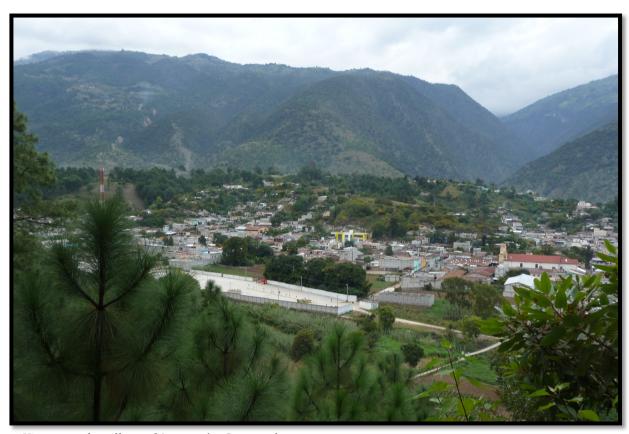
Documentation of ICT Usage for Maya Development: a Case Study from Aguacatán, Guatemala

Nina Benedicte Aubert





View over the village of Aguacatán, Guatemala Photo: Pål Aubert, 2012 Credit page

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III

Declaration

I, Nina Benedicte Aubert, declare that this thesis is a result of my research investigations and
findings. Sources of information other than my own have been acknowledged and a reference
list has been appended. This work has not been previously submitted to any other university
for award of any type of academic degree.
Signature
Date

To all the Maya people who struggle for their rights and future. To the power of the Maya calendar and all its prospects for the new époque. To all the people around the world who believe that a better world for all is possible.

Acknowledgement

First of all, I want to thank my supervisor, associate professor John Andrew McNeish, who has given me valuable advices and encouraged me to go a bit further than I thought I would. Your work capacity and achievements astonish me. I am very grateful for the knowledge and experiences that you have shared.

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Ås, May 10th, 2013

Nina Benedicte Aubert

Abstract

The purpose of this study was to investigate the effects Information and Communication Technologies (ICTs) have for development of the Maya people in Guatemala. Another aim was to see how foreign influences change marginalized communities. Finally, the relation between humans, development and technology was examined in the study. By using a qualitative approach, observations and semi-structured interviews were conducted. However, the most interesting information was acquired through informal conversations in everyday settings.

It was found that Guatemala's turbulent historical background, as well as the socioeconomical differences in the country, influences consequences for development. ICTs are present, but not used in accordance with the opportunities they give because of lack of skills and knowledge. Also, development among marginalized populations was different than a western perspective immediately would conclude. While the Guatemalan Government follows neoliberal tendencies by highlighting industry and technology, the Maya people are interested in acquiring human rights and equality. The main conclusion was that the situation is complicated and while ICTs are not necessary for development per se, our globalized world makes it difficult to escape.

List of Acronyms

AHPN - Archivo Histórico de la Policia National (National Police

Historical Archive)

ANT - Actor Network Theory

BIS - Bank for International Settlement

CERIGUA - Centro de Reportes Informatives sobre Guatemala/ Centre for

Informative Reports about Guatemala

COMPMAGUA - Coordinación de Organizaciones del Pueble Maya de Guatemala

CONAVIGUA - Coordinadora National de Viudas de Guatemala

IACHR - Inter-American Convention on Human Rights

ICT - Information and Communication Technology

ICT4D - Information and Communication Technology for Development

ILO - International Labour Organization

IMF - International Monetary Found

IRI - Interactive Radio Instruction

IT - Information Technology

MDGs - Millennium Development Goals

MENAMIG - Mesa Nacional para las Migraciones en Guatemala (National

Bureau for Migration in Guatemala)

MLN - Movimiento de Liberación National (National Libera

Movement)

NGO - Non-Governmental Organization

OHCHR - Office of the High Commissioner of Human Rights

PBI - Peace Brigades International

PC - Personal Computer

PRONADE - Programa Nacional de Autogestión para el Desarrollo Educativo

(National Self-Management Program for Educational Dev.)

Q - Quetzal (the local currency)

STS - Science And Technology Studies

UDEFEGUA - Unidad de Proteccion a Defensoras y Defensores de Derechos

Humanos Guatemala (Human rights defendors

UNDP - United Nation Development Programme

UNE - Unidad Nacional de la Esperanza/ National Unity of Hope

UNHCR - United Nation High Commissioner for Refugees

WB - World Bank

WTO - World Trade Organization

WSIS - World Summit on the Information Society

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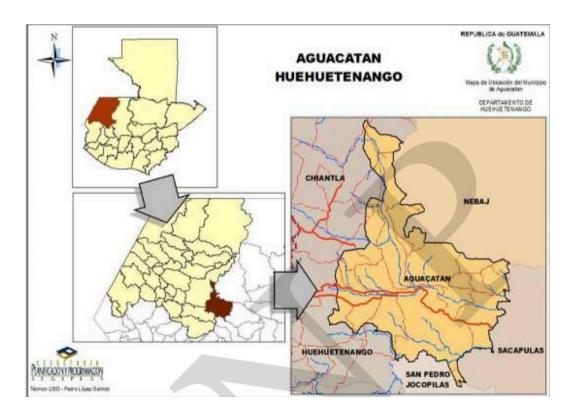
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Aguacatán, Guatemala

Guatemala is situated in Central America and share boarders with Belize, El Salvador, Honduras and Mexico. Guatemala's total area measures 108 889 square kilometres. The total population counts 14,373,272 (July 2013 est.) whereof 59.4% are of mixed or European origin. 40% of the population are called indigenous.

Aguacatán is one of the 31 municipalities in the department of Huehuetenango, with a territorial extension of about 300 km² and 51,685 inhabitants. With an altitude of 1,670 meters over sea level at it highest point, the climate is mild compared to the more tropical lowlands. From November to January, the temperature can reach down to 3 degrees, while March to May is warm with up to 30 degrees. The rainy season normally last from May to October, which is ideal for agriculture such as garlic, onion, tomatoes and corn. The topographic geography shows a mixture of five different ethnics with different cultural characteristics; Awakateka, Chalchiteka, Mam, K'iche and Ladino.



Sources: Lopéz, et.al, 2012; CIA World Fact Book, 2013.

Introduction

"The Maya calendar is ending,

but it only means a transition from a traditional lifestyle into a digital one" [my translation, informal interview, 09.12.12]

21st of December 2012, the approximately 5200 years long Maya calendar ended. Debates about what would happen that day were all over the news. Some believed it was the end of the world, while others stated it would not change anything, and was simply a new cycle of years. In Livingstone, a man standing on the harbour told visitors not to believe what they heard and read. As the new époque starts, the Maya lifestyle enters a digital time period, he explained (informal interview 09.12.12). While before, the Maya used to shout to each other in the village and travel far distances to see each other, the new époque brings mobile phones and Internet with Skype (ibid.). In other words, a total reorganization of traditional lifestyle is occurring, and the Maya are much included in entering a technological époque.

This thesis will look at both positive and negative consequences of Information and Communication Technologies (ICTs). The base of my analysis is a Maya village called Aguacatán. When I visited the village only five years ago, the technological landscape was less established than today. Mass emigration to the United States and development projects focusing on ICTs as development tools, causes the sudden availability of technology. I believe that indigenous populations in remote villages are especially vulnerable to the drastic changes ICTs bring with them. This thesis will explore why this is so.

1.1 Polarizations in the ICT debate

Modern Information and Communication Technologies (ICTs) are defined as managing and controlling information by the use of Internet, mobile phones, TVs and other technical equipment (Gerster, 2003). A strong emphasis is put on ICTs, as many scholars believe they can give new, low-cost opportunities to information and communication access for poor people around the world. One position in the debate is that development can flourish as global

distance does not matter anymore and the cost of communication has been greatly reduced (e.g. Gerster, 2003; Castells, 2004/2010; Murelli, 2002). This position transfers the world into a so called "network society" (Castells, 2010). The network society is filled with nodes connecting everything together. No overarching institutional shape exists, meaning that new nodes can easily integrate on the same level as others. With equal opportunities for network integration, the possibility for success is rather based on effort than power. Theorists of this position present successful stories of how ICT has been used to improve education and gender equality (Laval, et.al. 2002; Gurumurthy, 2006). ICT access facilitates social assistance programs and local empowerment, which is a step in the direction of poverty reduction and equality (Galperin, 2005).

However, development through ICTs can also do harm to local communities. Such processes can increase the differences between social classes and bring about influences that can lead the ICT use in the wrong direction (e.g. Heeks, 2005; Mercer, 2004). For example, the Millennium Development Goals (MDGs) and other multinational organizations have been strongly attacked for giving ICTs too much attention in the development debate (Heeks, 2005). As a consequence of the ICT use in development, the inequality gap between rich and poor have grown wider instead of smaller (Mercer, 2004). One such reason is that marginalized people are more or less excluded from usage of new technology.

Between these polarized views there is a middle position, which, instead of dismissing ICT from development, suggests improvements and changes in the existing system. Before starting ICTs projects, an examination of people's knowledge and access is necessary because of the complexity and uniqueness of each society. (Gigler, 2006). Development can only be accomplished when adapted to the different situations of people. Therefore, Gigler (2006) argues that ICTs do not have a direct link to development. However, people, technology and social institutions are closely interwoven, which is also expressed in another debate presented by Latour (1993). Nature and technology should be treated as one entity, not as separate parts (Latour, 1993). By this, Latour highlights a whole new understanding of development and human interaction with technology. As nature has been cut off from this debate, the human interference with the essence of the world is also gone (Latour, 1993). Humans are no longer capable of understanding the reality of existence. The sudden dependency on technology that did not exist only a few years ago is striking, and nature is understood as simply a resource for humans. Latour further states that This worldview is the complete opposite of Castells network society, where technological communication is the focus of human purpose and life.

My position in this debate is related to what Gigler (2006) suggests, that is: ICTs can be helpful for marginalized communities, but only if used in the correct manner. Today, ICT use does not give equal opportunities. Social differences, both inside and between villages, seem to escalate together with the increased foreign influences. This thesis will emphasize the necessity of education and other basic needs, which must be prioritized in development work.

1.1 Research questions

Two key research questions are chosen in the hope of contributing to new understanding about the development impacts of ICTs in marginalized communities. The first question is rather broad, but is limited by choice of a representative village in the western highlands. The historical and social settings of this area, where most Maya villages are situated, have serious effects on the situation of daily life. Answers to the second research question provides a criticisms of Castells well-known theory:

- What impacts do ICTs (Information and Communication Technologies) have on the development of Maya communities in Guatemala?
- Castells claims that outsiders can easily be integrated through his theory of the network society. Is this theory valid in practice?

Furthermore, two sub-questions are chosen to guide the focus of the thesis, as they are necessary to answer my key questions:

- What difficulties do foreign influences cause in the local population?
- How does the Maya culture and social setting cope with the changes?

1.2 Approach

In the following study I will explore ICT usage in a Maya village called Aguacatán. I have focused on the use of TV, radio and the Internet, as these are the most commonly used media for both entertainment and information. Influences from the Western part of the world have become more widespread as ICTs have strongly interfered with many parts of daily life. This thesis will examine the problems of foreign influences and social differences in a Maya village linked to political aspects and development through ICTs. Research in the field of

ICTs has mainly focused on power relations and telecommunication (Navarro 2009, Skaar 2010, Bull 2005). However, few studies have provided insight to the social factors and effects on the spread of technology. This thesis investigates the interferences between humans and technology in rural and marginalized areas. Much more research is needed in this field, as both positive and negative consequences of a world filled with technology are more observable as time passes.

While carrying out research for this thesis, a backdrop on Guatemala's difficult political situation has been important. Aguacatán, situated in the western highlands, was one of the hardest affected areas during the civil war. The historical factors intervene with the development taking place, as well as the trust and faith people have towards the State. In Guatemala, a country with huge social differences, it was important to show empathy and knowledge about historical happenings. My focus has been on the Maya population in the village of Aguacatán, and as such I have chosen not to focus on higher institutions or power centres. The angle presented is that of the local population, as their voice is rarely heard in this debate. This does not mean that I ignore the power centres and global influences. On the contrary, I examine how marginalized people understand the globalization processes. ICTs are one of the most globally influenced mechanisms the world has experienced. Because of limited time and resources, I have chosen to explain these processes and the power relationships arising from it through the viewpoints of Aguacatán's population. While living in Aguacatán, I kept my eyes and ears open, while trying to capture a broad spectre of opinions, from children to elderly and from both women and men.

While travelling to surrounding villages, I also discovered that there are huge social differences also between the Maya communities. As the infrastructure is improving in village areas, goods and services also become more accessible for some, while others are left out. Aguacatán is a poor village, but is under-going a growth process. Internet Cafés are opening on every corner, and influences of consumerism and daily comfort are pushed through media and migrated relatives. Similar to many other rural and marginalized villages around the world, Aguacatán's population struggles every day with discrimination and having to stand up for their rights. The Guatemalan Government has a reputation of treating their indigenous people badly. I think that the situation in Aguacatán is a good representative example of many rural areas around the world.

1.2.1 Motivation

My first travel to Guatemala, five years ago, resulted in culture shock and a new understanding of the world. It was my first time outside Europe and the indigenous people's life and beliefs fascinated me. Through studies in social anthropology I had gained some insight into worldwide struggles of indigenous people. I have been eager to get an opportunity to return to see how the situation has changed and how they are affected by the globalization processes happening all over the globe. While in Norway, I had contact with some acquaintances from Guatemala, telling me about their constant fight for legal rights. Indigenous people are still suffering from marginalization and discrimination. I started asking myself if ICTs can help the indigenous population to make their voices and interests heard. Illiterate leaders of local NGOs have fought for expansion of social justice for decades. The diversity of indigenous groups, of whom neither shares costumes nor language, makes a cooperation process seem hopeless. Can Internet and other technology help connecting marginalized people together, making their voices recognized and heard? And is their vision of development a society where networks and technology controls their lives? As not much research has been conducted in this field of study, it was an opportunity for me to provide some answers to the questions.

1.3 Structure

This thesis starts with chapter 2, explaining and presenting the qualitative methodology used during my three months in the field. Chapter 3 will present the history of Guatemala to give a contextual background for the challenges the country struggles with today. Chapter 4 will provide a theoretical perspective on ICT in the development debate. Chapter 5 discusses the Maya culture and how the division between the Ladino and the Maya is constantly reproduced. The chapter also considers the effects of mass migration to, and remittances from, the United States. Chapter 6 and 7 examines the main findings of my fieldwork conducted in the Maya village of Aguacatán. Chapter 6 focuses on education and Internet use, as education is a weapon for development and ICTs is seen as a useful tool in this matter. Further, chapter 7 discusses how technology makes changes in Aguacatán through the use and production of radio and television channels. Chapter 8 will go into a deeper debate on ICTs used in development. Special attention will be given to Bruno Latour's work on how humans, technology and nature have always been separated, while in reality the transitions are non-

existent. Finally, chapter 9 will sum up the main findings from my thesis and give concluding remarks to the research questions.

Methodology

In this chapter I will explain the methodology of my study and how I carried out my research. My study is highly *qualitative*, as my goal was to understand the locals and explain the situation they live in. To go into the field and study people in their context is a method design Walliman (2006) calls "case study design". One problem connected to a case study design is that the research done in one locality is supposed to be representative for other places. I believe my study in Aguacatán can be used as a representative village as it has many of the characteristics of a traditional town in change. For example, the majority of the indigenous people work with agriculture. They wear their traditional costumes and talk their own language. The road from Huehuetenango to Aguacatán was paved only few years ago, making goods and services more easily accessible. A high percentage of the families have relatives in the USA¹ who send remittances and packages filled with clothes and other necessities. Much technology and modernity sent with the packages, contrasting with traditional values in Aguacatán. There are many villages in Latin America seen as "traditional societies" which suddenly are going through a huge modernization phase including a technological change similar to the one in Aguacatán.

Describing situations in a foreign setting is commonly done in an "explorative" way. Exploratory research means that the researcher has not planned in detail how to conduct the study (Walliman, 2006). It was hard for me to plan my work before I arrived. Even though I tried to make some meeting arrangements by phone and e-mail, it was without success. My research was finally done in an exploratory way, giving me freedom to have an open mind for whatever opportunity that might appear. Even though I had not much planned before entering the field, I had been to Guatemala before and knew some of the norms to follow and how to address people. I wanted to get information from a diverse group of informants, as a representative sample of informants is important (Bryman, 2008). A common way to choose informants is through "gate keepers" who introduce you to willing subjects. This way of sampling is called "snowball sampling" (Bryman, 2008) and is what I used for parts of my

¹ Exact numbers of emigrants is impossible to find, as the emigration is mainly illegal.

study. The snowball sampling of informants gives the subjects a comfort, as they know others who trust the researcher. Fortunate for me, I knew a Maya family from my last visit, who had time and interest in talking to me and they gladly gave me other contacts.

2.1 Qualitative research

With a bachelor in social anthropology, the choice of doing a qualitative fieldwork in an exotic location was easy. Malinowski and Barth has been part of my education and I had great expectations for my work and findings. Unfortunately, the real world is not as it seems in old books. Guatemala is an especially slow-going country where everything takes a lot of time. Important information had to be dug out, as nothing fell into my hands. Everyday life was also a challenge with repetitive activities such as washing clothes by hand and making fire to warm water for showering.

The time I had at my disposal was limited and I was unfortunate at some points. One of my goals was to study the school and their way of teaching about technology, but the school holidays started just two weeks after my arrival. I also missed some important informants who travelled away from Aguacatán because of the holidays. However, I had many advantages making my stay much easier than it could have been. First, I was not alone in the field because my boyfriend decided to go with me and stay the whole period. Secondly, by knowing the Spanish language fluently I did not need any translator and had no problems talking to those who knew Spanish. Thirdly, I had contacts and friends who made me feel like home and contributed to a pleasant stay.

As this is a qualitative study, I focused on getting the locals' point of view. There is no need for too many informants as long as the information is explanatory and representative (Fangen, 2010). I went into the field with some questions I wanted to investigate and knowledge about theories of my topic. In the field I learned about much more than what this thesis is exposing. My key informants talked to me as a friend and told personal stories about themselves and about others in the community. The relation between researcher and key informants will always be complicated and need to be taken into consideration when writing the findings (Bryman, 2008, Walliman, 2006). Much of my research was about observing the daily life of the indigenous people and how they used and talked about technology. The main research methods I have used, are observation and interviews. My approach was inductive as the theory was built up through my research and the observations I did (Brockington and Sullivan, 2003). As I was open for unexpected impulses, I acquired many interesting findings,

which are too broad for the thematic of this these. This is a common experience for researchers doing qualitative fieldwork.

2.1.1 Fieldwork

Brockington and Sullivan (2003) are convinced that there is no better way to understand the meanings of different forms of life, than to use qualitative methods. By doing fieldwork, the researcher will get the best access to the informants, as he/she is able to live with them and to be part of their everyday activities. I got to live next to a Maya family of seven, spanning over three generations. This experience in particular gave me a basic understanding of the indigenous peoples' ICT use. Be observing and talking to the different family members, I learned a lot about how age and gender influence the technological skills. Aso everyday division of labour and privileges became visible. One girl in the neighbourhood made an impression on me. She wanted to continue her university education in Huehuetenango, but because she is a single mum, she needs a steady income to feed her daughter. Instead of studying, she had to do a small paid small job, including washing and cleaning for others in the village.

I encountered different challenges by living with people with less access to economic means than myself. Many people in Aguacatán have severe money problems. More than one time, people stopped me in the street wondering if I could help them to migrate to the United States or Europe. Also, high birth rates, making families unable to support all the children, is still a problem in rural Guatemala. The situation seemed unfair, as I, a young student, came to a poor place simply to observe and talk to people. After all, my informants worked to survive, while I was observing and interviewing. Scheyves et.al (2003) explains that doing fieldwork among marginalized groups is called "studying up". "Studying up" has been recognized as a credible way to get a better understanding of how power and differences are reproduced. I got concernedly fast comfortable with being cooked for, and after a while, I started paying the heavy bedcovers to get washed. Being a stranger was hard at times, and gossip spread quickly in the little village. Still, just by being white, I got some kind of a silent respect from the villagers. While people talked behind our backs, they listened to advices given by my boyfriends and me, and we were never harassed or attacked in any way.

2.1.2 Interview

Qualitative interviews are normally semi-structured in-depth interviews with informants. These types of interviews give insight into how the participants view the world (Bryman, 2008). My first real interview was with the mayor of the town. I could have chosen a more suitable pilot informant, but after the interview I was eager to continue my research. Other interviews were conducted with managers of all the Internet Cafés in Aguacatán, with radio stations and finally other persons of interest. I had no special difficulties in the interview process. Most of my interview informants were men. Even though many of the Internet Cafés had two managers, one man and one woman, the women always refused to be interviewed and asked me to wait for the man. At one Café, the manager was especially sceptical to do an interview. After asking him some questions about his background, I understood that he was not fully qualified to own this kind of business and thereof his scepticism. I had informed consent² with me to all these interviews where the subjects could choose to be anonymous. It was important for me to do the interviews properly. After a while, however, I found that the only subjects bothering to read the informed consent, were those sceptical towards me bringing any papers to sign at all. One asked me if I was from the police, and another if I did investigations for the Government. I figured that explaining orally my intentions worked better to gain trust, than to make people sign a document.

For all my formal interviews, I had a list of semi-structured questions³ which I added follow-up questions to if needed. I used a recorder for these interviews as it gives many advantages. According to Bryman (2008) a recorder makes the remembering phase easier and allows the researcher to go back and examine some particular answers of specific interest. It also helps towards making a more natural atmosphere around the interview conversation, as the focus is on the interview objects and not on writing the answers given. The recorder was very helpful for the interviews I did, not only for the in-depth interviews but also for the random small interviews I did in the street. I wanted to get a general impression of what people understood of Internet and technology, so I decided to do some random street sampling. My ethical responsibility was rather low at this point as the recorder was out of sight for the informants. I chose to hide the recorder because many elderly refused to answer my questions from shame of not knowing the answers. I suspected that a recorder would further intimidate my informants. The street interviews were totally anonymous, as only age

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² For the informed consent, see appendix C

³ For the semi-structured interviews, see appendix B

and gender was asked for. The recorder also helped me in doing these interviews quickly, as I did not need to write anything down. Through the street interviews I got an overview of how much the technological usage differentiated between the younger and older generation. However, the findings were not revolutionary in any ways, as they did not provide the depth I needed.

Doing interviews is good for data collection, but it is important for a researcher to remember that, "what people say they do and what they do is so different" (Wright Mills, cited in Steward, 1998: 26). Participant observation became, therefore, the most important instrument for my data collection. Steward (1998) stresses that notes from "speech in action" can be valuable for the research results as the information will come naturally and not in a staged setting. After finishing my fieldwork I swear to Steward's words and most of my collected material is not from my semi-structured interviews, but from informal conversations with people in everyday life.

2.1.3 Observation

By doing participant observation, the researcher will get an advantageous insight of the objects daily life (Walliman, 2006). Many ethical and practical issues have to be taken into consideration when doing participant observation. Ethnographer has to be cautious about their role as observers. The goal is to neither get too involved nor too detached from the actions observed (Bryman, 2008). Living so close to a Maya family as I did, the division between friends and researcher/informants became unclear. Studying the Maya population and their lives is a sensitive topic considering the historical disputes and racial issues in Guatemala. However, as my focus was on ICTs, I never encountered any uncomfortable situations, neither during interviews nor in daily life. The ethical concerns were therefore not complicated as all I had to do was being open about my mission and my background. When I did formal interviews, I brought an informed consent that the interviewees had to sign, but for most conversations and interviews, a detailed explanation of my intentions and study was enough. However, to secure my informants privacy, all the names in this thesis are pseudonyms.

In my proposed research I wanted to make observation in school classes where children learned about ICT usage. Unfortunately, the schools closed for winter holiday shortly after my arrival, so this part of my research fell out of my plan. However, I got to observe two computer class examinations and talk to the IT-teachers in charge of the classes, which gave

me a general idea of what the children learned. In retrospect, I remember several situations where I should have been more offensive and opening up the topic of ICTs. As I felt uncertain and sometimes uncomfortable as a researcher, I am sure I missed some good informants because I did not take the initiative to talk to them directly about ICTs. I could also have been more involved in youth's activities to get material.

TVs and the radios were constantly in use everywhere in Aguacatán. According to what I observed, everyone seemed to know mobile phones usage. Common, people had several phones, one for each of the competitive phone-companies. The heavy competition between the three biggest phone-companies was intense. "Tigo" have had the reputation of the company with best coverage. Claro is the second best and they use young people with high popular music to stand in the street selling two phones for the price of one. Moviestar is the up-and coming, as they use incredible amounts on commercials and having triple credit refill every day. Reading the newspaper and keeping my eyes open for commercials and changes in the media landscape became an important part of the observations.

I visited all the Internet Cafés in Aguacatán and spent some time on computers and in the playing departments of the Cafés. Despite all these different arenas of observing ICT use, the most rewarding was to live next to a Maya family and see how they used telephones, television and computers in a natural setting.

2.2 Out in the field

Being a field researcher was a new experience for me, and something that was hard to prepare for. Since I have already visited Guatemala, I knew some basics about how to behave and approach the indigenous people. Arriving in Guatemala, my boyfriend and I travelled for a week to get used to the new situation and the country. I was excited about my fieldwork and started already the first week to look for useful data. A very different life waited for us in Aguacatán and I was struck by Guatemala's diversity in culture, nature and technological development.

I spent almost three months in Guatemala, from 25th of September to 19th of December 2012. Two months were spent in the village of Aguacatán, Huehuetenango. My boyfriend, Gaspard Philis, stayed with me the whole period and he was supportive and patient. We experienced both positive and negative consequences being a couple in a special situation like this. One of the positive effects was that I got in touch with other groups of people because of him. For example, Gaspard joined a soccer team and played matches

against other Aguacatán teams. He came easily in contact with people and was curious and asked questions of the people we met. It was also fruitful for me to share and discuss my experiences with him.

In Aguacatán, we had a house for ourselves with two rooms, and we ate daily with the neighbour family. The conditions were basic, but we had electricity (though no heaters) and cold water. As Aguacatán is at 1600 meters altitude, the temperature changes according to the season. We arrived at the end of the rainy season and it started to get very cold during the nights. In the evenings we gathered around the kitchen fire with our neighbour family for dinner, and talked until bedtime. I got a lot of my data from the family next door. They became our friends and my key-informants through both the informal conversations and the observations.

Guatemala is a country full of contrasts, and the complex reality is especially visible in a small place like Aguacatán. For example, even though the majority of the inhabitants are farmers, there were no tractors used on the field. Still, everyone in the village had at least one mobile phone and manual labour in the field could be concluded with a couple of hours in front of a television. Another visible contrast was how the girls and women wore traditionally woven costumes, while men preferred fake imitations of Diesel or printed t-shirts with "I Love NY". In the five years between my visits, a lot of things had happened. I remember that there was only one Internet Café in town where the connection was very slow going. Today, Internet Cafés are located on every corner and people buy modem sticks rechargeable with money like a normal pay phone. Technology seemed to be everywhere. Yet still, as time passed, I saw that the actual ICT usage was limited.

2.2.1 Field access

As a stranger with a limited time period at hand, there is always a risk to be denied access to the field. I was lucky to have visited the village five years before and I had already some contacts willing to help me. People were in general welcoming and eager to small talk. However, to lead the conversation over to the subject of ICTs, was not so easy. Even having influential contacts, I encountered problems in the willingness of people to use their time for meetings with me. The elderly were especially hard to get information from, as they did not feel qualified to answer about technology. After a while, I changed tactic and talked around the subject. By not focusing directly on technology, the interviewees felt more relaxed and more in control of the dialogue, as they could tell stories instead of answering specific

questions. It takes some trials and fails to manage the art of information gathering without stepping on anyone's toes, and a qualitative researcher should acquire these skills (Bryman, 2004).

Another problem I encountered in Agaucatán was the carelessness of time schedules. More than once I experienced informants arriving very late to meetings, or not showing up at all. If I got hold of the missing informant by phone, they apologised, but did not seem especially concerned about letting me down. I figured that the most efficient way to get information was simply to meet up where the informants were and ask if they had time to see me there and then. The locals were very generous and hostile towards me and seemed to have respect for my study. A person not showing up for an appointment was normal and happened to everyone, so I was told to not take it personally.

I had a couple of tough times during my fieldwork, feeling I was not going anywhere. I did not know how to continue the research, and no one seemed able to help me with new contacts. I needed to try another strategy and got the idea to ask people in the street what their opinion was on ICTs. I went around the streets of Aguacatán for three days, asking elderly, middle-aged and youth/children about their use of radio, TV and Internet. There was clearly a trend in the answers I got, and three days was enough to get an overview of answer patterns to my simple questions. To get new information, I also began free computer lessons with two middle-aged ladies. They were both intelligent women who wanted to learn how to manage the computer, but they felt lost and had given up trying to learn from their kids. The exercise was rewarding for both parts, as they learned about computer use and I got the opportunity to talk relaxed with middle-aged women in a natural setting. I learned about their understanding of computer usage and the different difficulties ladies had in a village like Aguancatán.

2.2.2 My first informants

The first interview I conducted was with the town's mayor. He agreed to talk with me because of his good relation to Hanne Lunder, a Norwegian who by chance was in Aguacatán when I arrived. She had lived one year in Aguacatán earlier and had started education and health projects in the area. Because she is such an important contact for Aguacatán, the mayor could not turn me down. The interview with the mayor was successful and he gave me both statistics and his personal opinions on the matter of ICTs in Aguacatán. I wanted to meet him again because there were several important questions I had not paid attention to during the initial time of my fieldwork, which I wished I could ask him about. I tried endlessly to get

another appointment with him, but since he is a busy man, it did not work out. To have the interview with the mayor so early in my field study was therefor not ideal, but on the other hand, I had a good start and I was exited about the continuation.

Hanne Lunder is also the reason why I chose Aguacatán as my place of study. It was a big help to have her in the village the two first weeks of my stay. She took me to Nebaj⁴, introduced me various informants, for example the only TV channel producer in town, and she invited to the closures at the school she works for. After Hanne Lunder left, my focused turned towards everyday use of ICT and to the Internet Cafés. As the majority of Aguacatán's population is low educated farmers, my aim was to find out about their understanding and usage of ICT.

2.2.3 Main informants

My main informants were without doubt the neighbour family, with who we shared kitchen and meals. Seven people lived in the house: A grandmother with her son and two daughters, the two children of the daughters (one boy and one girl), and the husband of the oldest daughter. The grandmother's parents lived very close and came often to eat with us or to peel dry corn in the late hours of the evening. Through four generations, I got to observe the daily routines and usage of technology by old and young, boys and girls. It was really an ideal family to live with. The grandmother also had one older son, who lived in the centre of town with his wife and two children. My boyfriend and this son became good friends, so we spent quite a lot of time with his family. The wife of the oldest son had eleven siblings and she often told me stories about them. Both the oldest son and his wife are teachers and they seemed to enjoy answering my entire curriculum of question about their life situation.

Towards the end of my stay, I finally got in touch with two of Aguacatán's radio-channels. The very catholic radio station called "Radio Encarnación", was especially kind to me and let me witness a broadcast they called "Radio Marathón" in the village of "Nueva Esperanza". This was a special experience that made me understand the incredibly diverse situations of the population inside the municipality of Aguacatán. In Nueva Esperanza, they still have no electricity, and the poor population are saving money every month to build a church. The percentage of literate people was very low and most of the women spoke only the local language K'iché. I met some people in Nueva Esperanza who told me about their

⁴ Nebaj is a remote village said to be one of the poorest in Guatemala.

dreams for themselves and their children. I realized how far-fetched those dreams were and how little they knew about the world around.

2.2.4 Documents

Documents are important as additional information to observation and interviews and to check the validity of facts. I got hold of some statistical overviews of the area telling me everything there is to know about the inhabitants. Unfortunately, the statistics I got were dated and such extensive work has not been done since in this area. Newspapers are another important source of information. I often bought "Prensa Libre", the biggest national newspaper, sold only from a small boot next to the central park. I read the newspapers to see what news the Guatemalans read about their country and abroad, and of course to see if anything was written about technology. If I found an article or a comment on ICT, I usually cut that part out. Commercials were a third type of documents I found interesting. TV and phone commercials highlight the western tall and stylish youth who show off some must-have products. I found it very strange that companies believed focusing on an ideal so far from the Guatemalan reality was rewarding.

2.2.5 Collecting and organizing data

I recorded and transcribed all the semi-structured interviews conducted. As time passed I found informal conversations much more fulfilling than semi-structured interviews. I usually wrote down everything I remembered as soon as the opportunity arose. By doing this I took the risk of forgetting important information. Still, it gave me a more comfortable working arena, where I had the flexibility to decide how and when it felt natural to ask questions. Because of the unstructured way I have collected data, I have constantly been moving back and forth between my notes and new material emerging. By doing this, I also analysed and categorised the themes while still in the field.

Walliman (2006) argues that coding is an important part of the analysing process in qualitative research. Researchers need to structure their findings into meaningful groupings and codes. I used what Charmaz (2006 cited in Bryman, 2008) calls selected/focus coding method where possible, and grouped my data into different themes. As my informants were from different sectors of the village and my interviews were very different in form and structure, it was hard to use this method. I still found focus coding rewarding for some of my material, as it gave a clear picture of the most relevant data collected. As participant

observation was a main method of data collection, I have analysed my field notes using the three steps suggested by Miles and Hubermann (cited in Walliman, 2006:132): data reduction, data display and conclusion drawing/verification. To reduce the data I collected was a hard exercise for me. Everything I had seen and heard in the field felt important and needed a space in the thesis. Instead of reducing my field notes, I tried to include only the most essential parts as a first exercise.

Data display is something that I pictured only quantitative studies doing, but it showed itself as an important practice for understanding the connections in all the notes. The method I used is close to what Walliman (2006) calls *partially ordered displays*. Partially ordered display can be charts or drawings showing different influences a person is subject to in a specific situation. This is a way to examine situations without making it too mathematic. Data display also helped me to sort my information and made it easier to check my results against each other (ibid). The conclusion drawing is the results I have reached and presented in this thesis.

Some of my meetings and trips, I summarized in one-page summaries right after returning. I was careful to write down my experiences into a log with dates, all in chronological order. To reduce the amount of data collected, I divided phrases and segments of texts into clusters of categories, highlighting important parts with colour coding.

2.3 Methodological challenges

Qualitative data has a lot of challenges. As the data is descriptive, handling real stories with personal attachments and feelings, the exactly content is impossible to measure (ibid). While quantitative research often use numbers describe the findings, qualitative method investigate more complex issues, and only words can describe the results. As Walliman (2006) argues, qualitative data is vulnerable when it comes to the results, as data need to be interpreted by the researcher.

In this research I have focused on peoples understanding of ICT and the influence new technology has on the society. This kind of study would be hard to conduct using quantitative method, as social relations and unspoken actions are of high importance.

2.3.1 Language

It has to be taken into account that Spanish is my third language and the indigenous peoples second language. I am confident in my Spanish, but as I was taught the language in Spain, there are certain differences that can cause confusion, such as words with different meanings. Sometimes I had to ask what words meant, but mostly people complemented me on my language skills. The problem was rather that people thought I did not manage the Spanish language and chose not to talk to me. For example, one lady I had met at various occasions had not taken the initiative to talk to me because she was afraid of communication problems. Later, we became friends and she turned out to be an important informant. I experienced few language problems in the village Aguacatán. In the surroundings however, people's knowledge of Spanish varied greatly. By driving only 20 minutes away from the Aguacatán centre, I met people who only spoke their local Mayan language. In these areas I had trouble communicating with people, and especially with the women who normally were illiterate and had no knowledge of Spanish. There were always some men who knew how to speak Spanish or who even had some English skills from attempts of reaching the tried United States. These men always came to talk to me and to practice the few words they knew in English and talk about their expectations about going back.

2.3.2 The researcher and the informant

The relationship between a researcher and the informants is a much discussed theme. As a qualitative researcher you are involved with your informants and many experience the difficulty of distinction between informant and friend (Thagaard, 2003). My entry to the village of Aguacatán went surprisingly smoothly thanks to Hanne Lunder and the small groups of Norwegians she brings in from time to time. Even though there are barely any tourists in Aguacatán, the family I lived with was used to have guests from Norway who were on some kind of mission. People guessed at once that I was a Norwegian and did not ask questions about my business in their town. Curious inhabitants did start to wonder why I was still there when a couple of months had passed. As our neighbours were used to guests from Norway, they had no problems being asked all sorts of strange questions. They were well aware of my intentions and goals for my stay, but did not treat me differently than other guests. However, my boyfriend and I did discuss the feeling of having people cooking and cleaning for us. It was too easy to fall into the rhythm of letting others do hard work that we simply paid them to do. The unequal power relations were hard to eliminate.

Entering a new arena as a silent observer was impossible. In church, my name was announced over the speaker three times, wishing welcome the guest from Norway and giving me special blessings. At the "radio-marathon" I had to sit on the first row as a special guest and I also had to introduce myself "on air" and was constantly referred to and thanked for my presence. Afterwards the managers and I were given food-gifts to bring home with us as a thanks for our visit. To talk about my study on the local radio was an opportunity to get more information, but I tried in general to be cautious about public performances. My intention was first of all to observe how the locals naturally used ICTs.

I will not hide the fact that being a young, blond woman was challenging at times. As the machismo is strong in Guatemala, I often experienced men or groups of men shouting after me in the streets or trying to get my attention. However, this only happened when I walked alone and as my boyfriend normally was with me, it did not occur to me as a problem. Being who I am might also have weakened the credibility of my research, as women are seen as less capable than men to handle technological equipment. A researcher is understood according to the sex and age (Thagaard, 2003), of which neither was at my advantage in Aguacatán. Being 25 years old, unmarried but living with my boyfriend made a good base for gossip in the town. Even if I had some disadvantages, I still think people were friendly and open when they understood that I took interests in talking to them.

2.3.3 Cultural barriers: a hermeneutic challenge

To "go native" (Bryman, 2004), the researcher needs both time and special skills of adaptation. In my case, I did not reach the state of understanding the world from a Maya perspective, even though I tried to be part of a normal family's everyday life. As already discussed, my appearances are too western to be perceived as an equal to the indigenous. My friends often told me that I was becoming a Maya when I learned indigenous words or did activities most foreigners wouldn't do, like waking up in the early morning to take the corn to the mill. However, to fully understand the life indigenous people live, I would have needed much more time than I had. I would also have needed a deeper understanding of their situation to interpret the hermeneutic messages hidden in the interviews. A hermeneutic understanding means to interpret text and speech on a deeper level, seen together with the whole context (Thagaard, 2003). With this said, I will still argue that I have made a big effort to reach the validity and reliability of a qualitative study by constantly reflecting on the choices I made and the interpretations I did.

Background: Racial barriers and power structure

They have helped heal some of our wounds; by dignifying our dead, they also have dignified us.

(CONAVIGUA, 2010)

The quote belongs to a Maya woman, grateful for the CONAVIGUA organization's effort in finding her dead husband. My informants continuously brought up stories from the past to explain their understanding of different situations. Present day's situation and actions are still influenced by Guatemala's historical context, so knowledge and understanding of historical events were important for following the more political conversations. Guatemala's history is interpreted and understood differently depending on who is asked. The enormous social inequality is one of the reasons for this, which has followed the country since the Spanish conquest. In this chapter, I will present the historical context of Guatemala, giving special attention to racial differences and indigenous rights.

3.1 36 years of violence

My youngest female informant, 4-year-old Chuny, was playing with plastic figures. One of them was dressed in a military uniform and Chuny told me it was the policeman burying all the people he had killed. I asked her surprised why he would kill all the people, and she said, "The police kill all men and women because all policemen are bad!" [my translation, 04.12.2012]. She even buried the hero plastic figure...

The image of a little girl in seemingly peaceful environment, playing this kind of game gives a strong indication of how stories from the past are told from one generation to the next. Chuny has probably never met a bad policeman or seen anyone killed, but as a Maya Indian, a people with a long and bloody history of marginalization and unequal treatment, she has learned to see the Government as an enemy. Faith in the governmental institution of security was close to non-existent in the area I conducted my fieldwork. Similarly, all the promises of

equal opportunities that the new Government had proposed were treated like rumours and scornfully criticized around the dinner table.

Guatemala is known as a country of violence and contrasts. The easy explanation, according to Grandin (2004), is the distinctive division between Ladinos and Maya who, despite huge differences in wealth and power, live side by side. Ladinos are wealthier and more powerful than the Indian population, even though they are the minority in many places. The poorer and marginalized Maya population has been prevented from rebellion by the use of violence. Grandin explains: "The use of violence to settle disputes of almost any nature is accepted in Guatemala's indigenous culture" (Grandin 2004: 100). Grandin's view contradicts many local people and researchers experiences, and Guatemala has many laws and regulations against violence. Still, the 36 years of the Civil War, from 1960 to 1996, was a real testimony of violence, as many massacres were conducted in the Maya settlements.

Distribution of land has been a difficult and complex issue ever since the Spanish conquest. In fact, land disputes were one of the main reasons for the Civil War. The dictator Jorge Ubico ruled Guatemala for thirteen years, from 1931 to 1944. In October of 1944, the emerging middle class, together with students, teachers and young military, overthrew Ubico in what is later called the "October revolution". Social rights finally came into Guatemala's law system and the ten years that followed steered the country towards a modern nation where indigenous people were protected and land reform was one of the main issues (Grandin, 2000). The land reform of 1950s guaranteed land to poor farmers and indigenous people, which had been taken from them during the Spanish rule (Wilkinson, 2004). Unfortunately, the promises were never met. People at the countryside felt mislead and tensions built up, leading to a long and hard Civil War (Grandin, 2000).

The first attack in the Civil War was conducted by policemen and military organized by the National Liberal Movement (MLN). The group of people, called Mano Blanco (White Hand), was a death squad⁵, attacking those they accused of belonging to a guerrilla army (Grandin, 2004). The political party MLN arranged a coup d'état in 1963, and has later been described as "the party of organized violence" (Sandoval Alarcón, sited in Grandin, 2004: 89). In 1966, under the excuse of "counter terrorism"⁶, Mano Blanco killed over 8000 civilians, mainly in the Maya highlands (McClintock, 1985). It is estimated that the

⁵ Death Squad: a group of military (can be terrorists or police) conducting extrajudicial killings, assassinations and forced disappearances.

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⁶ Counter terrorism: a strategy used by governments, police and militaries to attach terrorist threats or acts, both real or imputed.

Government killed 200,000 people during the Civil War, including 50,000 detaineddisappeared (Sieder, 2013). Several mass graves are found in the highlands, but the Government denies their existence. CONAVIGUA, an organization started by the widows from the civil war, work with discovering more of the "forgotten" mass graves. They want proof for what actually happened during the war, but they also want to bury the deceased in a honourable manner (CONAVIGUA, 2010). The Government denies any existence of evidence and documents from the massacres. However, the National Police Historical Archive (AHPN), have found a whole building belonging to the former Guatemalan National Police Headquarters, filled with documents from the Civil War. Around 80 million pages of material, including information and identification cards dating back to 1882, are now being digitalized and opened up for the public (AHPN, 2013). Human right defenders, including AHPN and CONAVIGUA, have a dangerous job in Guatemala because the Government refuse all responsibility for the massacres and disappearances. For a long time there were neither bodies nor evidence found in the country (Grandin, 2004). Victims and perpetrators live side by side in the highland villages, making the work even harder. Families, who took their concerns to the State during the war, were answered with silence or rumours about the relatives who were presumed to have joined the Guerrilla or fled the country (ibid).

The civil war ended with the signing of the peace accords in 1996. The peace accords repeated the 1985 constitution, affirming that private owners of property had absolute rights. Every slot of land had to be owner-identified, which meant that poor farmers could no longer claim their land based on historic arguments (ibid). My informant Eliseo explained that 10 families in Guatemala own around 65% of the land. Eliseo believe that the social difference is a consequence of the Spanish conquest (informal interview, 27.10.12). Spaniards took indigenous people as slaves, and those who refused had to flee to the highlands. The indigenous population wanted to be free, but they had to pay the price of losing their fertile land. "Today, 65% of the population own only 10% of the land", Eliseo continued, "and that land is not even good for crops" [my translation, informal interview, 27.10.12]. Land rights are therefore part of the marginalization process of the indigenous population.

3.2 Legal rights and justice

The October revolution of 1944 started the process of social rights in Guatemala. However, not until the Constitution of 1985 did Guatemala reach international standards regarding social rights (OHCHR, ca.2012). The 1985 Constitution is the current one, and includes only

five articles on indigenous rights [title II, chapter II, section III, article 66-70⁷]. Indigenous right to land, protection of ethnic culture, and indigenous' work situation are included in the articles (Republic of Guatemala, 1985). Guatemala also signed The ILO Convention nr 169 in June 1996, which aims to improve communication practices between indigenous societies and policy makers. The convention focuses on discriminatory practices indigenous people often encounter, such as language issues, land rights and the right to create social and political organizations (ILO, 2012b). Therefore, ILO Convention nr.169 gave indigenous people the right to have their own institutions and justice practice, as long as they follow internationally recognized human rights (ILO, 2012a).

This is how the "Maya Justice" came to be, which follows the traditions and the worldviews of the Maya population. Sieder (2013) writes that Maya Justice has changed the way claims are made in the whole of Guatemala. There are 86 communities where the Maya Justice is actively applicable today. Filipe is a Maya Quiche authority adviser and he explained that the Maya Justice is expanding, as the General Court is slow and costly. "The lawyer who is best paid normally wins in the governmental court," was Filipe's opinion, indicating that it is a corrupt institution [my translation, interview 01.11.2012]. While the Maya Justice wants conciliation, Filipe continued, the general court only seeks punishment. Also, only a handful of the many indigenous languages have translators in court. This makes it impossible for indigenous people to claim their right and understand and follow their own case (Valdez, 2013; Sieder, 2013). With the verification of the Declaration on Rights of Indigenous People by the United Nations General Assembly in 2007, indigenous institutions were guaranteed protection (Sieder, 2009). Still, despite implementations of international regulations, the situation has not improved remarkably for the indigenous populations. Laws can rather be seen as symbols of recognition, while putting these symbols into practice will demand more from the current Government than they are willing to give (ibid).

In addition to being marginalized by their race, the Maya women experience double discrimination. The abuse of women and sexual violence is taboo, so the assaults rarely get public attention. In Aguacatán I learned several stories about domestic violence. Aguacatán has a secure health station where people can come to seek advice with all kinds of issues. One story I heard through the heath station was especially dramatic. *A 13-year-old girl had been*

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⁷ The articles states: (66) Protection of Ethnic Groups; (67) Protection of Indigenous Agricultural Lands and Cooperatives; (68) Lands for Indigenous Communities; (69) Transfer of Workers and their Protection; (79) Specific Law (a law will regulate matters relating to this section) (Republic of Guatemala, 1985)

raped by her uncle and had given birth to his son. The mother wanted justice for her daughter and with help from the health station she reported the offence of her husband's brother. Sadly, her husband took his brother's side and did not agree to the accusations. The brothers blamed the girl for encouraging the incident. Even with an angry husband who started hitting the mother and their children, the mother continued the work for justice. Violence against women is known but given little attention, again as a consequence of the Civil War. Killing and sexually abusing women was used tactically during the war, a practice that has been adopted by the criminal organizations and gangs in Guatemala (Villarreal, 2013). In 2011, Villarreal (2013) reports, 700 women were found killed, left in the street for public view. The majority of women abuses are domestic, which makes the situation difficult to report. However, because of legal plurality, meaning that both the Maya Justice and the governmental justice are permitted, indigenous women's possibility to take abuses to the legal system is slowly improving (Sieder, 2013).

Women's right to be free from violence is frequently addressed through women's groups and campaigns. Strong organizations with international support have grown rapidly from grassroots to nation-level statuses (Hale, 2006). Rigoberta Menchú sent the whole world a clear signal of indigenous people's power when she won the Nobel Peace Prize in 1992. Even banks, such as the World Bank and the Inter-American Development Bank (IDB), have given indigenous organizations money to promote the fight for improved indigenous rights. However, while the World Bank supports human right activists they simultaneously promote economic policies, which lead parts of a population into deeper poverty (Hale, 2006). For example, IMF and the World Bank have given loans to many poor countries between 1980-95. As a consequence, low-income economies now struggle with external debts they are unable to pay back (Skogly, 2001).

Neoliberal multiculturalism works in the same way by promoting cultural inclusion, but distinguishing between who is worthy to be included and who is not. Likewise, indigenous people in Guatemala are invited into the political system, even as leaders, but very selectively. Ladinos seem to recognize the empowerment of the Maya people, while at the same time trying to halt their modernization, accusing their culture of being impassive to the changes and refusing development (Hale, 2006). There is an underlying fear that indigenous people can be dangerous and vengeful. The clear limit between the races in Guatemala leaves the Indians at the bottom of the hierarchy "because they, for one reason or another, belong there" (ibid: 20). The Maya have become both uncivilized Indians and glorified bearers of Guatemala's history.

As the racial differentiation is so divided and deeply grounded in history, a different Guatemala is hard to imagine. The worst human development statistics in the country are found in the western highlands, where the density of indigenous population is the highest (Sieder, 2013). Still, fluctuations between the races are common. Some Mayas have climbed up to a middle class economic situation. Several Indians even change their names and deny their indigenous roots to pass as Ladinos. There are also many Ladinos who live like the Maya, cultivating the difficult highland earth (Hale, 2006). Still, the understanding of how dominance and economy is reproduced is strongly bound to race. Today's racial discrimination, Hale (2006) argues, lies in the mentality of a seemingly unchangeable reproduction of the hierarchical system.

Partido Patriota (the Patriotic Party), a right wing political party, was re-elected for the third time in November of 2011. The party was founded in 2001, but the current president Otto Peréz Molina is a well-known figure in Guatemalan history. In the 1980's, Molina worked as a militant officer in the Ixil-triangle⁸, Quiché region, where brutal human rights abuses took place (Willard, 2011). The Maya population of Aguacatán had strong opinions about politics. Even my youngest informants knew about the injustice done by Molina. When I asked a 5-year-old boy what he thought about Partido Patriota he answered matter-of-factly: "Primero pegan a la gente, despues los matan" (first they hit the people, then they kill them), (informal interview 04.12.11). I continued, asking which is the best "partido", and the boy answered: "Barcelona". Many adults found the last election a choice between several evils, and were not able to answer which political party was the best one, just like the little boy.

Many Maya organizations criticizing the Government for ignoring the Maya populations needs and complains. COPMAGUA (Coordination of Maya Peoples' Organizations of Guatemala) is one of them, which during a demonstration against expropriation and redistribution of land, stated: "this agenda breathes fresh life into structures inherited from the colonial period..." (Wittman, 2007:35). Struggling for the right of the marginalized is a hard and dangerous fight. The Human Rights Defenders Protection Unit (UDEFEGUA) concluded at their meeting in November that "Human rights defenders are being criminalised as a tactic to discredit and defame the work that they do" (PBI, 2012: 2). UDEFEGUA's report from 2012 shows how indigenous and environmental human rights defenders are those clearly most affected by assaults. They also report that none of their

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⁸ The Ixil-triangle is a name given to three neighbouring village in the Quiché department. The villages are called: Santa Maria Nebaj, San Juan Cotzal and San Gaspar Chajul.

⁹ Partido: has two significances in Spanish; both political party and a match, as in a soccer match

recorded cases from 2011 were solved, which shows that the cases are handled with alarming unimportance of the Guatemalan Government (UDEFEGUA, 2012). This year, a trial has begun against ex-dictator Rios Montt, who was Peréz Molina's commandant during worst parts of the conflict (Normann, 2013). Evidence and testimonies have been collected. If he is found guilty, it would be a historic event which can lead to further investigations and justice for the Maya people.

3.3 Who's got the power

Guatemala's history sets in many ways the background for anything happening in the country today. Inequalities and discrimination started long before the Civil War and the struggle for justice during the conflict has not strengthened the indigenous population's position significantly. The peace accords were signed in 1996, 16 years ago, and only the last generation have been shielded from experiencing the war first-handed. Still today, the children are well aware of the racial differences in the country and many indigenous societies feel neglected by the Government. While spending months in Guatemala, it became relevant for me to have knowledge about the past. People referred frequently to the years of "la violencia" [the violence], when I asked about their family and origin. Even migration to the United States were linked to the years when so many were killed or forced to move away from their land.

Human right defenders do a courageous work in Guatemala, which gives both hope and belief in a better future for the indigenous groups. Even so, when reading about the assaults against organizations and individuals fighting for the marginalized groups, the history seem to repeats itself. A corrupt and powerful Government is clearly visible in Guatemala, also through the unfair distribution of technological skills and devices. While the Guatemalan Government are decided on technology and foreign investment as a development strategy, it might not be what the majority of the population need and want. Accusing the indigenous people of being against developed is easier than fulfil their demands of justice and human rights. People I talked to in Aguacatán were convinced that Guatemala's richer and well-educated part wanted a silent indigenous population, without the same equipment and comfort as themselves. The domination of the indigenous people is so embedded in history that the powerful elite is unable to see how wrong it is.

A need for connection

"Left unchecked, the digital divide will increasingly add to the knowledge divide, the skill divide, the opportunity divide, the income divide and the power divide" (Yunus, 2007: 193, cited in Wheeler, 2011)

ICT is the fastest spreading technology the world has seen. Shirky (2011) argues that communication technologies are tools which can be used by the public to respond quickly and collectively to political decisions. The Internet was launched in the 1990s, and the amount of connected people has reached billions. It has been claimed that any aspect of life can be more "efficient, productive and successful" with technology (WSIS, 2012:29). Many scholars agree that more extensive use of ICTs can empower individuals and make the world's inequalities smaller (e.g. Castells, 2010; Friedman, 2006; Murelli, 2002; Schech, 2002). Even so, the usage of technology as development is a highly debated issue, especially when applied to rural areas in lack of basic needs.

4.1 ICT in international policy

Development projects, both governmental and non-governmental have in recent years focused on technology and information flow (Heeks, 2009). International development organizations see information and communication access as a backbone for development and a necessary step for "catching up" with more technologically advanced countries (Avgerou and Madon, 2005). The United Nations (UN) MDGs, for example, have highlighted "global partnership for development" as a toll towards ending poverty by 2015 (UN, 2012). The UN (2012) has written specifically that they will make new information and communication technologies available for all. Not everyone accept this as an obvious approach to development. MDGs focus on ICTs has been questioned and criticized by theorists who argue that inequalities will not be reduced by following this approach (e.g. Heeks, 2005; Main, 2001). Linda Main (2001)

admits that higher life standards are obtained by the use of ICTs, but she argues that it commonly refers to the elite in countries where ICT already has been implemented into the politics. The only secure outcome of today's development through ICT is a world where differences between advantages and disadvantages are even wider (Main, 2001).

On last year's worldwide World Summit on the Information Society (WSIS), organizations and member countries discussed advantages and disadvantages of ICTs. They concluded that the technological network is borderless and challenges our economic, political and social structures (WSIS, 2012). Castells (2004) calls the new power the "network state", which he claims has taken over for the former sovereign nation-state. The network state consists of different state and non-state actors who simultaneously work together and compete for authority. Professor Ezzine from Tunisia, a representative at the WSIS, was positive towards the use of the Internet as a communication technology, especially when referring to democracy building (WSIS, 2012). Social forums, such as Twitter, Facebook and YouTube, are frequently in use for mobilizations and discussions, he argued. Ezzine wants ICTs to acquire a stronger position in education because in his view, ICT has "radically changed the dynamics between the governed and those in government" (WSIS, 2012:67). However, Mercer (2004) is not convinced by the empowerment of marginalized groups through ICTs. He draws on examples from Tanzania and claims that ICTs widen the gap between elite Non-Governmental Organizations (NGOs) and rural NGOs. The reason is that NGOs located in the capital use the Internet frequently for funding and publicity. Rural NGOs and NGOs from villages in Tanzania do not have sufficient knowledge of the usage, and therefor lack the possibility of promoting themselves online (Mercer, 2004).

4.2 ICT in academic literature

Castells (2000/2002/2004/2010) is one of the most cited authors on the ICT topic. He has written a trilogy called "The Network Society", counting 1,500 pages. The theory shows how flows of information and communication have transformed into a society of networks divided in a three-dimensional Space of Flows.

The first level concentrates on information technologies and electronic impulses, creating the space for communication and information flow. People communicate, long or short distances, through phones and computers etc., which makes the created space in a continuous flux (Myers, 2012). Castells' second layer consists of the centres and nodes constructed by the first layer. These connections are what make the idea of a Network Society

because they cluster around essential functions of the system. The term Network Society is built around the idea of our time as an "information<u>al</u> society" in contrast to the earlier "information society" (Castells, 2000). In the previous information society, the communication of knowledge was not at a technological level, so the social organization was different than it is today. In an informational society, power and productivity are mainly caused by technology (ibid). Castells' third layer is made up of dominant structures¹⁰, managing the flow of technology. These dominant structures are vital for the function of the flow in space (Myers, 2012). Castells (2010) argues, that power has spread from the State and firms, into the global network.

Information and Communication Technologies for Development (ICT4D) is an example of how the global society implements ICTs for poverty reduction. Heeks (2009) argues that poverty reduction is a moral obligation and that ICTs should no longer be seen as a tool, but a platform for achieving development. ICT4D emerged from the worldwide accessibility of the Internet and the MDGs. The program for development called ICT4D1.0, was started in the 1990s, but met failure and restrictions. ICT4D2.0 shifted its focus from "what might be used (the Internet and PCs), to what is actually used (mobiles, radio, television)" (Heeks, 2009:5). One example is the use of radio for education, by gathering a team of educationalists who can create a daily interactive broadcast for children. This program is called Interactive Radio Instruction (IRI) and Hollow (as cited in Unwin, 2009: 102-103) demonstrates how the Zambian Ministry of Education have over 4000 governmental primary schools using IRI in education.

What is actually used, and the skills to use these technologies are important issues in the debate of ICTs in development. Amartya Sen's capability approach elaborates on the difference between possessing and using technology. Having technological items present does not automatically mean that the people find reasons to use them (Barja and Gigler, 2007). Gigler (2006) argues that capabilities are the main tools for development, as ICTs can only work under the right conditions. He suggests that ICTs should be implemented by recognizing indigenous knowledge and structures. A lack of ICT skills, Gigler (2006) argues, influences every part of human life. However, ICTs should not be overestimated. Wheeler (2011) states "some development challenges are too big for the Internet. When people need food, safe drinking water, medicine and shelter, Internet connectivity does little to provide for these basic necessities except for potentially ending one of the root causes of extreme poverty,

¹⁰ Dominant structures means here decision making elites and three-dimensional organizations

namely, "isolation" (Wheeler, 2011: 208). This is an important point when examining the situation of ICTs around the world. What Wheeler calls isolation, is treated as the digital divide in other literature.

4.3 ICT in Latin America and the digital divide

The digital divide is defined as "gap between those people who have access to the new information and communication technologies and those who cannot" (Murelli, 2002: 2). Hilbert (2010) makes a division between ICT use as a luxurious and a necessary good. Latin Americas poorest 20% spends from US\$ 0.18-0.67 on ICTs a week equal to around 20 minutes a week on a normal Internet Café (Hilbert, 2010). Everything spent under \$10 is seen as a necessity, while exceeding the US\$10 limit, qualifies the use as luxurious. ICTs are often cheaper in rich countries as the usage and competition is higher. This contributes to make it harder for poor people to enter the technological market (Hilbert, 2010).

The unequal spread of ICTs around the world is indicated through statistics. In 2002, Murelli argued that only 10% of the world's population has access to the Internet and the future expected growth was widely exaggerated. Internet World Stats (2012) shows the latest percentages, displaying that 34.3% of the world's population have Internet access. Not surprisingly is North America topping the list with 78.6% coverage, closely followed by the European Union, with 73.1%. According to the same statistics, Central America has 32.6% coverage, but the distribution is highly unequal. In Costa Rica, 43.7% of the population have Internet access, while Guatemala only reaches 16.5% (Internet World Stats, 2012). However, the accuracy of these statistics is uncertain. For example, Costa Rica is well known for the high number of western tourists, bringing laptops and buying USB-modems in the country. The percentages do not say anything about the spread of access inside the countries, which can be centralized in tourist areas or the biggest cities where the well-educated elites normally lives.

In Latin American countries, the Spanish speaking elites of Ladinos commonly marginalizes indigenous populations. Liebermann (2003) suggests development strategies for indigenous people, such as e-business for traditional crafts and forums for chat in indigenous languages. This is not easy, as many indigenous groups lack the founding to actively use the Internet (Dyson 2010). In addition, Indigenous entrepreneurs with Internet access have so far failed in their attempts to profit by using e-business, mainly because of the Government's weak attempt to give marginalized communities sufficient training (ibid). The same is the

case for Internet based services given by the Government. Rubuni-Hallman (2002) argues that governments have a strong potential to include their population in public debates through egovernment.

In e-governance, ICTs are used for transactions and services from the government to citizens, between governments and through business cooperatives. E-governance can be a possible tool towards a power shift in Latin America, Rubuni-Hallman (2002) states, because individuals and organizations should be able to interact easily with the governments. He comments that international regulations, such as WTO's Basic Telecommunication Commitment from 2000, improved the ICT conditions in Latin America. Now, liberal telecommunication laws and privatization of the telecommunication sectors are common all over Latin America. As a consequence, Latin America has broader accessibility, upgraded equipment and lower prices (Rubuni-Hallman, 2002). Scholte (2005), on the other hand, describes the international control system, such as IMF, BIS and WTO, as "culturally blind agencies". These agencies destroy indigenous lifestyles in a number of ways "favour[ing] the already privileged and further marginalize[ing] the already disadvantaged" (Scholte, 2005: 319). Scholte's descriptions seem to coincide with my observations from Aguacatán. Neoliberal tendencies only appear to further weaken the marginalized people.

4.3.1 Guatemala as an example of technology and politics

Indigenous radio stations are good examples of further marginalization of indigenous groups. Around 1960-70, radical radio stations came to life in Latin America as a consequence of the unstable political situation. Many of the stations were illegal and supported by the Guerrilla and political organizations (Skaar, 2010). New regulations and privatization contributed to closures of many radio stations, Skaar (2010) explains, particularly those in indigenous languages, made for local users. In Guatemala, the Peace Accords signed in 1996 brought changes in laws of technology, for example by promising indigenous projects available frequencies on the radio. However, the Government managed to ratify a liberal telecommunication law just before signing the Peace Accords, giving the private sector the right to almost every frequency (ibid). Private owners bought up the radio market, leaving little space to a democratic and non-profit access to media broadcasting and communication. Corruption and violations of indigenous rights by the Government was therefore complemented by privatization of media ownership (Salzman, 2008). The radio and TV stations I talked to, told me about how they struggle to pay the bills. Funding from private

persons and organizations is crucial, but not easy to obtain. In small communities like Aguacatán, the stations are supported by remittances from families with migrated relatives.

Remittances are transfers of funds, sent from one part of the world to another, and can be seen as today's goldmine. There is a rumour saying that the reason for United States' debt is that all its money goes to Mexico and Guatemala as remittances. Latin America has experienced an exceptionally high increase of remittances from \$3 billion in 1980, to \$45 billion in 2004 (Motel and Patten, 2012). According to Adams (2006), remittances sent to Guatemala are invested rather than consumed by the families. Especially are rates of education higher for families who receive money. During my time in Guatemala, I heard countless stories about family members who left for a better life, and also about those who failed. According to Destarac (2008), displacement of educated people is one of the biggest problems of Guatemala. The reason for migration is the lack of opportunities and the lack of investment in technology (Destarac, 2008). The Internet can benefit marginalized communities to stay in touch with migrated family members (Parkinson, 2006), but from my observations, I was surprised to discover people's faithfulness to call centres and cell phones. The Internet was not much used as a direct communication tool for talking with family members in the United States.

However, some local radio stations had their channels linked to the Internet so everyone with access could listen to them. Young people with Internet skills actively used Facebook and Twitter for writing comments and recommend articles and YouTube videos. Even though the Internet seems to be more used for entertainment than information, important news rapidly spread to the global audience. For example, Thursday the 4th of October 2012, while I was in the area, the population of Totonicapán took to the streets in a mass rebellion. It was a protest against the unfair treatment of indigenous people done by the Government. The military responded by killing four people and wounding another 18 (International Crisis Group, 2013). The same day, angry comments and articles appeared on Facebook, urging others to join signature campaigns or protests. The news quickly reached global attention, which I noticed through concerned friends in Norway.

4.4 Further discussion

Many different scholars have intervened in the debate around ICTs for development. Even the Millennium Development Goals have embraced ICTs by including them in their fight towards poverty reduction. If Castells is to be trusted, the intention of success and the actual material

for being successful is all that is needed to reach a high level of user skills in ICT. By stating this, Castells also indicates that the situation is, and should be, equal all over the world. However, the competition and usage in western countries helps to keep prices down while new products and inventions also comes from these countries. From a western perspective, it seems quite impossible to stagnant the process of ICTs. However, on a global scale, 65% of the world's population do not have Internet connection. Castells has, in my opinion, a narrow view on the world's diversity, as he sees no way to live without technology.

Linking theory and practise together, Guatemala gives a good example of how ICTs can make greater differences in the world. Guatemala has a low percentage of Internet access on the statistics (only 13%), and is a country with huge social differences. In Guatemala, as history can tell, the Government is more concerned about keeping the indigenous far away for the national debate, than incorporating them. E-government could make differences in the political management, but only if the Government is willing to listen to the people. The Guatemalan Government has restricted marginalized communities access to ICTs by privatizing the radio frequencies. Punishments of years in prison for using unlicensed frequencies, gives a clear indication of the Government's position. With internal communication problems like this, international aid organization should focus human rights and basic to improve the situation in the country. Nevertheless, the international economic sector elites push ICTs forward, maybe because it is more profitable.

Castells argument of a non-hierarchical society by the infiltration of ICTs is therefore not credible. Powerful elites controls even the access of ICTs in countries like Guatemala. By recognizing that the network society does have hierarchical order, the attention should be turned towards the possibilities of ICTs, and what they can accomplish. Mobiles, Television and radios have a huge spread and can be more actively incorporated in development debates. Heeks (2009) argues that development can be successful by focusing on technology which marginalized places already have access and knowledge about. The next chapter will investigate the Maya culture and how western impulses are effecting and changing their traditions.

A Global Maya culture

In Aguacatán, both the successful and the disastrous sides of attempts towards modernisation are visible. This chapter gives some insight into the friction between global modernity and the Maya traditionalism. The Maya society is known to take care of their traditions and culture, but their traditions are by no means stagnant. From what I have observed, there is a constant change in every aspect of the Maya life, according to the impulses from the surrounding world. Given the presence of globalization, is it still possible to talk about "the real Maya?" How does the outside world understand the Maya culture, given the realities of migration and ICTs?

5.1 "You are either Maya or non-Maya"

The Maya are a proud people: proud of their history, culture and way of life. They live a tough life in the highlands of Guatemala, and many work on the land with their bare hands. I asked one informant what it means to be a *Ladino*, and she responded: "You are either Maya or non-Maya" [my translation, informal interview 05.11.12]. Watanabe (1992) argues that the indigenous people have never been passive victims of the colonial conquest. Too many of Guatemala's historical changes are credited to conquistadors, while the tribute should go to indigenous societies who has adapted to a changing Guatemala in a remarkable way. Watanabe (1992) also explains how ethnic identity between the Maya and Ladinos is based on inverse conventionalization of each other, meaning that the Maya are what the Ladinos are not and vice versa (Watanabe, 1992).

In historical terms, this segregation is inherited from the 1894 consensus, when the Guatemalan population was divided into two groups. If one was not an Indian, he/she was called a Ladino (Wilkinson, 2004). In 1994, the Government let the population define themselves. The question circulating was; are you indigenous? The Maya from the lowlands chose to call themselves "naturals" and therefor answered "no" to the Government's consensus. The number of indigenous people in Guatemala went down drastically (ibid).

There have been, and still are, big differences between the Maya and Ladinos in Guatemala. The inhabitants of Aguacatán could easily see who was a Ladino by their way of speaking, their way of dressing and their economic status. Many Ladinos have washing machines, dishwashers and ovens, making their housework easier. In general, Ladinos have more money and political power than the Maya, even though laws and regulations in the Government constantly try to convince the population otherwise (ibid). People in Aguacatán, talked cautiously about the differentiation between races, and answered reluctantly to my questions. Some of Maya origin tries to become Ladinos, moving to the city, changing their names and getting the right style of clothing. But there are also Ladinos who are almost like the Maya, my informant Maribel told me, "they live in the village and are as poor as the natives" [my translation, informal interview, 05.11.12].

Ladinos commonly see the Maya as lazy people, giving birth to too many children and wearing traditional outfit. The general idea is that the Maya are low educated, as they prioritize manual agricultural work instead of university degrees (Hale, 2006). Many Maya families are indeed unable to support themselves because of their economic situation and number of children. There are different reasons for having big families, such as religion, hard work and a preference of boys. Family planning is not a widely considered subject, but giving it more attention might be a step in the right direction. I was invited to a meeting in the poorest region of Aguacatán, where a nurse held a speech about family planning. Many of the children in this area looked dirty with clothes full of holes. The older children were carrying their baby siblings on their backs. The nurse, Jocelyn, had prepared a PowerPoint where she showed pictures of old mothers with babies, while talking about different types of contraception. I overheard some ladies in the back row discussing. They all agreed that God was the one deciding how many children a woman would bear. In their opinion, women should not go against God's will, and birth control was therefore out of the question (field notes, 28.11.12). One woman told Jocelyn that she gave birth to ten children, but only five of them survived. With cases like this in the neighbourhood, Jocelyn could not understand why so many looked at contraception as a sin (informal interview, 28.11.12).

My observations told me that the Maya are less scared of death than people from the western countries. Stories about the Civil War, but also myths, about disappearances and killings, are shared among the people. The river source of Rio San Juan, the main river in the area, is an especially popular theme for stories. One tale says that a young girl went to pick flowers at the source and simply disappeared in the mouth of where the river starts. People think the river source has a special power. A story about when the river went dry shows this.

Eiseo's version, one of my key informants, goes like this: Some years ago, in 2006-2007 there were big fights between Evangelic, Catholic and traditionalist parts of the inhabitants. Suddenly one day, when the fighting was at it worst, the water stopped coming from the river source. Little by little, people in the town gathered to pray and cry for the water to come back. Soon people from all different sides of the fights were gathered around the river source. A whole day passed, and the next day they all came back, standing side by side, hoping for the water to start flowing again. When they were about to leave the second day, suddenly the water came back! The people became convinced that fighting brought bad consequences. Only by standing together like brothers and having the same goal, miracles would happen (field notes, 27.10.12).

This story brings great emotions to most of the inhabitants. However, Aguacatán's population is still segregated into groups who are not able to fully cooperate with each other because of the difficult past.

5.1.1 Religion

The Spanish conquest brought great changes to religion around Latin America. The religious system in Guatemala is today both confusing and complicated. Traditional Maya religion swore to gods following the system of the ancient calendar and the dates, with the Maize God as a central figure. After the Spanish conquest in 1524, Catholic preachers entered as part of the colonization process. The Church held great areas of land and had huge impact on the political and economic processes (Brintnall, 1979). For example, the schools still have Christian names and some have even churches linked to the school building. From the beginning of the 20th century, Protestant missionaries began their work in Guatemala. According to McCleary and Pesina (2011), Catholic priests did not make the effort to learn indigenous languages, which is why Protestantism have grown to include more than one third of Guatemala's population. The Protestants learned indigenous languages and used oral and visual technologies for more effective evangelizing methods where illiteracy was widespread. Such technologies made cultural syncretism easier to achieve, and so the Pentecostals became a fast growing segment of Protestantism (McCleary and Pesina, 2011). Protestantism is constantly growing; constructing more churches than what seem necessary in the small villages. The reason for all the churches is that the Protestants have many different branches, or cults. The Catholic tradition owns the few massive churches in Aguacatán. In other small

towns the same pattern is repeated, and the big churches have room for triple the population of the town, leading to churches always looking empty.

There are still some practitioners of the Maya religion in Guatemala. While the religion seemed to die out only a couple of years ago, it has turned to regain some popularity. Before, only old people practiced the Maya religion, while today it has turned to be a prestige religion for rich young intellectuals. One of my informants is a lawyer who lives in Guatemala City and calls himself a Maya priest. I witnessed a ritual he performed at the family's alter. It was an interesting ceremony where offerings making up a whole meal were made for the ancestors. We prayed for our ancestors and put candy, candles and liquor on the fire. Towards the end two eggs were put in the fire. They were symbolizing difficulties in life. If they cracked open it was a bad sign. Both eggs cracked, and I got egg white on my face and clothes. It was an intense moment and no one knew what to say. Eric, an informant, was concerned by the naivety of people "commercializing" the Maya religion. Young people found the opportunity to make money from Maya rituals, which before were restricted for old traditionalist. Eric gave an example of how these new Maya priests could take 4000q to perform a ritual that will make a girl fall in love with a boy.

The syncretism of religions in the Guatemalan highlands is evident. The merging of beliefs is especially visible on the day of the dead. The day of the dead was originally ancient Aztec, a day when the dead would come back to earth to visit their family. It was celebrated in the summer, but after the Spanish conquest, the day was moved by the Catholic Church to coincide with all soul's day the 2nd of November. I went with the neighbour family to celebrate the day at the graveyard. At 04.30 in the morning, along with many others, we ate breakfast at the grave. The graveyard was big and colourful. People had stands, selling candles with Virgin Mary iconography next to the local cheap rum, Venado. The liquor was passed around for everyone to drink after first having poured a shot on the grave. In daily life, the Evangelic Protestants are denied to dance and drink. A marimba band was hired to our grave, playing the traditional light music with sad lyrics. The sound was mixed with people praying.

The Maya have a lot of superstition in their everyday life. Likewise, the Protestant and Catholic directions have transferred some of the old myths into the new religion. The horror of hell and heaven is present in the religious faith, but so is the belief in dead ancestors participating in decision making, and punishing those who do bad things. Spirits visit loved once as big butterflies and if you kill them, you kill the deceased person's soul. At the same time, many are Protestants or Catholic, believing that the spirit lives forever. Mythical beliefs

are especially important for women who see a connection between fertility, death and hair. A Maya woman should never cut her hair, and Maribel told me that I should collect all my hair that I had brushed off and bring it home to my property. If not, I would have to come back to all the places I had been and pick up my lost hair after my death (informal interview, 01.12.12).

5.1.2 Gender differences

Religion is a very important part of the social setting in ceremonies. Hanne Lunder, an enthusiastic Norwegian who has visited Guatemala over 30 times, told me about a wedding ceremony she had been to, which for her had been a shocking experience (informal interview, 19.10.12). The families of the couple were very religious and the priest had talked for 2,5 hour about the duties of the women in the household. The bride was to obey her husband, and wake up early to make breakfast for the rest of the family. Furthermore, the bride had to always look nice so the groom would be attracted to her, and also do work that would provide money for the family. The priest did not mention the duties of the man with one word. My visit to a church gave a similar indication to gender division. The smiling priest greeted all the men eagerly by shaking their hand and showing them their seat. Women and children did not get the same welcome and had to follow suit their male representative. The priest didn't even look at them (field notes, 21.10.12).

In the Guatemalan highlands, the unequal division of labour was easy to see. Women do most of the domestic labour. For example, old Maya belief tell the girl children to not play the guitar, because playing the guitar would spoil the skills in cooking. Women repeatedly told stories of how they had to wake up before dawn to go to the mill and make tortillas before breakfast. Tortillas are used for every single meal, but needs to be freshly made to taste good. I asked a group of men if they could make the tortilla and they laughed at me, saying it was women's work. Many men from the highlands choose to migrate, and so the responsibility for the family lies upon the women. There are of course hard-working men with good intentions and times are changing toward equal education and healthcare rights for girls. Many girls go to school in Aguacatán today, but families with severe economic problems still prioritize boys.

5.1.3 Language

It is estimated that around 36.800 people speak Awakateko in Aguacatán and the surrounding villages of the municipality (Lopez et.al, 2012). The language is unique for this region, but is still spoken amongst the inhabitants and taught to children at schools. There are also three other Mayan languages in the municipality, very different from Awakateko. Most of the inhabitants are bilinguals, meaning that they speak both their Mayan language and Spanish. Children under ten years old seemed to be less concerned about speaking Mayan language than children over 10 years old. The teenagers preferred to speak Spanish amongst themselves, but at home they often spoke the Mayan language with the elderly. My informants explained me that the small children watched cartoons and movies in Spanish, making them better in their second language than in their mother tongue. My neighbours spent a lot of time in front of the TV, where Mexican series and cartoons were playing all day long.

Eliseo, a key informant, had fought for the survival of indigenous languages and was afraid that Awakateko would soon be lost if no changes were made to the current school system. Eliseo claimed that small children did not want to speak Awakateko anymore because of the low effort of implementation at schools (informal interview, 11.11.12). He proudly showed me exercise books he had published in Awakateko. Unfortunately, the Government does not help publishing these materials, neither economically nor by effort. Eliseo's published material, finished in his own bookshelf, while the Government spend huge amounts of money on similar material in Spanish (ibid.). The Government writes about prioritizes bilingualism and education in Mayan or Garifuna language, but I heard too many complain about the language situation to believe that they were actively improving the conditions for indigenous people. The Guatemalan constitution is seemingly one of the worlds best, focusing on equality and indigenous rights. Sadly, the words on paper reflect little in the real life of marginalized groups. For example, Spanish is still the only official language in Guatemala, which compared to Bolivia, with 38 official languages, seems extremely unfair.

5.1.4 Clothing

Every Maya community has its special colours and styles in clothes. The clearest indicator of where a Maya woman comes from is the skirt, called *corte*, hand woven to a thick and heavy fabric. In some specific areas, the men also wear their traditional outfit with pride. Todos Santos is a famous place for experiencing the tradition, where men have red and white stripes

trousers and jackets with purple embroidery on the collar. In Aguacatán, the men stopped wearing their traditional outfit around 50 years ago. American clothes appeared on the marked at this time, more practical and cheap than the traditional clothing. Male informants admitted that they still put the costume on for special occasions, but the young boys do not feel comfortable in the white pants and squared-patterned shirt. Even though they don't use the outfit, they all use some special small purses, called *moral*. Curiously, they often have the writing "Recuerdo Aguacatán" or "Recuerdo Guatemala" on it, meaning: "I remember Aguacatán/Guatemala". This would seem like a touristic detail, but is actually not a business idea. Most men in Aguacatán, a place with an extremely low number of tourists, wear purses with these writings.

The women wear their money in pockets hidden under their cortes, and carry groceries on their head. It is amazing how many kilos the women manage to carry while at the same time taking care of their kids, one tied to the back and one in each hand. The cortes has changed throughout the times. My informant Ximena, told me about the meanings of the colours and the modern style of the skirts. For a long time, the costume had a clear red colour because of the bloody civil war. Before the war, the cortes were dark blue, with few horizontal stripes and no embroideries (informal interview, 01.11.12). During my time in Aguacatán, a whole new style, which the more prosperous and fashionable women bought, was created. The dark blue background was coming back but with beautiful designed vertical embroideries. The embroideries could be anything from butterflies and squares to the Maya calendar symbols, called *Nahual*.

Earlier, the blouse that they wear, called *hüipil*, always had carefully made embroideries in soft colours. Now, to save time, the Awakatekos often made crochet flowers and decorated ribbons that they could sew directly on the blouses. The colours became stronger and more brilliant with the years, and gold ribbons are now commonly used in the design. A typical woman in Aguacatán has at least fifteen different hüipiles, all in different styles and for different use. The women dress up beautifully every day, and only the heaviness of decoration, as well as the amount of money and time put into the fabric, separate special occasions from every day life. A trained eye can easily tell how much a corte or an hüipil is worth. With globalization, more and more young Maya girls have started to crave American clothing. Many families are pleased with their children choosing American clothes, as cheap second hand clothing stores are everywhere to be found. Even in the town of Nueva Esperanza, lifted 2600 meters above sea level, the people chose to wear American clothes

over their traditional wool clothes. The farmers around Nueva Esperanza have sheep, but sell their wool instead of making clothes for own use.

A shopkeeper in Aguacatán told me that people bought American clothes because "the economy is very bad, so everyone wants cheap clothes" [my translation, interview 23.10.12]. Surely, more and more young girls switch their cortes and hüipiles into jeans and hoodies. The American clothes are both more practical for work and when self defence is needed. As cortes are heavy and tight around the legs, running or kicking is impossible while wearing the skirts. However, those faithful to the costume describes it as warm and comfortable to wear. In addition, the cortes never get worn out however many times they are rubbed in the hand wash.

All these changes and merging of cultures have one major root: migration. I visited a village called Laguna II. They had a yellow beautiful Catholic church, right on the edge of the lake making the place very photographic. The church reflected its richness in some very nice big houses spread around the area. My travel companions told me that almost 90% of all inhabitants in this area had family in the United States, indicating the cause of great economic differences.

5.2 The Maya in the world

Eliseo had studying for one year in the United States. He wanted to bring home a pair of real American pants. After buying the pair he wanted, he realized the little note saying: "made in Guatemala". Eliseo encountered some big challenges while studying in the United States, but he was lucky to enter the "Promised Land" legally. The National Bureau for Migration in Guatemala (MENAMIG) estimate that 336 Guatemalans emigrate every day. 97% of all emigrants are heading towards the United States, but out of a yearly 123.000 undocumented travellers, only 60.000 reaches their destination. MENAMIG tries to protect the emigrants right under the slogan "Migrate to live. No more deaths, abduction or disappearance of migrants in transit" (PBI, 2012)

In 2010, 1.1 million of Guatemalans was estimated to have residence in the United States (Motel and Patten, 2012). Motel and Patten (2012) studied Guatemalans life in the United States and encountered some interesting statistics. For example, only 40% of the emigrated Guatemalans speak English and 48% live without health insurance (ibid). Despite the bad living conditions, Guatemalans in the United States have contributed to the social welfare in villages like Aguacatán. The mass immigration from Mexico and Guatemala has

also led to a series of changes in the south of the United States. Latin dance clubs, newspapers and radio channels in Spanish and a thoroughly different religious and cultural system make the south a very distinctive part of the United States. Chavez describes in his book *The Latin Threat* (2008), how Americans were sceptical to the waves of mass immigrants. The *Minuteman project* was an attempt to stop the flow of immigrants from crossing the Mexican/USA border. This project, started in April 2005, tried to form the public policy by making the press involuntary associates. By constructing a war against illegal immigrants, the *Minuteman project* wanted to convince American citizens about the threat illegal immigrants posed to the society (Chavez, 2008). The project got much fewer volunteers than expected. Contrarily, the media coverage was almost outnumbering the minutemen. One volunteer said: "We have already accomplished our goal a hundredfold in getting the media out here and getting the message out" (ibid: 142).

All this "noise" about the illegal immigrants has made it more difficult for the Maya to enter the United States, as well as to get a secure and good job in the new country. Claudio, one informant, told me it costs around 45.000 quetzals (Q) to get transported across the boarder in a so-called *coyote*. Each coyote carries between 20-30 illegal immigrants, and around 50% are stopped at the border. Because illegal immigrants have to swim across the river parting Mexico from the United States, they are called *mojados* (wet-backs). They also have to cross the desert, a walk that today takes three days. Before, illegal immigrants used ten days walking through the desert. Claudio remembers a cousin of him, sharing the destiny of many illegal immigrants who dies while crossing the desert. For those who get stopped at the boarder, the chance to pay back the loan is close to impossible. Many of those who are sent back try to cross the border a second time, but the cost rice by 5.000q for every trial. So, if the first time it cost 45.000Q, the third time it will cost 55.000Q. Most people take up loans to pay the bill for a coyote. A lucky immigrant with a well-paid job in the United States can manage to pay back his loan in 6-7 months [informal interviews, Eliseo and Claudio, 12.11.12]. Many of those who never make it across the border, end up drinking their sorrows away with a loan that will last for life [ibid].

5.2.1 Obstacles and possibilities

Even with all the obstacles mentioned above, many Maya try every year to leave their hometown for a better economic life somewhere else. The Maya have a special relationship with their land and country, but the global urge for money has spread to include even the small village of Aguacatán. Most of the immigrants intend to stay some years abroad, and return to Guatemala with a better economy. However, many Guatemalans end up leaving children and other family members behind to spend the rest of their lives in the United States. In Aguacatán, the men in the family normally migrate. Maribel, one informant, told me that children always suffer the most. Disputes among parents are commonly ending in divorces, in families where one of the parents leave and the other stays. "La mujer recibe el dinero" Maribel explained, "pero tambien tiene otros necesidades emocionales" (the wife gets the money, but she has also other emotional necessities) (informal interview, 16.10.12). The gossip around women's faithfulness is also a burden, and many women with migrated men chose to stay most of their days indoor (Hughes, 2012). A lawyer told me that many emigrated husbands ask for divorce to avoid paying child support (informal interview, 01.11.12). Women are often left with all the responsibility for the children, and without the economic help, their situation becomes unbearable (Hughes, 2012).

Migration and remittances is the most effective way to spread Western mentality to other places of the world. Because so Guatemalans migrate to the United States, American trends and values have been adopted even in the most remote areas of Guatemala. Packages with clothes and technology contribute to the changes in everything from consumerism to language. As seen in this chapter, the Maya cloth style is going through changes. While American cheap clothes become more popular, much pride and history make the traditional costume alive. Innovations in patterns and colours are positive for the future survival of the outfits. Globalization also influences religious practises, making a syncretism of religion. Without some historical knowledge, religion in Maya villages seems like chaos of icons, priests and cults.

Taking the globalization process one step further, the picture of power relations becomes complicated. Lucrative interests are navigating the Guatemalan Government into decisions, destructive for the Maya population. New highways are built across the country, supported by China (CentralAmericaData, 2013), and hydroelectric power station with different international investments has been developed since the 1960s (Hirsch and Utreras, 2010). Plans of expansion have escalated after Perez Molina came to power. The most debated issue these days are the mining projects, where even Norwegian interests are represented through NORFUND. The mining projects uses huge amounts of water and further pollutes the water resources to the surrounding population (FIVAS, 2013). Human rights are clearly violated through these projects and protests have been heavily hit down on by the governmental military, showing that the State is more interested in economic reward than

protecting their own population (ibid). Human rights defenders live dangerously in Guatemala. As a consequence, publications going against the Government's interests are rarely seen on the Internet.

To be part of the technological world, languages such as Spanish and English rapidly change the situation of indigenous languages. Some people have started protesting against this, wanting to keep culture and tradition alive. International TV channels and music have huge influence on the young generations language skills. On the other hand, radio and TV channels are broadcasted on the Internet, making it possible for emigrants to follow local news and communicate with their home communities. Even radio in local Mayan languages is possible to follow from all over the world. ICT use, such as Skype, can make a positive contribution for tighter and more frequent communication between family members living in different places. At the same time, this might also enhance the wish to stay abroad, as those who return to Guatemala normally do it to see their children and family again.

Surprisingly, there were very few people who were using the Internet as a mean to communication with relatives across boarders. The next chapters will explore why this is so.

Internet use when educating the new generation

"There are two educations.

One should teach us how to make a living and the other how to live".

John Adams

Arriving to Aguacatán in a shuttle, I overheard two elderly men speaking: "We did not have education, but we had respect!" said one man to the other. "The kids today get education but they do not even respect their own parents. That is how the world has developed" [my translation, field notes, 02.10.12].

The education in Guatemala has improved significantly during the last few years with many newly opened schools in remote areas (Gill, 2012). Still, there are challenges connected with the quality difference from one school to the other and the gap of skills between Ladinos and Indigenous. Teachers have a great responsibility in this matter, as their knowledge and pedagogic skills should be at an equally high level all over the country. This chapter deals with the reality of Guatemalan education, linked with social exclusion and ICTs. Is it possible that social exclusion is caused by increased use of ICTs? How do the teachers, parents and children cope with the technological changes that happen around them?

6.1 Education and problems in rural Guatemala

Basic education is not only mandatory, but also a human right. UN statistics (2013) show that the conditions of education have improved in Guatemala recent years. Today's children are likely to have more than the double amount of years in schools than their parents. While children are expected to go 10.7 years at school, an adult's average is only 4.1 years of schooling, (UNDP, 2013). Even with the increase of years of schooling, statistics demonstrate that Guatemala has by far the lowest education achievements, compared to other countries in Latin America (ibid). Huge social inequalities in Guatemala make Maya Indians in rural areas

the most vulnerable for dropping out of school. Low participation in school is common in rural areas where parents have little education and where agriculture is the main occupation (ibid.). According to Venås (2006), one factor for the low participation in schools is the traditional social values of the Maya people. Maya values focus on humans' physically hard work, and understand the nature and animals as essential for life. Schools are rather seen as "...for the lazy ones" because the children get separated from all the Maya values (Venås, 2006). The Guatemalan Government has been criticized for following a 'one fitting all' approach, creating many new problems while trying to improve the situation. A good example is the governmental program entitled Programa Nacional de Autogestión para el Desarrollo Educativo (PRONADE). The program was released after the civil war ended in 1996 and focuses on rural children's education.

PRONADE decentralized the education, opening up for community-run schools where teachers could be recruited within the local village (Gill, 2012). The schools looked promising and were able to employ teachers educating in the local language of the children. Even though many schools were opened in rural communities¹¹, Gill (2012) argues that overall education skills did not improve convincingly. Marshall (as sited in Gill 2012) showed that children's skills and teacher's capabilities in rural areas were far from national level average. One of the reasons is that the PRONADE schools curriculum is decided by the Government and not developed for indigenous communities. Some of the content is rather insulting for the Maya. For example, teachers are obliged to use the Maya numbers incorrectly in mathematics, translated from Spanish back to indigenous languages (Maxwell, 2009 cited in Gill, 2012). PRONADE has yet another basic argument for following national regulations. The dates for school holidays are obliged to corresponding with the national system. Most private schools choose to have holiday between the beginnings of October to mid-January, the main season for harvesting. PRONADE schools, however, held open during those months, resulting in few children attend classes. PRONADE was a great attempt to give basic education to more children. Still, to be successful, the schools need to be adapted to local conditions instead of bound to national regulations.

The more wealthy population of Aguacatán's inhabitants choose to take their children to school in Huehetenango, one hour away from Aguacatán. I talked to one Ladino, called Emmanuel, who explained that there were three different reasons for his choice. First, the children at local schools were not serious enough to give a good learning environment.

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¹¹ In 1996 there were 477 rural schools, while in 2006 there were more than 7,600 (U.S. Agency for International Development 2007, 6)

Second, the local private schools chose to focus on indigenous language instead of English. And third, at the local schools, neither the curriculum nor the teachers had a high enough level for the children to get into a good higher education after the basic level (informal interview, 23.11.12). Many others agree with Emmanuel in that rural schools fail to give the children a necessary level of knowledge for entering higher education.

6.1.1 Higher education in Agaucatán

Higher education is not common in the rural Guatemala, and Aguacatán is no exception. However, more and more young people understand the importance of further education. Most of the students who take higher education normally have low paid work in Aguacatán during the week and travel to other cities on Saturdays to do part time studies. Women are in general less educated than men. Those who manage to take higher education commonly end up as teachers, which (until now) have needed the lowest possible higher education. I met a family of seven where all five children took higher education, but all three girls had chosen teachers education. The two sons worked in the family owned photo store and TV production. The sisters had the opportunity to work there as well, one of the sons told me, but they were not interested in technology (informal interview, 05.11.12). The son himself took Media and Communication education during the weekends, while working for his father the rest of the week.

Angel, a man working for a local radio station, claimed that education in Media and Communication was not sustainable in Guatemala because the teachers lacked updated information on the newest technologies. Angel's friend had made an expensive application software after finishing the Media and Communication education. At date of release, a free application, similar to his, already existed online. "This happens because the teachers in this country are not very up-to-date" Angel claimed. "The study of informatics does not make you fit for reality. You learn more from hackers' sites where you can share experiences with people around the world" [my translation, interview 14.11.12]. Angel claimed that university professors of highly technological studies were unable to give Guatemalan youth a good education, as the field is constantly changing on a global scale.

6.1.2 New rules and restrictions

A better education system in Guatemala needs better teachers. According to Calderon (2012), more than 20,000 teachers are graduated yearly while the country's annually capacity of

employment is 4,000. This makes a huge surplus of teachers, who have only nine years of schooling, which has been the requirement until now. In 2012, a new reform came into place, trying to increase the skill level of teachers. Instead of getting a teachers diploma after nine years, the students now need twelve years (Claderon 2012). This might seem like a step in the right direction, but the negative affects from the reform have destructive consequences in rural communities. Many frustrated teachers in Aguacatán told me that their education would be worthless as soon as newly educated teachers would take over the job market. They blamed the Government for making new restrictions to cope with the problem of too many teachers, instead of improving the education system. Three extra years of education would cost too much and take too long to complete for most of the rural teachers. The few who could start additional education did, again as a weekend occupation.

Eliseo, one of my main informants, invited me to a university conference in Huehuetenango one Saturday, where teacher students took extra credits because of the new rules. Many of the students worked in small villages in the district of Huehuetenango. The class was about technology in secondary school and Eliseo wanted to show the teachers that creativity and action was needed more than technology to give children a good education. He showed how to make an improvised blackboard for those who didn't have one at their school¹². I was dedicated a part of the conference to talk about implementation of technology in the Norwegian school system. It was a strange and difficult experience to explain how Norwegian classrooms use projectors and computers, to teachers without even blackboards in their schools. I was struck by how unreachable it seemed to give poor children in villages technological education when even the teachers didn't have the skills. They seemed unmotivated and tired, most of them probably eager to get home to their families. I was uncertain of how relevant it was to talk about ICTs in schools to teaches working in remote places, where both electricity and Internet access can be years away.

6.2 ICTs in schools

Nueva Esperanza, a village 50 minutes from Aguacatán with an altitude of 2600 meter, has no electricity. The village was abandoned for 18 years during the civil war, but around 20

¹² It was a big blue piece of plastic with sticky glue, where you could put pieces of paper on and then drag it off again.

families chose to move back and work on the land¹³. In this area, illiteracy is widespread, especially among women. Most children only speak the local language: Kiché. A governmental school was constructed some years ago, but the teacher working there only tutors in Spanish language. Consequently, children loose a lot of time learning Spanish before being able to learn anything else. A man I talked to had learned to read and write from his children who went to the school. He was confident with the use of mobile phone because of his literacy. There were some few places with connection coverage, so the men met there a couple of times each day to check their phones and make calls. Computers were heard of, but people knew little about the Internet.

The experience from Nueva Esperanza seemed miles away what "Prensa Libre", the biggest national newspaper, eagerly presented in their "technology" section every day. One article in the newspaper explained how technology was used in Guatemala's biggest University. Students used tablets and smartphones in class to get additional information, the article stated (Quijada, 2012). As an illustration, two western looking students were smiling and looking down at a tablet. It is hard to understand that the two separate worlds belong to the same country. Even in Aguacatán, where Internet Cafés are everywhere to be seen, the computer skills are poor among educated people. For example, the principle at a private school told me he used the Internet a lot, but when I asked to get more details about his work, he seemed uncertain about computer usage. After some discussion, he admitted he never did the actual job himself, as his secretaries managed the computer and the Internet for him. At the same private school, they focused on IT and had their own computer room as the only school in the district. The school had announced on the local TV channel that the new computers were installed in the school. Unfortunately, this led to break-ins and the school saw the need to hire a 24-hour guard to secure the computers.

Other private schools had IT as an additional class that children could sign up for. Kevin, the IT teacher, held the classes in a computer lab that he owned. He held two different classes; one in ordinary computer usage and another in Internet use. In the Internet classes, Kevin thought the children how to search on Google, Facebook and YouTube and how to make e-mails on Hotmail. Kevin told me that in his Internet courses, they also mention difficulties and dangers of usage. For example, he said that unknown e-mails could contain

¹³ Effective agriculture is hard to achieve at this altitude. I was told that pesticides did not stick to the plants, so everything was ecologically grown. Sadly, instead of eating the fresh products the villagers sold them at markets hours away and bought cheaply produced products from villages using pesticides. Also sweets and sodas were popular goods and easily accessible.

false information and should not be opened. It was common for young people to fall on pages of pornography, Kevin said, but sex and pornography is a taboo theme and not much talked about. At school, they do not have sexual education, so curious children sadly learn from the Internet (informal interview 13.10.12). When I visited the computer lab, Kevin held the general class of IT. It was an expensive course where a total of 610Q had to be paid for 9 months of classes¹⁴. The children learned the basic management of the Office package with Windows, Power Point, and Excel. Few children in Aguacatán have the opportunity to attend this kind of courses. However, the young generation had technological skills far above teachers and parents.

6.2.1 The situation of parents and teachers

In Aguacatán, I held IT courses for two adult women. They were both teachers who felt incapable of using computers, but wanted badly to learn because of the increasing need they saw in teaching situations. As children have knowledge in technology, there is a reason to believe that the parents can learn from their children. However, the children did not have enough patience to teach their parents. My informant Dulce told me that she felt too slow to learn from her daughter and the daughter got easily bored. After winter break had started in Aguacatán, Dulce got the assignment of register the grades of all the 500 students at the school she worked. The students were to be put alphabetically into lists with last name, first name, grades and date of examination. For Dulce, the task seemed impossible. After two hours, registering only 15 students, she gave up and paid her daughter to do the job for her (informal interview, 04.12.12). This example shows how the school system encourages teachers to use the computer as a tool, but they are not given the necessary background skills for accomplishment. Throughout the classes with the two women, we practiced e-mail writing and I understood that a lot of basic training was lacking. Both women had clearly no knowledge of how to present an e-mail as neither one introduced themselves, put their name at the end of the mail, nor used dot and big letters to start new sentences. The usage of the mouse was also frustrating for them as it was much more sensitive than they imagined. The mouse constantly flew over the screen and ended up invisible in the corners.

These kinds of computer skills have to be learned, but also practiced until it goes automatically. Otherwise, the users would feel that they wasted time on technology, as

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¹⁴ A normal day payment for working on land is 30Q and for a teacher it is around 60-70Q, making 610Q many days of work.

writing by hand goes faster. It is difficult for both children and teachers to practice their computer skills when the schools do not have computer access. Ximena, my other computer class student, never asked her pupils to do work on the computers because she did not know how to use it herself. She works at a public school where they have a room full of computers, but the children do not have lessons there. "The computers were given to some kind of project some years ago", Ximena explained, "but now no one really knows who has allowance to use them and we [at our school] do not have either classes or teachers to make use of the computers. Maybe the rats go there and play" Ximena joked [my translation, informal interview, 07.11.12]. Few people have their own computer with broadband connection in Aguacatán. Those who have Internet connection, use the USB stick, prepaid like a phone. People who already manage computers are the only users of the Internet Cafés, which in theory are for everyone. At the Internet Cafés, there are constantly children playing games such as PlayStation and Wii. One can be fooled to believe that all children have the ability to play, but this is far from reality.

6.3 In search of reality

While electricity came to Aguacatán 45 years ago, the Internet has only been available for around six years. At my first visit to Aguacatán in 2007, there was only one Internet Café. It took me one hour to send e-mail because the connection went out constantly. In 2012, there were seven Cafés and two more under construction. One of the managers told me that there was something curious about people's mentality: they saw something work for one person, and suddenly everyone wanted to try the same. That was the reason for all the Internet Cafés (interview, 11.10.12). The connection seemed reliable even though the managers complained of not being prioritized by either the State or the telephone companies. One manager told me that commonly the Internet signal barely reached them. The clients got angry, but there was nothing the managers could do. Another novelty I encountered was that the Internet Cafés focused on games, and the children seemed to use many hours in front of the screens. Most of the Cafés were planning to install, or had already installed, a separate section with only games as an addition to the normal computer and Internet access. Still, all of the interviewees told me that their Cafés were mostly used for students' investigations and schoolwork.

I asked the managers about advantages of the Internet. "In general", one man told me, "it is that people understand more of reality. They get a wider understanding of what is here through what is there" [my translation, interview 10.10.12]. All my informants agreed that it

was easier for the students to learn through Internet than searching for books at the library. It was also necessary with the Internet for a good development, I was told. Almost all jobs require basic computer use, so some skills in computer and Internet is good to have (interview, 09.10.12). Some of the managers were bothered by young students coming to the Internet Cafés asking for assistance with schoolwork. The children were given assignments they were not able to do themselves. Also teachers, who are bound to do work on the computer for the school, came and asked the staff for help. However, most of the people I talked to agreed that very few adults wanted to learn computer skills. "To learn computer usage, one has to want to learn, or else it is impossible", one manager told me [my translation, 09.10.12]. Most of the Cafés had clients between 6 and 30 years, and there were constantly younger people entering to play games and visit social forums such as Facebook, Messenger, YouTube and Twitter. At one Café, a nine-year-old boy worked alone in the evenings. He had full control over the technological challenges that people asked him about, and he seemed more confident using the computer than most of the adults in Aguacatán.

Letting such a young boy have control of an Internet Café scared me¹⁵. Even though he had grown up with computers, he must have less knowledge of the possible risks and dangers than adults. By not being aware of correct use, one can easily open the wrong pages. To investigate this further I asked the managers of the Cafés of what they understood as disadvantages of Internet use. I was told that some people used the Internet badly, as there are both good and bad usage of the Internet. Either, the people were not aware of the correct use, or they had bad intentions with their use (interview, 10.10.12). "It is a new universe for us" one manager told me, "and we still don't have the means to control the different types of information available" [my translation, interview 10.10.12]. Secure control of what is being downloaded is still not developed accordingly to use. Children use the Internet without guidelines from adults, and can therefore be tricked into pornography pages and other sites they do not fully understand. Most of the Internet Cafés had placed the computers so that the staff could pay attention to which pages were visited. Pornography was the one thing the managers seemed cautious about. Adults in general, however, trusted the younger generations Internet management, and there was never any discussion about blocking pages or secretly finding out what the youth spent all their time in front of the screen on. Still, the adults did complain about computers taking a lot of the children's time.

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¹⁵ A nine-year-old boy working is of course child labour and illegal, but I do not take that discussion up in this paper.

Jorge, a 16 years old boy, was in a church group where they made short movies and posted them on-line. The young generation is experimenting and understanding, but it seems like a long way to get Internet accepted as a useful tool for most people. Jorge's mum, Maribel, was not so enthusiastic over his Internet obsession. "He is constantly on Facebook" she complained, "and has no time to help me" [informal interview, 06.10.12]. Maribel was the leader of a women's group. The group did not use Internet for their activism, because Maribel did not have the skills. I knew some of the ladies in her group had computer skills, but Maribel refused to let them control something she could not assist in. She simply explained to me that women's groups do normally not use the Internet if their leaders are without technological knowledge.

6.3.1 Getting connected at home

In addition to Internet Cafés, an USB-modem gives the possible to get connection at home. I was surprised by the good connection I got, paying 199Q for 4G. 199Q was a price I would easily pay for having Internet at home, but most people could not afford this, which would be equivalent to three normally paid workdays in Aguacatán. Eliseo used the USB-modem. One time while visiting, I heard he talk to a colleague on the phone. The colleague wanted some documents that Eliseo had on his computer, so they arranged for a time to meet to transfer the files from one computer to the other. When he hung up I asked if they did not have e-mails in this country. Eliseo looked at me, perplexed, and then realized that it would be much easier to send the files on e-mail. It was interesting to see that even someone like Eliseo, who has Internet access at home, did not think of sending files by e-mail as the first option, rather something that was a bright new idea.

Many of the phones sold in Aguacatán were expired phones from western countries. In bigger cities, like Huehuetenango, smartphones have started to be more commonplace and I saw different promotions for one-month trial periods with the Internet included. The price would be around 200Q a month after the trial, the same as for the quick Internet I paid for. Smartphones might out-conquer the success of the slow Internet Cafés, if the prices are reduced. For the time being, pre-paid phones are the most commonly used. Three big phone-companies: Tigo, Claro and Moviestar, are fighting over the costumers. My informant Claudio had a smartphone with Internet access, but activation of the Internet was too expensive for him, so he used his computer for Internet connection. "Buying a very good phone on a three years contract does not make much sense in this country", Claudio said.

"Imagine if it gets stolen the first week" [my translation, informal interview 13.11.12]. Robbery and pickpocketing is common in Guatemala, where some have the newest technological equipment, while others have nothing.

6.4 Social exclusion - a new phenomenon?

There is a shoemaker in Aguacatán, sitting in a small dark room with a boy called Leo. Leo looks professional when gluing and sewing shoes. He told me that he goes to school, but that he likes to fix shoes on his spare-time. I asked Leo if he liked computer games but he said he didn't know how to play. At Leo's school they do not have any computers, so he had never got the chance to try one (informal interview, 13.11.12).

Globalization and ICTs bring social difficulties and challenges that have not been in the society before. According to Amartya Sen (2000), social exclusion has been a problem far older than terminology of poverty and deprivation may indicate. Even in Aristotles time was humans' freedom, in the sense of choosing the activities they wanted, explored and discussed (Sen, 2000). Social exclusion is a net of different interlinked problems; including economic means, health, food access and knowledge. Romero (2004) argues that social inequality today grows manifold because of the difference in user knowledge of ICTs. School are no longer the main source of information, and so, children without skills in technology become socially excluded from the common society (Romero, 2004). Social exclusion is linked to many different problems in the whole of Latin America. Calvo (as cited in Behrman et.al 2003) argues that social exclusion deny individuals to live out their full productive potentials. This does not only stagnant the public societies growth, but has also a public costs as the social excluded groups might need additional public services or become engaged in crime. Additionally, social exclusion often continues for generations, as people lack material means and knowledge of how to improve their situation (Behrman et.al, 2003).

As an attempt to escape poverty, many have immigrated to the United States. In Aguacatán, families with relatives in the United States can be easily spotted. Even the children signal differences in their way of behaviour and dressing. Nora and Eliseo are married and they are both teachers. Nora told me that there are three children in her class taken care of by their grandparents because the parents have migrated to the United States. Nora said they behaved different than other kids, as their grandparents do not have the same power over them as parents have. The children wore nice cloths and gold chains around their necks. "Even their pants were different; shinier", Nora explained [my translation, informal

interview, 12.11.12]. With the reputation of crime in Guatemala, I wondered if these people were afraid of being robbed. In Eliseo's class, there was one student with an iPhone. One time he brought the phone to school and asked Eliseo to drive him home because some of his classmates threatened to steal it (informal interview, 12.11.12). Great differences in living conditions can make difficult situations like this.

ICTs have escalated the social differences in the world. Even in small villages like Aguacatán, people are constantly getting aware of the power and possibilities computer and Internet skills can give themselves and their children. The technological development can be read about in the newspapers and seen in the big shopping malls in the cities. However, integration into the new sphere becomes more difficult when the basic knowledge is missing. Schools are probably the place where children can increase their equality of opportunities, integrating the ICTs in an early state. One of the solutions to technological social exclusion is therefore to bring ICTs actively into education. In Guatemala, the Government's will to invest in education is limited, as well as the rural teachers capacity to take long higher education. As seen in the PRONADE school example, the Government make easy solutions to improve the education problem, trying a "one-fitting-all" standard. In a country with people in completely different life situations, these kinds of programs are bound to encounter problems.

Also, by talking to people, it became clear that much of ICT development work was done right before political elections as a campaign boost. Computer-labs were put into schools and teachers were offered short term IT classes on the Government's bill. Effects of such generosity last as short as the campaigns themselves, as no one follows up the situation. The Internet Cafés have improved the situation of the students by giving them computers with Internet access. While more Internet Cafés are opened in the small town of Aguacatán, the competition between the Cafés is also increasing. Slowly, the Cafés seem to change their focus from giving students a place to do schoolwork, towards becoming playhouses for children with money. With increasing competition, the need to earn more money also escalates. The consequence is that rich children spend their time in front of screens, while at the same time the scope of the digital divide grows.

Radio and TV as information channels

Televisions and radios are the most accessible ICTs in poor communities. In Aguacatán, marimba music played from the radio can constantly be heard from every corner of town and the blue flicker from the TV screen light up houses in the evening. Unwin (2009) writes that development can be successfully done through mass media, but it is complicated. Commonly, the messages streamed through TVs and radios come from centralized governments, wanting to control and influence the population. However, mass media produced by a variety of actors can encourage people to act and bring knowledge against unfair treatment (ibid). In this chapter I will look at how TV and radio are used in Aguacatán, connecting my findings to Guatemala's legislation and history.

7.1 TV producers and audience

Every morning after the school holiday had started in Aguacatán, the neighbours children sat planted in their small special chairs in front of the television. Television is widely used in Aguacatán, but mostly for pure entertainment. Younger people watch international channels in Spanish language, presenting Mexican or American popular shows and cartoons. The adults claim they watch news, but from what I observed, very few households had neither national nor international news-channels. What they meant was probably the local, low profit channel 9, screening local news and happenings.

I visited the producers of channel 9, who own both a photo/video store and the channel 9. Fernando and his two young sons, Mikael and Javier, worked together and ran the whole business, which was all carried out in one small locale. Their space for cutting and directing the TV production was no more than 2m². Channel 9 shows programs that last from one to three hours each day. When screened on TV, the programs are more or less unprocessed. Mikael admitted the bad quality of their programs and said, "In Aguacatán people still don't criticize if the cutting is done badly or the sound quality is not good. However, with more

technological experience, the people will start complaining. In Guatemala City, they would not have accepted the quality we give on channel 9" [my translation, interview 05.11.12]. Fernando, the owner, was also aware of the middle-range equipment, but the family did not have the economy to buy new cameras. People accept the poor quality because Fernando's shop is the only place in Aguacatán where recordings of weddings and special occasions can be ordered.

Skilled men behind the cameras count more than good cameras, the family agreed. As a consequence, the oldest son Mikael studies Media and Communication at a bachelor level in Quetzaltenango every Saturday. "I have to leave Aguacatán at 4 am in the morning, and the shuttle returns at 10 pm" Mikael told me [my translation, interview 05.11.12]. Even though he used two hours of traveling, the importance of staying in contact with the technological development made it worth the time. Media and Communication studies exist in Huehuetenango as well, but Mikael chose to travel to Quetzaltenango because the equipment is newer and the class has a better reputation.

As a memory of channel 9, I got to keep a DVD from the day of the dead, the 2nd of November. The program is easily made with bad sound quality. Noise from musical instruments, wind and people talking drowned the comments made by the reporter. The dusk affected the picture quality, but with the sun rising, the picture got clearer. Nevertheless, people sat glued in front of the television screens following the reportage. What presented through the program was more than good quality sound and pictures; it was the reality of the inhabitants of Aguacatán. Everyone knew someone who was to be seen on the television screen from that public celebration day. While local television is a new phenomenon in rural Guatemala, radio has been part of people's life for decades.

7.2 The local radio

There are three local radios in Aguacatán, and many more in the area of Huehuetenango. Some of the stations have paid licences for their signal, while many small community radios do not have resources to do this and are called "illegal radios" by the Government. Both radio stations I talked to were legally owned and managed. However, to get hold of them was not so easy. After trying to reach them by mail and phone, Eliseo and I finally went to their studios without notice. I managed to get interviews with the two biggest radio stations, the Catholic "Radio Encarnación", and the 'hipper' "Radio Aguacatán". The following part will address the difference between the two stations choice of repertoire, finance and employees.

Radio Encarnación was the first station I talked to. Their office was placed behind the market and linked to the big yellow Catholic Church. Dueño Efren, the manager of the radio station, welcomed us warmly and had no hurry talking and explaining about his radio station. Radio Encarnación receives any organization or interest group wanting airtime on the radio, as long as they are part of the Catholic Church. Efren added that a women's group of anonymous alcoholics used the radio to talk about their problems. Students are especially encouraged to use the station for free, but they are not permitted to talk favourably about ideas like abortion, alcohol, contraception etc. (interview 14.11.12).

We were shown the music studio; a small room with, as far as I could tell, updated equipment. Angel, working with recordings and the Internet page, was more than willing to share his experiences. Angel has been to the United States several times learning about IT. He was lucky to get an invitation for a journalist study program the first time he went. Angel was picked out to go because he was the only one in his group who knew more or less how to manage the computer. Now he had a visa letting him travel out and in of the United States. Even though he attended some computer courses, Angel was convinced that most of what he knew, he had learned from Internet pages and friends who had more knowledge than him. Angel said that in Aguacatán they don't have money to get professional and specialized people. Therefore, one person often ends up as a reporter, film shooter and modifier, as the case of channel 9 (ibid). When we arrived at his studio, Angel was just finishing the recordings of a women's choir. 12 ladies had sung and played traditional folk songs. Angel joked about the ladies barely fitting inside the small room. Radio Encarnación wants to be a radio for the people and have programs in five languages; Spanish, Awakateko, Chachiteco, Kiché and Mam.

The radio is for the five different cultures living side by side, Efren said, but also for those who have left Aguacatán. Angel is constantly updating their technological offers and has just released a new, free app for users in the United States. Through android, iPhone and Blackberry devices, users can get the Radio Encarnación right on their phone. Many people in the United States have already commented on the success of this release. Efren eagerly showed how their Internet page could follow the numbers of listeners around the world. The moment we looked, there were two persons connected in the United States.

My next interview was with Radio Aguacatán. The office was big, with posters on the walls and young people, seemingly busy, running around. The style and hospitality was very different from the first interview. My informant Luis was young, but still the most experienced in the radio. Even though Radio Aguacatán is supposedly the local radio station,

with Awakateko as the main working language, their focus is on international music for young people. A couple of hours each day, they play typical, local music, called *sonido*, and morning music for elderly people. Talking to people in town, the radio seemed more like a way to "pasar tiempo" (pass time) than an information tool.

Over Radio Aguacatán's reception desk, the wall was decorated with schedules and pricelists for commercials. To have an advertisement on the radio, the cost was from 150Q to 350Q a month. Luis said that their main income was not from commercials, as advertisement does not give sufficient founding alone because of the huge competition. It is normally better to pay more and get the announce spread over the whole of Huehuetenango, than just here for the few listeners in Aguacatán, he explained (interview, 14.11.12). Renting the licenced signal out to interest groups or private people was much more lucrative. People paid well to make announcements or reports from event and special occasions in the surrounding areas (ibid). Radio Encarnación had a different way of collecting money, called Radio Marathon.

7.2.1 Radio Marathon

"The founding of Radio Encarnación comes from the heart of the people", Efren told me [my translation, interview 14.11.12]. Every year, Radio Encarnación visits the 15 different areas in Aguacatán where people from five to six aldeas are gathered to hold a full day of radio sending. The project is called Radio Marathon and the 19th of November, Nueva Esperanza was the host. Nueva Esperanza lays 2600 meter above sea level and has a beautiful view. Arriving over the thin layer of clouds, we saw four different volcanoes peeking through. 20 families live in Nueva Esperanza, but people from the five surrounding aldeas came to join the Radio Marathon. From this altitude and upward, the pesticides are unable to stick to the plants, so only organic food is grown. Unfortunately, the inhabitants bought most of their food from the nearby villages further down where they use a lot of pesticides and fertilizers because it is cheaper. A lot of sweets and chips and coke are also sold, visible because of all the people lacking teeth.

Nueva Esperanza had a Catholic Church provisionally set up by wood planks and a tin roof where the Radio Marathon was held. The marathon lasted six hours, with room for every family of the area to say some words about their situation. Most of the announcements were held in Kiché and almost every family wanted to say some words to their relatives in the United States. Angel had talked about the new app, making it possible to listen to the radio all over the world. He had explained how the Internet works by boxes above the sky picking up

signals, before sending the signal down to other parts of the world. The population of this area had little knowledge of the Internet as they had no electricity, and the phone signal only reached some specific areas. The radio needed electricity, so a generator was brought to make the broadcast work. After the long session was finished, the inhabitants were to give gifts or money to Radio Encarnación. Efren was surprised by the amount of cash because last year, people had given food and handicrafts. As people are poor in the aldeas, their gifts come from the little they have. That is what Efren meant by giving from the heart. Efren and his wife had a small shop linked to their house where they sold food and handicrafts from the aldeas. The surplus from the shop was an additional income to the radio, but money collected from a radio marathon was not enough to cover all the expenses of wages and equipment updates. Besides financial limitations, there are also many other difficulties encountered in the mass media business.

7.3 Limitations

Economic difficulties, as well as limited professional skills, seems to be highlighted when talking about the future of media channels, whether it is development of radio, TV or Internet. Low education is a problem among radio and TV personnel, as in many other sectors of Guatemala. Skaar (2010) writes that at a seminar with 40 indigenous radio volunteers, only three knew how to conduct an interview. Navarro (2009) demonstrates how democracy can be improved by discussing sensitive subjects, like discrimination on the radio. Unfortunately, the lack of knowledge makes it difficult to reach the radio's potential as an information channel. Other difficult aspects of running radio stations are security issues and governmental regulations.

The Guatemalan telecommunication law, as mentioned in chapter four, made it hard for community radios to get frequencies. On the 15th of March 2013, four indigenous representatives from community radios went to court, fighting for legal freedom of expression. The Inter-American Convention on Human Rights (IACHR) and the ILO Convention 169 supported them. One of the representatives, César Gomez, accused the State of "lack[ing] political will" when it came to freedom of expression (Cherofsky, 2013). Gomez explained that selling frequencies to highest bidder only made the indigenous incapable of buying. According to Cherofsky (2013), the legal advisor to the Guatemalan Presidential Commission for the Coordination of Human Rights simply answered that illegal, unlicensed radio was a threat to the Government and interfered with the radio stations that held licences.

In 2012 the Government started to hunt down illegal radio owners, punishing them with 6 to 10 years of prison (ibid).

The neoliberal politics also have other costs. For example, there is no control over antennas in the country, which is sporadically placed around. The mayor of Aguacatán estimated a number between 15-20 antennas in the area, but he could not answer which companies they belonged to. There are no rules about how, or where, private companies can put up antennas (interview, 08.10.12). Every part of land in Guatemalan is privately owned, so people can do more or less what they want with their land. The radio antennas at Guatemalan community radio stations often have restricted or unstable coverage, which makes reception problematic at times. Angel, from Radio Encarnación, told me that the telephone companies had put up many signal towers for Internet access in Aguacatán, but found the area unpromising, dangerous, and had finally abandoned them (informal interview, 14.11.12).

7.3.1 The dangerous job of journalists

"There is a big problem in Guatemala", Angel told me. "Journalists and news reporters are easily victims of violence, as the Government does nothing to protect us" [my translation, interview 14.11.12]. Many want to cover political news, but choose not to because they are scared for their lives. Before the election held on the 6th of November 2011, Radio Encarnación covered the whole process from the start until 6am in the morning the day after. Efren said they tried to be neutral in the comments, but allegedly, someone who disagreed with their comments had smashed the electric power box outside the building of their office. Many more serious assaults on journalists were reported all over the country. Bodyguards of the different parties violently pushed aside news reporters trying to get close to the candidates. CERIGUA (Centro de Reportes Informativos sobre Guatemala/ Centre for Informative Reports about Guatemala) wrote that a journalist from TV channel GuateVisión, ended up spending 10 days in a hospital after an attack by bodyguards of the winning party UNE (Unidad Nacional de la Esperanza/ National Unity of Hope) (CERIGUA, 2011).

As a consequence of the violence against journalists, few radio stations prioritize newscasts. Radio Encarnación has a connection with GuateVisión, a private owned TV channel, who gives them information on international and national news. At occasions, when important material is launched from GuateVisión, one hour in the evening is given to news updates. In Radio Aguacatán, news reports were only given when there were big happenings

in Aguacatán. The employees of the radios were too afraid to be news reporters. Fear creates in this case a great barrier for development.

7.4 What's next?

According to Heeks (2005), radio and TV should be tools for improved social welfare and knowledge. With restrictions in resources and liberty of speech partly imposed by the Guatemalan Government, the achievements in development seem far-fetched. While development projects often write about their success stories, the glorious side have a dark surface. Radio channels normally want to inform the people, but the Guatemalan Government is obviously afraid of what such information can contain. Hearing about the high sentences for stealing radio frequencies, while domestic violence goes unnoticed, makes me wonder about what the Government sees as important for a well-functioning society. If human rights and liberty of speech are given low priority, the country faces a dark future. It is hard to anticipate what investments in ICTs will do to relationships between people. Online dating and violent computer games have taken over physical contact. In western countries, where people spend continuously more time in front of screens, the discussion has already started (e.g. Berdayes and Murphy, 2000; Stahl, 2007).

In my opinion, one should be careful about getting too attached to technology. Technology, together with consumerism and capitalism makes us value objects and money more than human interaction and nature. Even heath issues, such as obesity and depression are linked to excessive Internet activity, gaming and TV viewing (Reeves et.al., 2008). These entertainment technologies distract people from reality. The next chapter will go deeper into this debate, linking nature and technology together with development.

Understanding ICTs, modernity and development

A modern society is commonly seen as highly industrial, using technology for many of the daily activities. Technology has indeed made life easier and more comfortable, especially the invention of electricity. Electricity has not only improved, but also contributed to lifesaving factors for many people around the world through lights, stoves and heating. Arguing that ICT has made a similar contribution to development is debatable.

During this thesis, both positive and negative consequences of ICT usage in Aguacatán have been discussed. In this chapter I will consider some of the basic connections that are made between information and communication technologies and ideas of development and modernity. Are ICTs a viable proposition for the Maya in Aguacatán? Are they needed for development? The French philosopher and sociologist Bruno Latour and his actor-network theory will be important in this chapter in which debates on nature, technology and modernity are addressed.

8.1 The concept of development

Development has been defined in different ways from different perspectives. One example is the United Nations, wanting to expand people's choices through their human development program (UNDP, 2011). The World Bank, on the other hand, sees development as equally spread well-being and economic growth (WB, 2004). How to achieve development without social costs, for neither people nor the society, is a difficult task. Still, there is no single answer to a sustainable development in a world where economic interests, protection of natural resources and poverty reduction seems to hinder each other.

Indigenous people in Guatemala see development as related to a life without fear. Various people told me that their only wish was to live peacefully, while having enough to eat. "The Government constantly use new methods to depriving us" one informant told me,

"now, the industries of mining and hydroelectricity are their reasons for stealing our land and killing our people" (informal interview, 14.10.12). Natalia Atz is the leader of an environmentalist movement called CEIBA – Friends of the Earth. The movement protests against megaprojects wanting to bring foreign interests and capital into the country, which is the next step in Guatemala's development agenda. Indigenous people in Guatemala are accused for not wanting development because of their protest against the megaprojects' violations of human rights (Radio Mundo Real, 2012). While the projects take huge land areas and water resources from the indigenous people, almost nothing is given in return. The electricity made from hydroelectric installations goes to places where people can pay. Atz believes that people have different understanding of development, and that the indigenous inhabitants' wish and protest should be taken more seriously (ibid).

Food shortage is another consequence of international development and liberalization. Many farmers worldwide has been forced into poverty because of trade agreements. While Guatemala was almost self sufficient on corn only some decades ago, the subsidized mass production from the United States increased the import to almost 50% of all corn consumed. With the international development agenda of driving cars on biofuel, food crops are made into fuel making the prices increase, and more hungry people in Guatemala (Rosenthal, 2013).

The debate concerning ICTs as a tool for development, circles around the capabilities of the marginalized people usage of technology. While ICTs are getting more popular, big masses of people are left out, causing the digital divide. ICTs so far have failed to improve the situation of everyone, which is the generally accepted definition of development (Peet and Hartwick, 2009). Gigler (2006) wants to see a new way to approach ICT4D, focusing on how ICT can be used to bring basic needs to marginalized people.

8.2 The concept of modernity

To enable any answers to the question of whether ICTs are necessary for modernization, the concept modernity has to be defined. In sociology, theories of modernity have been greatly debated. The three classics, Marx, Weber and Durkheim, had different understandings of the term. According to Marx, modernity is almost equal to capitalism, and history is constructed by the powerful upper-class societies (Sayer, 1991). Weber understood modernization as rationalization. More efficiency and value orientation was what created a modern society, where individuals would finally be lost in the controlled capitalistic system, which he called the "iron cage" (ibid.). Both Marx and Weber were convinced that science and technology

controlled modernization processes. Durkheim also criticised capitalism in a modern world where, in his view, social value and solidarity were gradually lost, making humans feel alienated (Peet and Hartwick, 2009). All these three sociologists saw modernity as a purely capitalistic order, either as an organizational or a moral diminution of humans.

Others, like the political scientist Huntington, have a more positive vision of modernization. Huntington (1971) claims that modernization is a revolutionary, global, progressive and irreversible process where greater control over the natural and social environment is acquired through scientific and technological knowledge. He also argues that today, people are confident in the strength of individuals to make changes happen (Huntington, 1971). None of the theorists I have listed so far have questioned the origin of the term modernization. Latour has, however, contributed importantly to the modernization debate with his book "We Have Never Been Modern" from 1991, where he claims that people incorrectly classify the world by dividing nature and technology in two separate parts (Latour, 1993).

Latour shows that the division is artificially constructed. Nature and culture are continually mixed together in newly made hybrids. The hybrids, or "quasi-objects" in Latour's terminology, could be for example, genetically modified corn or frozen embryos. Latour (1993) sees the modern human as secretly classifying the quasi-objects, putting them either in the box of technology or nature. The objects get "black-boxed", meaning they are given a position in the world, which people accept without opening the box to investigate the contents. An example is the mobile phone. The mobile phone is seen within the term technology, but is it that simple? Every part of the system is constructed and invented by humans, with the intention of contributing to social life. All quasi-objects balance between technology and nature, and they are qualified to be placed inside a specific framework. Modernism's ultimate aim is to keep the two processes separate. As a result, Latour criticises humans for never being modern (ibid).

8.2.1 Actor-network theory

Latour, together with Michel Callon and John Law, developed what came to be known as the actor-network theory (ANT) in the early 1980's (Couldry, n.d). To begin with, the researchers worked around science and technology studies (STS), trying to understand the methods of knowledge and innovation in the field. However, Latour was convinced that social activities and science are connected and should be treated as such. "We are never faced with objects or

social relations, we are faced with chains which are associations of humans... and non-humans... No one has ever seen a social relation by itself... or a technical relation" (Latour, 1991:110, cited in Couldry, n.d.). Take the example of electricity, which is seen as a human invention. Electricity exists naturally in the form of lightning and even within some animals. The electric eel possess the ability to create electricity. Technology is therefore as much a product of nature as technical innovation and progress. Both human and non-human actors are part of electricity, and the same argument can be posed about any technological item.

As ANT merges every part of the world into one theory, it also has a wide range of usage. Authors in fields ranging from informatics to feminism use ANT as an analytical tool, as it is used to explore relational ties within networks. Latour is however not content with the term Actor-Network Theory, which he sees as problematic for two reasons. Firstly, the term "network" is used in IT, as transportation of information between nodes, where actors do not change the information (McBride, 2003). Castells "network society" is a clear example of this. He explains how wealth and power are accumulated through the nodes of the network. The nodes, Castells (2004) writes, are the places in the network that consume and process the most relevant information in the system. Latour's notion of ANT is not necessarily a network shaped like Castells network theory suggests. Still, the network was chosen as a term because it is without hierarchical order and has no indications of micro- or macro- sizes (Couldry, n.d.).

Secondly, Latour (1993) dislikes calling ANT a theory, because it does not explain "why" or "how" the network is constructed. Rather, it should be looked at as a method for exploration. However, theory is a common buzzword in the academics, which Latour was unable to resist. ANT is concerned with the terms semiotic networks and material networks. While semiotic networks are connections existing between concepts, the material networks are connections between things (ibid). Again, Latour will not separate these relations. The material-semiotic networks act not as two separate parts, but as a whole. Power is not centralized, but spread and shared in the global system that Castells calls a network-state. The network state consists of identity-less individuals, but new types of identities are constantly constructed, Castells (2010) argues. They are difficult to identify because they are formed through multiform networks, and not visible in traditional ways through power centres. Castells believes that a new form of society is emerging, built on the power of identity but constructed from the network society.

Latour (1993) on the other hand, argues that nature has been put in parentheses and parted from culture. Machines, instruments, representatives and spokesmen separate humans,

nature and technology through interpreting their meaning. Latour (1993) calls them "translators" and they have changed the true essence of the world. The world has always been the same, Latour concludes, even before humans entered. However, the process of translators has stopped us from being modern by bringing cultures to an end, and separating what belongs together. With this separation existing, a society will never be able to call itself modern or developed.

8.3 Poverty reduction and the Internet

Castells sees the technological world, which is without frontiers and hierarchy, as a huge opportunity for anyone to be included in the network. Castells challenges people to see the world as totally dependent on the Internet. Villages without electricity and illiterate masses of the world are simply called the "Internet have-nots" in contrast to the once who have (Castells, 2002). This is too simple a generalisation of a very complex problem. From my observations, the Guatemalan Government seems to decide every step in the regulations of Internet access and use in the country. ICTs can in my view help marginalized people if the circumstances, such as education, healthcare and access to ICTs, facilitate the process. International and national organs, called the third layer of Castell's network society, control these circumstances. Castells, however, sees the third layer as no hindrance for marginalized groups, as he argues that the nation state no longer exists as a powerful entity.

Friedman also takes Castells' position in his book "The World is Flat" (2007). Friedman sees the ICTs as the key to bridge the gap between rich and poor, as well as equalizing opportunities and power (Friedman, 2007). Both Castells and Friedman are positive to development through ICTs, which they truly believe will improve the world. One of the methods of implication is the so-called ICT4D, earlier discussed in chapter four. ICT4D has not become the successful as first anticipated. Unwin (2009) explains that unwillingness to create effective partnerships causes the problems. Projects often get more expensive than calculated and difference in interests between private and public contributors stagnate the process. However, Unwin is convinced that if the focus stays on poverty reduction, cooperation between partners will be possible and effective, and that ICT4D will be the way to solve the world's biggest problem, namely poverty (Unwin, 2009).

This optimistic view on technology as lifesavers is criticized. "It takes a lot more than technology and capital inputs to achieve development," Pieterse argues (2010: 176). He claims that IMF (International Monetary Found) and the World Bank urge states to cut in

public spending, which should have gone to education, while at the same time pushing ICT4D forward. There is a reverse logic to this kind of development position, Pieterse argues, as ICTs are not useful without education. Warschauer (2003, cited in Pieterse 2005), shows that even with widespread distribution of television and radios in the society, information is unequally distributed. Warschauer's studies were conducted in the United States and focused on black and minority groups' access to the Internet, which he concludes is linked to income. Pieterse (2010) accuses ICT4D to be a strategic part for expansion of ICTs, because it is obvious for him that "inequality is social, not digital" (ibid.: 175). By implementing ICTs as the new way of doing development, the market and business around technology also gets a boost.

I partly agree with Pieterse's accusations, as my observations have showed how marginalized communities are left out, while metropolis have gained huge benefits from technology. For example, Castells theory might be applicable to for the United States, where ICTs are highly developed. However, the whole world cannot be examined through the network society. Equally, Latour has a point of accusing people of slowly lacking the connection with nature, but while the theory might be applicable in countries like France, the whole globe cannot be observed in the same manner.

8.4 Modernity in Aguacatán, and worldwide hacktivism

Having reflected on the different positions in the modernization and development debate, I will now move back to Aguacatán and link the local Internet usage to the worldwide online activism. As commented earlier, electricity arrived in Aguacatán around 45 years ago. Still, almost everyone in the village boils water over firewood for showering, and hand washes the clothes in cold water from the tap or the river. Most households have installed electricity for lights and a small stove which helped in the daily activities. In 45 years, Aguacatán's inhabitants have invested in lamps, stoves, TVs, radios, mobile phones, etc. And many of the objects run on electricity, which indeed makes life easier. But the ICTs: the TV, radio and computers with Internet, do they enhance development of the Maya? And for anyone else for that matter?

In Aguacatán, one man told me that social media brainwash the young people. "Influenced by the global society, they start dressing as punkers, rockers, emos etc., leaving behind the local traditions" (my translation, interview 10.10.12). The Maya culture has experienced drastic changes, also when discussing social aspects. Parents and grandparents

are no longer consulted and included as before, as looking up answers on Google is more tempting. I discussed this with various people working with IT, and many seemed concerned about the future. "The communication between generations is something that is dangerous to loose...we will see more of this in coming generations", one man told me while hinting that Aguacatán already had started the process. Another man was more direct and said, "We are acting more like robots, and more like pure informatics... maybe this [technological development] should never have happened!" (my translation, interview 12.10.12). These statements show some of the worry and uncertainty around ICT use in Aguacatán.

Brintnall wrote a monograph in 1979, dealing with the modernization in Aguacatán through political, religious and ethical issues. Brintnall (1979) describes a hierarchy in the society where the elderly got more power and respect for each year. Even the deceased were included in the hierarchical system, playing a huge role in decision making through rituals and faith. During Brintnall's study he became aware of the change towards a society where the younger generation stood up against the religious traditions, which seemed unfair and illogical. The protestant church was especially supportive to the young rebellions wanting to change the social structure. Today, the system seems reversed. Religion is no longer the drive for change, but technology is. Those who are able to manage information technology see it as a big opportunity. Special interest is given to the radio where people feel included, because of the low prices and certain broadcasts held in local languages. There is also the opportunity to be heard on the radio, to spread messages and ideas.

The hacktivist group "Anonymous" has given the world a taste of what Internet activism can do. As the name indicates, the members of the group are anonymous. Their symbol is the Fawkes mask¹⁶, a mask the activists put on when they are out in the street. The group started in the United States as a protest group against the scientology church in 2008, and has grown bigger every year. Now, Anonymous have stories of successful protests in India, Poland, United Arab Emirates and London where they rise up against authorities and for freedom of expression (McLaughlin, 2012). What appeared to be a group of nerds, turned out to have great affects and consequences in the real world. Anonymous can be seen as Castells proof of a successful network society because of their vertical and including space with fluctuation of people. Internet facilitated the organization across countries and spread of information in no time.

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¹⁶ The Guy Fawkes mask represents the most famous member of the Gunpowder Plot, an attempt to blow up the House of Lords in London in 1605. After the movie V for Vendetta, where the main character who blew up the parliament used the mask, it has become a symbol of a shared cause while concealing the identity of individuals.

8.5 Latour vs. Castells

Turning back to the question of whether ICTs are needed for development, the answer is "no" according to Latour and "yes" according to Castells. ICTs attract us with an escape from reality, which in increasing degree captures bigger parts of the world. In Norway, people have gone so far as to experiment with living without constant Internet connection, and it seems almost impossible. The society has made students like me totally dependent on technology. Only few years ago, face-to-face meetings were necessary for a lot of issues, which are now solely Internet based. Some examples are paying the student fee, changing the general practitioner or voting for the student parliament. Without Internet access, I would feel cut off from all necessary services. Still, this is not because the Internet is needed for development, but rather that society constructs a vision of the world where Internet is important. Using e-governance is not chosen by the people, but by the State.

Latour's arguments are difficult to grasp because they imply a U-turn in people's mentality and force us to think of known items in a new manner. It would be troublesome for most people without any distinction between technology and nature. Nature is natural and has a purpose without human interference, while technology is human made for human use. Still, Latour's point of seeing a linkage between all the elements existing in a system should be given more attention. Our struggle towards modernity comes at a considerable cost, which Latour describes. Technology particularly highlights this problem, as Internet conversations make us incapable of feeling and smelling the other person. Instead of meeting other people's faces on the bus, SmartPhones and tablets capture the attention. The frontier between humans and the world in its purest form seems to grow with each step taken towards what is call modernity.

Castells' theory, on the other hand, describes a world which has developed steadily towards becoming the network society he describes today. He draws an understandable and clear picture of a three dimensional network where the nodes of power and information are decentralized. Castells' "network society" is problematic because he focuses solely on the technological part of the world. While working with Internet studies, it is easy to forget who is actually included in world of ICTs, and Castells seem to forget this over and over again. Aguacatán serves as an example of a village in the middle of a transition period where Internet have and have-nots live side by side. In the centre of Aguacatán, everyone knew something about the Internet. Driving a bit out of the centre, illiteracy was widespread and the Internet was unheard of. Some children who had never touched a computer, travelled to

Aguacatán to go to school, playing with other children who had Internet access at home. These huge differences is what makes both Castells' and Latour's theories impossible to apply on a global scale. Both theories have good points, but the reality is more complicated than the theorists seem to acknowledge.

Conclusion

The aim of this thesis has been to explore the link between ICTs and development. Increasingly more attention is given to the use of ICTs as a tool for development, even when fighting poverty. Through a field study conducted in the western highlands of Guatemala, I have encountered both positive and negative consequences of the implementation of ICTs. By understanding the situation from the viewpoint of marginalized societies, I think a lot can learn about how development works. My overall purpose with this study is a critical contribution to the development debate by examining the way theorists embraces new technology. In Guatemala, as in many other developing countries, the political and social context has huge influences on individual's life and capabilities. This makes each village a complex and unique case, impossible to put into an agenda of systematic and effective development.

This conclusion will go through my research questions, starting with the two additional questions, where the encounter between Maya culture and foreign influences are highlighted. The two main questions focus on the use of ICTs in development, giving attention to Castells' theory of our world as being steered by networks, superior to the nation state.

9.1 What difficulties do foreign influences cause in the local population?

Foreign influence is an old phenomenon in Latin America. The Spanish conquest brought huge changes to Guatemala and the repercussions from the Spaniards still echo in the society today. Religious practices, land distribution and social differences are only some of the consequences Guatemala inherited got from the conquest. The 36 years long Civil War was a reaction to the inequalities created by the Spaniards and the continuation of indigenous marginalization in the time after they pulled out. From my observations, there are three main problems I would like to highlight, namely the social, economic and cultural problems.

Firstly, the social problems have been discussed from different aspects through this thesis. After the civil war, the Guatemalan constitution supposedly secured indigenous rights, but the situation has not improved significantly. Race division and discrimination is well integrated in the society, and the powerful elite do not seem bothered with the unfair situation. Huge dissimilarities in economy and opportunities make social differences grow. Local populations try to resist international influences, but are often met by accusations of refusing development. The Government send military forces, trying to quieten the protests (Hirsch and Utreras, 2010; International Crisis Group, 2013; PBI, 2012). In Guatemala City there are daily killings and harassments grounded in gender and race. The increase of socio-economical difference makes violence and robbery commonplace. Aguacatán has been a quiet village, but complains from inhabitants indicated that alcohol abuse and criminality were increasing among the youth. I was strongly advised to stay at home after dark. Crime is inevitable in a village where some part of the inhabitants cannot afford spending time in Internet Cafés, while other are equipped with Smartphones and laptops.

Secondly, the economy gives problems when natural resources are extracted primarily for financial gain. Indigenous peoples' future looks dark because of the foreign investment warmly greeted by the Government. Guatemala's resources are turned over to the industries, which give power and money to other countries. Air and water is highly polluted by industries such as hydroelectric installations and mines, making it dangerous to live in the surrounding areas. At a local level, the continuous wave of migration from Guatemala to the United States gives room for economic variances. The differences are huge between Maya life in the Guatemalan highlands and the "American Dream", but since more than fifty per cent of households in some areas have migrated members, the influences are visible. While traveling in the area of La Laguna I and II north of Aguacatán, those with connections abroad were easily spotted only by looking at the different houses. Traditional houses were in wood with corrugated iron roofs¹⁷. Sporadically spread around were big, colourful houses with balconies and pillars, witnessing the possibilities lying in the north.

Remittances have only strengthened the wish to follow the migration dream, as some families in a village receive money, cloths and technology. The choice is problematic; either to live in poverty while watching other families receiving remittances, or choose to risk life and family relations while trying to cross the border. Around half of the people leaving for the United States fail to enter, ending up with a lifetime of debt. As most people take up a loan to

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¹⁷ Because of the civil war where people were massacred brutally in this area and most of the houses were burned down. The corrugated iron roofs were the cheaper alternative to the earlier tile.

travel, misery and alcohol abuse is a common sight in the streets of Aguacatán. In the case of those who return in debt, and those whose family members successfully enter the United States, all the parental responsibility is transferred to the wife. Often the long distance relationship ends in divorce where the father gets freed from responsibility of paying child support. The Guatemalan highland also loses an important part of the work force as the land is worked on by hand.

Thirdly, the various cultural changes, investigated in depth under the next title, have changed many indigenous communities. Local languages, traditional costumes and religious practices are transformed to adapt to the incoming influences.

9.2 How does the Maya culture and social setting cope with the changes?

The debate around indigenous languages is on-going in Guatemala. Mayan languages are weakened by every generation. Spanish is needed for business transactions, schools hire teachers from other places, and people in one town develop a need to communicate with people from another town. Schoolwork on the Internet also requires good skills in Spanish language. The biggest influence is probably the TV with cartoons and series dubbed in Spanish, for children and youth. Seemingly, inhabitants in Aguacatán both curse and praise the new language influences. While some engaged people try to save local languages, others prefer their children to focus on English, which is seen as the way to accomplish a high level of education and success.

Cheap clothing stores have also reach success, and are now found on each corner of every town. While Maya women are trying to keep the traditional costumes alive, western second hand stores and copies of brand name clothes are slowly changing the young girls' minds. The clothes made a clear distinction between ladinos and indigenous women before, while now, they are wearing the same types of clothes many places. The gender division is not as easily changed. Strict rules and norms are in the Maya culture from the moment babies are born. For example, boys are never taught how to make tortillas, the most important part of every meal. Few female drivers are seen in the streets and boys are still favoured for education in families with limited resources. Girls are discriminated in various ways and are kept in the domestic sphere by most families. Since these norms are still so much alive, there is no surprise that boys have a better technological understanding than girls. At the Internet Cafés there were only boys playing the games and it was easier to talk with boys about computer habits than girls.

Capitalistic tendencies as well as consumerist behaviour is clearly an effect of a more integrated world. Some young entrepreneurs abuse the traditional Maya religion, calling themselves priests, and offering magic services in exchange for money. Religious practices such as Catholicism and Protestantism are mixed with the traditional beliefs and superstition, and marimba versions of international pop-music are played on the radio. It is a colourful meeting between the western world and Maya traditions where shopping malls and fast food restaurants lie next to cornfields. The younger generation appears to embrace the powerful and rich United States and the opportunities available, especially through ICTs.

9.3 What impacts do ICTs (Information and Communication Technologies) have on the development of Maya communities in Guatemala?

Investigating how the Maya are incorporated in the world of ICTs is especially interesting because of the huge contrasts existing in Guatemala. For a long time, the Maya have been excluded from any participation in the national media system. A change towards a higher participation rate implies at least three important factors: skills, capabilities and security. Among the Maya population, these criteria are not met so far.

The young generation seems interested in spending time on the computer, actively engaged in social forum and entertainment, such as computer games. However, very few schools in Aguacatán focused on technological education. As far as I know, only two schools had their own computer rooms in Aguacatán. One was a private school, using it actively, and the other was a public school, where the room was locked and no one knew who had access to the computers. Because of the lacking computer skills among teachers, the IT level of the students also remains low. Only children from rich families, able to pay for expensive private IT courses, or those with computer access at home, are able to acquire skills. Adults without sufficient skills would rather pay their children to do the few necessary tasks needed on the computer, than finding out how to do it themselves. While the Guatemalan Government seemingly focuses on ICT equipment and skill-development, most changes happen in the already developed areas. Attention is given to poor areas only when the authorities need something in return: for example around elections.

Amartya Sen's capability approach (2000), as discussed in chapter 6, describes how the lack of access can be an obstacle. In Agaucatán, the Internet Cafés gave access to the inhabitants and the Cafés have so far been a success. Again, only those with money are able to use them. In this way, the digital divide increases among inhabitants in villages like

Aguacatán, where there is no free access to computers and Internet. This supports Warschauer's statement saying that inequality is highly social. As a further development, three out of seven Internet Cafés in Aguacatán have in the last years installed a separate section for computer games. X-boxes and PlayStations are supposed to offer breaks between study sessions for the children. While people seem to agree that computers and Internet is important for studying, my observations stated the consumption of time spend on social forum or entertainment, and studying. There is a risk of children using much more time and money than they should on entertainment and violent games. Many elderly accused the younger generations of lacking traditional Maya values because of the increased time spent in front of screens.

Traditional values are a source of great pride for the Maya. While the number of indigenous people in Guatemala have decreased, both because of the civil war, but also because of labelling issues, the division between Ladinos and indigenous is wide. Talking to the villages, I got the impression that the Government was like an enemy, only concerned about improving Guatemala City and the area around the capital, and using armed forces to quieten rebellions. The western highlands of Guatemala are constantly supervised, because here the resistance to the military was strongest during the civil war¹⁸. The Maya population is used to live with fear, as the Governmental security forces still attack them when trying to utter opinions. Liberty of speech is a great problem in today's Guatemala. No effort has been given to including the indigenous into the sphere of mass media and ICTs.

On the contrary, the Government is constantly excluding the indigenous populations through strict regulations of telecommunication, criminalization of human rights defenders and by not prioritizing education and agriculture. Reporters and journalists fear for their life, as anything contradicting the Government is a possible crime. Punishment is also given to non-profit enterprises who broadcast on radio frequencies without paying. The Peace Accords and signed conventions on human rights do not seem to have an impact on the Guatemalan reality. However, the fight for justice is continued through discoveries of mass graves and archived materials from the civil war. Strong organizations backed by human will, have proven to be unstoppable in their fight, even with a brutal governmental army fighting agaist them.

ICTs facilitate the spread of information, and can shed light on human rights defenders across borders. Rigoberta Menchú demonstrated how a documentary could inspire

 $^{^{\}rm 18}$ That they are supervised is visible even on Google maps where the area is shown in great detail.

compassion in the whole world through "When the mountains tremble". The documentary, and also her book, told Menchú's story of the Civil War, starting with the famous phrases "My story is the story of all poor Guatemalans. My personal experience is the reality of a whole people." (Menchú, 1984: 1). ICTs give many opportunities, but maybe is the belief in an interconnected globe too far fetched.

9.4 Castells claims that outsiders can easily be integrated through his theory of the network society. Is this theory valid in practice?

Emmanuel Castells is an important figure in ICT studies. His description of the "network society" (2010) is both appreciated and discussed throughout my paper. Castells (2004) argues that the network makes it possible for any new actor to slip right into the system and be an equal part of the global connection. The global network Castells describes is connected to the world of finance and economy where the United States is a good example. He pays little attention to other realities of the world, where development does not have the same significance. Money and power control human lives, because of industrialization and international trade, making self-provided farmers suffer from food shortage. In Guatemala and Mexico, the poverty of agricultural areas contributes to the high number of migrants to the United States. In Guatemala, 50% of those trying to migrate are forced to return with great debts and a miserable future.

Through the example of Aguacatán, I have showed how the local population strives to keep traditional values and practices. For Castells theory to be applicable worldwide, both the complexity and differences has to be given greater acknowledgement. While his theory might reflect contemporary USA, it is not applicable to marginalized communities, discriminated by powerful governments. In Aguacatán, there are many conflicting interests at the local level, while the national Government is one strong force, making decisions behind closed doors. Small groups in Aguacatán have organized themselves to manage projects improving infrastructure and livelihood. One of my key informants is a leader in a women's group and very active in decisions made in her part of the town. I was amazed by all the time she used going to meetings, discussing and planning projects. None of the people I talked to had any idea of the Government's plans of investment in Aguacatán. They said the information flow was non-existent. The news, given through radio, television and newspapers, devoted all their attention to violence and robberies.

Through my thesis I have tried to offer many aspects of the ICT use in a Maya village. While people in urban settings use ICTs such as mobile phones, radios and television, the wider hidden realities of the poor is much more complex. In Aguacatán's surrounding towns, infrastructure, illiteracy and food shortage clearly deprived people's capabities to be integrated in the technological world. Poverty limits health care which influence personal development and skills. People living under poor circumstances have few opportunities to improve their situation in cases where the Government gives no assistance. Poverty also makes it harder to enter the technological market, as ICTs are cheaper in rich countries because the usage and competition is higher (Hilbert, 2010).

Castells argues that there is no hierarchical order in the network society and that anyone can enter the global market. With the governmental power I have experienced in Guatemala, Castells' theory meets a lot of restrictions.

9.5 Closing remarks and suggestions for further research

There are many possibilities for interesting research in the field of ICT usage in marginalized communities. ICTs are constantly changing the reality we live in, and therefore, there will always be new trends and tendencies to explore. Even though I found Aguacatán a representative village for this kind of study, I believe that similar studies in other parts of the world can give a more comprehensive and thorough perspective on the topic. As qualitative studies are always based on subjective interpretations, a different research design as well as different choices along the way could have changed the findings. In my opinion, there is a lot more possible research to be done on the topic of ICT usage for development in marginalized communities. Two suggestions to further research is presented.

Firstly, more investigation should be done on the use of ICTs as a communication tool between family members across boarders. My findings concluded that these tools were not commonly used because of the lack of knowledge and skills. Only Facebook was commonly known, but tools like Skype will open up a new way of communication for people living years apart. How do these communication tools affect relations between people? The percentage of migrated people from marginalized communities is high in Guatemala, and so is the value of remittances sent. Will the use of ICTs as communication tools trigger more people to migrate or will it rather make people think twice as they can get real-time stories of how it is to be an illegal immigrant. Also, Internet pages in indigenous language and content have started to spread online. It could be rewarding to see how much these pages are used and

to what extent migrated people are interested in the material. Are they concerned about what happens in their local community?

Secondly, the debate around humans and technology, presented by Latour and Castells in this thesis, will be even more important in the coming years as bigger parts of the world are incorporated digitally. How the world is perceived also affects decisions and actions. Should the development debate further incorporate digitalization? Are the way we do development today really about the marginalized people or is it a way to increase capital for companies selling IT services and goods?

9.5.1 Epilogue: The future for ICT usage amongst the Maya

If the man in Livingstone was right¹⁹, the next époque, which may last another 5000 years, is a digital one. My research has shown how fast technology is incorporated into the Maya society, leaving no room for hesitation. Those who are not ready to spend time and money in front of a screen are left behind on the wrong side of the digital divide. It will be interesting to follow development organizations continuous work towards ICT implementation. The MDGs need new goals after the 2015 deadline has expired. Will ICTs be even more important in the years to come, or will more focus be given to those having acute needs, such as food and shelter? The current Guatemalan Government came into power in 2011, and people I talked to were more worried than relieved over the new political power. Marginalization does not seem likely to come to an end in the near future as a new way of deprivation is taking place. Big money, through foreign investment, force poor people to sell their land or live with polluted water. An internationally engaged people aware of the violations taking place, might be able to steer the development agenda in the right direction where focus is on equality and justice.

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¹⁹ See chapter one



An old lady in Aguacatán weaving on a traditional loom. Photo: Pål Aubert

Appendix A - Terminology

"Aldea" – a word in Spanish describing an area of land, consisting of houses spread around with normally a village as a centre.

Anonymous – an activist group who do most of their action through hacking

Black boxed – Latour's term for objects that are put into a terminology that people accept without investigating what the object actually contains.

"Cinta" – a word in Awakateko meaning the piece of cloth the Maya women use as a hear decoration in Aguacatán.

"Corte" – a word in Awakateko meaning the traditional skirt, hand woven into a thick heavy fabric.

"Coyote" – a word used for the transportation carrying illegal immigrants across the boarder

Digital divide – describes the gap between those who are able to access ICTs and participate in the information economy, and those who are unable to access ICTs and so are excluded. Socioeconomic factors play a central role in determining who is able to use and benefit from ICTs. This pattern, unaddressed, implies widening socioeconomic inequalities.

E-governance – making Internet a tool for information and services offered by the government

Globalization is defined by Joseph Stiglitz²⁰ (2003) as: "the closer integration of the countries and peoples of the world ...brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders." My understanding of globalization is in agreement with this and my use of the term will fit under this definition.

Hacktivism – a word merging hacking and activism

"Hüipil" – a word in Awakateko meaning the decorated white blouse the Maya women wear.

ICTs (*Information and Communication Technologies*) is defined as managing and controlling information by the use of Internet, mobile phones, TVs and other technical equipment (Gerster, 2003). I will use this term for the meaning of one or more of these technical equipment.

Informational society: power and productivity are mainly caused by technology (today)

Information society: social organization happened without technological help (before)

²⁰ Joseph Stiglitz is an American economist who won the Nobel Prize in 2001 and is named as one of the 100 most influential people in the world.

Internet have-nots – those who do not have access to the Internet

Inverse conventionalization – when standards and general agreements are followed, but opposing to other standards and agreements. In this case: meaning that the Maya are what the Ladinos are not and vica versa.

Iron cage – the capitalistic system that control individuals according to Weber

Ladinos – was originally used as a term to address those speaking Spanish in Guatemala. With time, the meaning has changed and the term now somehow refers to someone superior to the indigenous population. Wealthy Maya would try to change their lifestyle and become Ladinos, because it meant more power and money. Although the difference between the Maya and Ladinos varies, I use these terms when demonstrating the distinct difference between the two groupings.

Material network – connections between objects/things

The Maya – is used as a generic term for all the indigenous people living in Guatemala. Under the broad term, there are different tribes, for example Mam, K'iche' and Awacateko. Guatemala also belongs to some other indigenous groups, such as the Xinkas and Garífunas. I use the broader term in this paper, either Maya or indigenous as was what my informants usually did.

"Mojados" – a word in Spanish meaning "wet-backs" used for illegal immigrants who have to swim across the river parting Mexico from the United States

"Moral" – a word in Awakateko meaning a special small purse, used by the men

"Nahual" – Maya calendar symbols

Neoliberal multiculturalism – when neoliberal economic policies intervene with the possibility of a multicultural society.

"Network Society" — is Castells' understanding of the technological development we are undergoing. Castells sees the world as a web of nods that binds everything together. He argues that there is no overarching institutional shape in the network society; so new nodes can easily be integrated on the same level as others. In other words are there few limits making the differences in the world and everyone has a chance to catch up with those who have technological advantages.

Quasi-objects – Latour's understanding of hybrids between nature and technology

Semiotic network – connections between concepts

"Sonido" – a word in Spanish meaning sound, but used for the typical, local music among indigenous people normally containing the marimba

Translators – machines, spokesmen, instruments etc. who separate humans, nature and technology through their translations (Latour, 1993)

Appendix B – Qualitative Interview guide

Interviews with Internet Café owners, semi structured (English translation):

General

- Name/age/origin
- Name of the Internet Café
- Your position in the Café

The Café

- When did the Café open?
- How did you learn to manage ICTs?
- If higher education: Can you tell me about what the quality and courses of your education?
- What is you motive to work here?
- Have there been any difficulties with working here, or with the costumers?

The users and use

- Can you tell me about the costumers coming here? Age, gender, race etc.
- Do you see any difference in skill level between adults and children/youth?
- Have you experienced that costumers without IT skills use the computers?
- Have you experienced that elderly people talk badly about ICTs?
- Can you tell me about the costumers' usage of the computers? What, how, why etc.
- In your opinion, do ICTs affect the relationship between generations?

The Internet

- In your opinion, what are the benefits of the Internet?
- In your opinion, what are the disadvantages of the Internet?
- What do you understand by the expression e-governance?
- Is e-governance used in Guatemala?
- Have you seen a change in the usage of the Internet the last years? How and why?
- Do you think the Internet is necessary for the development of Aguacatán?

<u>Interviews with radio stations semi structured (English translation):</u>

General

- Name/age/origin
- Name of the radio
- Function: Role, programming, hours per week, etc.

The Work

- How long have you worked in the radio?
- How did you learn to manage a radio?
- What is you motive to work here?
- Have there been any difficulties with working here?
- Do any journalists work here? How do they find their job situation?

The radio

- Which languages do the radio include?
- What kind of programs do the radio have?
- Do you focus on a specific group of listeners?
- What type of music do you play?
- Do you have news on the radio? Local, national, international.
- How do you find the news?
- Do you make interviews on the radio? How, with whom, etc.
- Do you make reportages in the community? How, why not, etc.
- Is the radio broadcasted on the Internet?
 - if yes, who are the users and what are the possibilities for further expansion?
- How is the radio financed?
- Do you have commercials on the radio? Which, by whom, cost, etc.

The community and the State

- How does the radio interact with the community?
- What kind of feedback do you get from the listeners?
- Have you ever got violent or unpleasant reactions from listeners? How, what and why?
- This radio pays a license. What is your opinion on the Government's regulations of radios?

Appendix C – Informed consent

Formulario de Consentimiento

CONSENTIMIENTO PARA PARTICIPAR EN LA INVESTIGACIÓN

Tecnologías de la información y comunicación en Antigua, Guatemala

Se le pide que participe en un estudio de investigación realizado por Nina Benedicte Aubert de la Universidad de Ciencias de la Vida en Ås, Noruega.

Yo soy una estudiante de postgrado en "desarrollo internacional". Actualmente estoy haciendo un estudio sobre tecnologías de información y comunicación, centrándose sobre todo en Internet. Quiero saber cómo los habitantes de las aldeas mayas entienden el cambio alrededor de ellos y si las diferencias en las habilidades tecnológicas (por ejemplo, entre las generaciones) están causando problemas. También me interesa saber como el Internet se utilice como una fuente de información para grupos de interés de diferente tipos (religiosas, derechos humanos etc.) y para difundir información a los habitantes en general.

Este estudio es mi propio proyecto y será parte de mi examen final en forma de una tesis. La tesis será disponible para los estudiantes con conexión a las universidades en Noruega. El tiempo de estudio en Aguacatán será desde 02.10.12 hasta próximamente 07.12.12. La tesis será entregado el 15.05.13 en la Universidad de Ciencias de la Vida en Ås, Noruega. Puede ser que la información de este estudio será usado en otras publicaciones en el futuro.

Su participación en este estudio es totalmente voluntaria. Por favor, lea la siguiente información y pregúnteme de cualquier duda, antes de decidir si desea o no desea participar.

Objetivos de la investigación

El estudio propuesto tiene objetivo de comprender cómo las TIC impacte en las comunidades locales en diferentes formas. Hay tres ideas principales que este estudio quiere responder:

¿Cómo la diferencia de conocimientos tecnológicos entre los jóvenes y la vieja generación están influyendo en las comunidades mayas?

¿Cómo circula la información por el Internet y que tipo de información es?

¿Cómo las tradiciones y costumbres locales se funden con la cultura occidental y las costumbres a través de las TIC?

Confidencialidad

Usted elige si quiere ser anónimo en este estudio. Si <u>no</u> quiere ser anónimo, podría utilizar su nombre y declaraciones directas de las entrevistas en mi tesis. Las entrevistas serán grabados. Las grabaciones se borran después de terminar el estudio.

Participación y Retiro

Usted puede elegir si desea o no desea participar en este estudio. Si usted es voluntario para participar en este estudio, puede retirarse en cualquier momento sin consecuencias. Usted puede negarse a contestar cualquier pregunta que no quiera contestar.

Derechos de los Sujetos de Investigación

Entiendo el procedimiento descrito anteriormente. Mis preguntas han sido contestadas a mi satisfacción, y estoy de acuerdo en participar en este estudio.

Firma de Participante (s) Fecha

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