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We Were Seeds: The Socio-Political Economies of Forensic Anthropology After Political Violence

'Quisieron enterrarnos, pero se les olvido que somos semillas.'

SARAH MAYA ROSEN

**DEPARTMENT OF ANTHROPOLOGY
2020**

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the Faculty of Social Sciences and Health

Abstract

This thesis seeks to navigate the intersection of forensic anthropology and social anthropology applied in contexts after political violence. The first case study is the identification efforts in Guatemala run by the Forensic Anthropology Foundation of Guatemala (FAFG) and the *Ministerio Publico*. The second case study is the World Trade Center identification efforts run by the Office of the Chief Medical Examiner of New York. Examinations of these examples reveal the complex nature of forensic anthropology after political violence and how similar dynamics can emerge even in fundamentally distinct scenarios. This thesis argues that forensic anthropological work occurs in a matrix of influences, which serve and empower some demographics over others, as well as producing or maintaining narratives surrounding the violence. It is also argued that these disparities and narratives can be understood in terms of their political, socioeconomic, and academic functions within the identification effort. These disparities and narratives manifest from attributions of victimhood, prioritisation of some victims over others, institutionalised remembering and forgetting through interment, and in the multilateral and national responses to these delineations of victim. This thesis concludes that the systematic nature of these influences can be understood within an intersecting model. This allows for the nuanced examination of concomitant political, social, and academic influences at each level of the forensic anthropological endeavour—as all participants of the forensic anthropological endeavour are beholden to this matrix. The disparities in access and empowerment extend beyond merely the unidentified dead and impact the living loved-ones of the unidentified and missing, the forensic anthropologists themselves, and those who enable forensic anthropological projects through funding and administration. A holistic understanding of these contexts allows forensic anthropology to function in a transformative justice model, contributing to efforts that address the underlying causes of the violence as well as the symptoms of it. In light of this, a heuristic model for practitioners and administrators for forensic anthropological efforts may be found in the intersectional, functional model to account for systematic discrepancies in access and empowerment—although this model should be applied with nuanced understandings of relativism, descriptivism, and prescriptivism.

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Figures 8-21 were taken by the author for the purpose of this thesis.

List of Abbreviations

CEH – Commission for Historical Clarification/ La Comisión para el Esclarecimiento Histórico
DONGO – Donor-Organised NGO
EAF – The Excavators, Anthropologists, and Those Who Fund Them
FAFG – Forensic Anthropology Foundation of Guatemala/Fundación Antropología Forense de Guatemala
HFA – Humanitarian Forensic Action
IFIFT – International Field Initiatives and Forensic Training
MLNI – Most Likely Number of Individuals
MNI – Minimum Number of Individuals
MUL – The Missing, Unidentified, and Those Who Love Them
NGO – Non-Governmental Organisation
OCME – Office of the Chief Medical Examiner of New York
QUANGO – Quasi-NGO
STR – Short Tandem Repeat
UNDP – United Nations Development Fund
USAID – United States Agency for International Development
VCF – Victim Compensation Fund

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Finally, I would like to thank my family for their volunteered time as sounding-boards, copyeditors, and coffee brewers. I truly could not have done this without you, especially my wonderful partner Owen Jones.

Preface

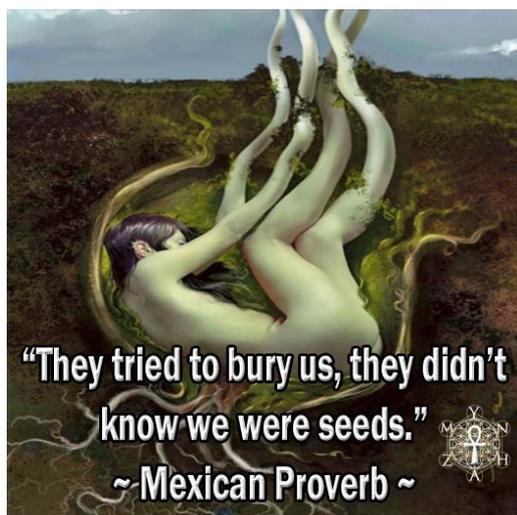


Figure 1: *We Were Seeds* (Ferraz 2015)

The above image has made the social media rounds, garnering thousands of 'likes' and 'shares' over the course of several years. It first hit my computer screen during the research for this thesis, and it struck me as incredibly apropos. So much so that I have adopted it in part for the title of this project, which seeks to examine the forensic excavations of mass graves in Guatemala.

The most important aspect of this image, much like my research, I would not discover until much later. As pertinent as the image seems, it is entirely misattributed. Ponders (2016) recalls that he first heard this proverb as early as the 1990s, presented again as a Mexico *dicho* or saying.



Figure 2: *Somo Semillas* (Castro_Zombie 2014)

The original iteration of this poetic expression of hope in the face of adversity, however, was just that—a poem. It was penned in Greek by Dinos Christianopoulos, a gay poet

who often had to rise ‘above the often moralizing, offended, and embarrassed critics who are not unprejudiced regarding sexual difference’ (Syrimis 1997).

καὶ τί δὲν κάνατε γιὰ νὰ μὲ θάψετε
ὅμως ξεχάσατε πὼς ἦμουν σπόρος

What didn't you do to bury me
but you forgot I was a seed.

I chose to keep this title because, as you will see, I fell victim to a similar series of assumptions during this project. In the early stages of the research for this project, I accepted information that was offered at face value—information that was not necessarily given in maleficence, but information that had been corrupted all the same. Perhaps it is not completely analogous, but I have discovered that, in regard to forensic investigations, we seem to have a propensity to come to conclusions that benefit our motives and our needs without full consideration of the context in which we are working. And above all else, this thesis will seek to show the damage which is done by this mindset, and the benefits of policies that compensate for it.

1. Introduction: The Backbones of Forensic Anthropology, Transformative Justice, the Project, and its Case Studies

1.1 Introduction

Anthropology is to study what it means to be human. There are innumerable ways to achieve this end, as everything that is experienced speaks to some aspect of human existence. To the individual, this human experience may end with death, however, to the community in which the death has occurred, death is another aspect that moulds its existence (Joyce 2001). Death, and the consequences that emerge from it (e.g. beliefs, practices, attitudes), have long been areas of interest for the anthropologist (Schwartz-Marin & Cruz-Santiago 2016), as it is a universal feature of human life. This includes social anthropological and archaeological research such as mortuary ritual (Chesson 2001), spiritual beliefs surrounding death and the afterlife (Robben 2018), and the creation and maintenance of burials or cemeteries (Francis 2003). But it also includes the biological anthropological studies of death, the body, and burial—particularly in contemporary forensic anthropology (Anstett & Dreyfus 2015, Crossland & Joyce 2015, Gowland & Thompson 2013, Rosenblatt 2015).

Yet, when death becomes more than a universal inevitability of life, the consequences change. Mass fatality events such as genocide or disaster, have an overwhelming impact on the community in which they take place, affecting—sometimes permanently—its sense of identity (Card 2005). For the deceased victims themselves, often their identities are taken away from them in a very literal sense, as the dead are deposited in large numbers by perpetrators anywhere from days to years, in many cases to shock and terrify (Korb 2015). Here, not only is the individual's identity removed in relation to his or her body, the body is removed from their community, many times never to be returned at all. There have been significant efforts now to

exhume, identify, and return the bodies of the victims of war crimes or disaster to the communities from which they came including excavation efforts in Argentina, Spain, Colombia, Peru, Guatemala, and beyond (Crossland & Joyce 2015, Rosenblatt 2015).

1.1,1 The Original Project

The original impetus for this research was an interest in the way that visualisation of skeletonised remains [the act of looking at exhumed remains], and of the burial sites themselves, changes the perception of the violence or disaster and how this shifts the communal sense of self—in the sense that what once was only ephemeral knowledge becomes tangible through the visual. But this initial iteration of the project was not to be, for just as death and communal identity affect one another, the cultural contexts surrounding the efforts to exhume, identify, and return victims deeply affects this process as well.

At the conception of the preliminary project, the efforts of a forensic anthropology field school in Guatemala, International Field Initiatives and Forensic Training [IFIFT] sought to reunite the victims of the war crimes committed during the civil war with their living families while training university students, of all academic backgrounds, for forensic field work (Katigbak 2014, IFIFT¹). This particular case offered a unique opportunity to study the metamorphoses of communal identity that stem from the visualisation of the Guatemalan civil war's devastating results, and to examine the experiences of those participating in the excavations themselves. In this field school context, ties to the local community were vital, and excavators were often encouraged to conduct interviews with the survivors and the families of the victims

¹ The IFIFT materials originally cited for this research were lost when its webpage went dark after the disappearance of its director. IFIFT field school documents are attached in Appendix 1.

(IFIFT). Groups from these communities were frequently taken to the excavation sites to observe progress and were given the opportunity to interact with the remains. Here, the act of exhumation served as literal and figurative means of revelation, uncovering the evidence of their tragedy for all to see.

And the efforts truly did seek to demonstrate what has happened in Guatemala to the world. Participants of the programme were encouraged to spread awareness, in their respective countries, about the war crimes committed in Guatemala [see EmpathyAndEqualityMatters.blogspot.com, ExperiencesInAnthropology.blogspot.com]. It had become a serious effort to disseminate what their work had revealed, turning the visualisation of the evidence into global validation of their suffering. These efforts also offered insight into the experiences of the field school participants and the ethical questions that arise in the face of commercialising forensic anthropology.

In this vein, the original project sought to critically consider several aspects of the excavation efforts of the IFIFT in Guatemala. An ethnographic analysis was to be conducted, examining how the communities interact with the dead from mass graves and with the gravesites themselves. Through ethnography, this project intended to consider the variation in willingness to visualise the sites and remains, the variation in how the site is emotionally and physically approached, the willingness to physically interact with the skeletal remains, the immediate emotional reaction upon visualising the remains, the extended effects of the experience on the individual and the community, and how this has changed their perception of the conflict. This list was intended to be non-exhaustive, as new and appropriate research questions were anticipated to become evident during the course of the project. It was thought that this would offer deeper insight into the extent that visualisation shifts the individual and communal sense of the conflict and the effects that have emerged from it.

The attempts to circulate information about the excavations would have also provided an interesting opportunity to examine the socio-political implications of extensive visualisation of the sites and remains. Perpetrators of these war crimes are only now being brought to justice with varying levels of success and many remain in positions of great governmental power (Sanford 2013). The dissemination of images and reports from these sites were still likely to present a conflict of interest for those in governmental positions, and this adds another layer to the complexity of visualisation as validation. But more importantly, I would discover, is how this conflict of interest between excavations and governmental power embroils the application of forensic anthropology.

Like much of ethnographic research, this project underwent necessary shifts in its questions and aims, accommodating the transitory reality of anthropological fieldwork. The original ideas were interesting and valuable, however, they were impossible to examine without the cooperation of gatekeepers. Relationships with gatekeepers in best-case-scenarios can be difficult to maintain, having to gratify a host of needs while still collecting data (Latchem-Hastings 2019). In a post-genocide context, and in a country still rife with violence and impunity, this gatekeeper relationship proved to be enormously complex—and potentially dangerous for all involved, as will be discussed in subsequent sections. When the relationship between myself and the IFIFT gatekeepers dissolved with the disappearance of the school's director, the original project would dissolve as well.

Yet, the failure of the original project allowed new questions to emerge from its remains. In fact, these new questions would possess an urgent importance the original project did not, despite its compelling academic questions. The new aims of the project would make a palpable difference in the life of at least one woman who had previously

given up hope of justice for her missing father—and it may conceivably do the same for others in her position. This project would no longer be an examination of the unexplored sensorial experience of the forensic excavation but would rather become an examination of the crucial ways in which the reconciliation process is failing.

Initially, this research project was to be carried out under the supervision of the IFIFT, a forensic anthropology field school run by *Nicholas*² through a Canadian university. At the time of my acceptance into the PhD programme, the IFIFT was running with numerous bona fides—including a spread in well-known magazine and an affiliation with the Fundación Antropología Forense de Guatemala [FAFG], an internationally respected organisation dedicated to identifying victims of state violence in Central America (FAFG.org) [see Appendix 1]. However, this connection was to be short lived, as I soon received an email from an anonymous employee of the IFIFT explaining how Nicholas had failed to pay his debts and the page would soon be closing down. Of course, this caused a significant amount of anxiety, yet when I tried to contact Nicholas to straighten out the situation, he did not reply. After several months of repeated outreach and continued silence, I accepted the reality that I probably would not hear from him again—nor see the money I had paid in advance to the field school. It was not until three years after the fact, during which time Nicholas remained incommunicado, did I discover what had become of him.

As the IFIFT had advertised an affiliation with the FAFG, I reached out directly to them hoping that they would either be able to offer me an explanation or take my project on themselves. I was once again met with resounding silence. I was unable to speak to anyone about the situation until a postdoctoral fellow at the university who

² This is a pseudonym used to provide anonymity.

already worked with the FAFG, and who would go on to become my secondary supervisor, sent an email on my behalf. The fact the IFIFT had advertised a connection to the FAFG took them by surprise, as the two had not been officially connected for a number of years. The FAFG had assisted in the original foundation of the IFIFT but had been largely uninvolved since that point. They admitted that Nicholas had been bad at keeping up relationships. According to an FAFG employee, he had 'burned bridges' before severing connections with the FAFG. They were also clearly concerned that the IFIFT was obviously no longer functioning and how this might affect the FAFG's reputation. They asked to see the materials from the IFIFT that stated a connection between them and the FAFG and agreed to read my project proposal.

After I passed my progression viva at Durham University, I followed up with the FAFG, hoping for a positive response to my proposal. Their reply was to ask for additional paperwork and to assure me that they would be in touch again soon. From that point, I believed it would be beneficial for my project to be based in Guatemala, where I could begin making observations and talking to locals about their experiences in the war. I also wished to be closer to the FAFG headquarters, as I believed this might expedite the process. When I informed the FAFG I had arrived in Guatemala, they agreed to meet with me in person to talk about my project in the following month. This was now eight months after I first spoke with them about the IFIFT and a year since the IFIFT had gone dark.

The in-person meeting went well, they expressed interest in my project—although it was clear they had not read the proposal. The employee who met with me said that if it was up to her alone they would take on my project immediately, but the board had to take a look at it first. At this point I was concerned that the board had not already considered the project, as I had sent them the material months before this

meeting. She then assured me that the board would meet about my project the following month as their schedule was already full of outreach programming that would take up most of their time. I was told to submit more paperwork, including a letter of intent.

From that point, I was nervous that the FAFG was stalling on my project, although I could not tell if this was purposeful or not. However, the meeting made it seem as though the only barriers left were bureaucratic. So, after two months of living in Guatemala and hearing nothing from the FAFG, I followed up again, to which they responded that the board had still not met to discuss the project and would do so during the next monthly meeting. And after another month of hearing nothing, I followed up again. This time they said they were formulating an official response—which would turn out to be: no. The official response read that my project was too socially driven, and that I should reach out to other organisations that focused on support outreach instead. This took me by surprise as my research was clearly predicated on the excavation of human skeletal remains.

1.1.2 The New Direction

When trying to navigate this response, several important facts came to light. First, I had made the assumption that I would be allowed at least some amount of access to the excavation sites and to surviving families. In context, this assumption was not entirely unreasonable as the IFIFT had accepted this project and would have provided this access had it not gone dark. Yet, there were certainly influences on me that made me assume an organisation like the FAFG would work with me. I had offered my expertise gratis as a biological archaeologist with experience [and a university degree] and had assumed that this would secure me at least some access. I had not taken into account the social context in which the FAFG and I were functioning.

Second, after living in Guatemala for several months, getting to know locals and expatriates alike, I learned something valuable regarding Guatemalan interactions. Often, *Guatemaltecos* will not give a direct 'no' to a request, but rather say 'I'll think about it' so as not to offend the asker. The local who explained this dynamic to me believed this attitude developed as a response to state violence. *Guatemaltecos* may still experience some underlying anxiety when refusing strangers or figures of authority.

And third, the denial of access in my case could have been entirely legitimate, however, the official rejection of my project for being too socially driven suggested that they either had a profoundly different understanding of the point of my research, or there was another, unarticulated reason for rejecting my project. In any case, the FAFG had complete control over the type of research it allowed, so while it is entirely possible that my research was an inappropriate project for them to take on, or did not merit their involvement, it is also possible that the FAFG did not want to enable research that examines the effectiveness of forensic anthropological excavations, in terms of reconciliation and methodology, if they were the case study.

To contextualise the latter possibility, which is a bold claim, over the course of my travels and conversations with *Guatemaltecos*, I had discovered that the FAFG had restricted access to their services in another way—and this way was significantly more surprising and potentially damaging than any rejection they gave to me. Entirely by chance, I came across a woman in the town of San Marcos on Lake Atitlan whose father had gone missing in 2008. She had contacted the FAFG hoping to have her DNA tested, however, because her father had gone missing after the official ceasefire, the FAFG said that they could not help her. I will tell her story in significantly more detail in subsequent chapters, yet, it is important to note her experience now as it is evidence of

an underlying system which empowers and disempowers with access to forensic services at every level.

From this point, it became clear that forensic anthropological research functions within a dynamic of access and restriction of access. The research projects that are allowed to progress are fully under the power of the organisations that allow them access, the bodies that are identified are only the missing persons who fall within the organisations' mission statement. These concepts have been discussed in other research contexts at length. For example, the selective pressure of funding in science has been observed to skew away from confirmation studies, leading to a body of research that is mostly unsubstantiated or utilises problematic methodologies (Smaldino & McElreath 2016). Political motives within countries where forensic excavations are taking place have defined the narratives that surround the conflicts that produced the mass graves in the first place (Wagner 2011). What I had not anticipated was the human collateral damage that could arise at the hands of these overarching problems within forensic anthropology.

This new association with the woman of San Marcos would fundamentally change my research aims. It made what was once an abstract idea of effectiveness and empathy, into a stark examination of effectiveness and access. As Rosenblatt (2015) observes, it is crucial to consider the purpose that forensic investigations serve, and more importantly, on whose behalf. A new paradigm had begun to reveal itself: an underlying network of influences using specific assets—such as access—to define the discipline of forensic anthropology. I would later come to call this paradigm the Forensic Economies Matrix, which will be discussed in the following chapters.

In order to consider these forensic anthropological contexts more deeply, the use of social anthropological methods would be essential. As Gowland & Thompson (2013)

explain, even scientists who strive for objectivity practice 'through the lens of their own historically situated culture and identity within it' and this illusion of objectivity hides the reality that the human body is subjected to many competing interpretations (Gowland & Thompson 2013: 3). This understanding of the forensic anthropological process would allow me to take a reflexive approach. At this point in my studies, I had been exposed to various human osteological projects from my time as an intern in the biological anthropology collection at the American Museum of Natural History, to a necropolis excavation in Spain, to my postgraduate work in the Fenwick Human Osteological Laboratory in Durham, and my professional development visits to the Office of the Chief Medical Examiner of New York [OCME]. Within the new project, these experiences became reflexive data. I used the Forensic Economies Matrix to examine the experiences I already had as a human osteologist and this reflexivity revealed a pattern. In each context that I analysed skeletal material, I was functioning within the same dynamic of influence through access. With this understanding, I was able to expand the reach of these questions not just to the Guatemala example, but to anywhere human skeletal analysis is taking place, especially after political violence.

In fact, expanding the remit of this project to include another, inherently different case study proved to be of great value. By introducing a second forensic anthropological example, the World Trade Center identification efforts run through the OCME, it was possible to juxtapose these examples and determine if there are overarching influences across contexts. These case studies are intrinsically different from one another; however, this makes for an ideal pairing as any similarities would be more impactful. Additional examples of forensic anthropological contexts were included on a smaller scale to demonstrate how some of these influences impact specific individuals practicing forensic anthropology.

The two central case studies are examples of forensic anthropology as a response to political violence. Often when forensic anthropology is utilised as a response to political violence, it is part of a transitional justice project as a truth-seeking mechanism (Kimmerle 2014). Transitional justice is understood as an endeavour to transition a community to a time of violence to a time of peace, usually through multilateral projects (Shaw & Waldorf 2010). This process may or may not include the actual prosecution of individuals responsible for the violence as these processes seek to provide resolution more broadly (Kimmerle 2014). However, transitional justice as a framework has been critiqued for treating the symptoms of violence—especially structural violence such as in the Guatemala example (Sanford 2008)—as opposed to the cause of the violence. It has also been argued that, as a model of peace building, transitional justice is reliant on networks of elite international donors and professionals, and that to increase local participation and agency it is necessary to switch to a ‘transformative model’ (Gready & Robins 2014). A transformative justice model seeks to address the underlying causes of the violence by centralising local perspectives and needs (Gready & Robins 2014). Focusing response exclusively on state-lead initiatives or truth commissions and trials is not a holistic approach (Evans 2015). Taking a reflexive, holistic approach to the forensic anthropological process, and contextualising this process in terms of intersecting influences, contributes to a transformative model that addresses inequalities of access and empowerment in forensic anthropology.

1.1.3 Research Aims and Questions

The foundational question this thesis seeks to answer is: who falls through the cracks of the forensic anthropological process? By asking this question, it is possible to map inequalities in the process and create a starting point to address these inequalities

and contribute to a transformative justice model, which is the foundational aim of this thesis. In order to contribute to a transformative justice model, it is necessary to consider underlying systems that reinforce inequalities in the process. Therefore, this thesis contextualises its observations in terms of systems and their functionality.

This thesis will explore the essential need of integrating social anthropological theory into humanitarian programmes and forensic anthropological initiatives—such as the use of reflexivity, cultural sensitivity, and social concepts of identity—the need for which is represented across biological anthropology literature (Anstett & Dreyfus 2015, Crossland & Joyce 2015, Gowland & Thompson 2013, Kirchengast 2014, Rosenblatt 2015). This model must be holistic in its aims in order to be transformative. By establishing the political, social, and academic influences on the forensic anthropological process after political violence in two, central case-studies [Guatemala and New York City], it will explore if this reflexive approach can transition forensic anthropological endeavours into a transformative model that addresses its inequalities. This thesis puts forward a mechanism for holistically understanding this interplay of political, social, and academic influences, especially as it relates to funding for these initiatives, access to the services that the initiatives provide, and the empowerment of individuals and groups involved in these initiatives. These include the families of the missing and unidentified dead, to the forensic anthropologists themselves.

This research posits that this mechanism—referred to as the Forensic Economies Matrix—when used in forensic anthropological projects, can reveal inequalities in the process and allow for the transformations necessary to improve equity in these projects. This mechanism is applied to the process holistically, from retrieval, identification efforts, and re-interment, to the participation of forensic anthropologists in these processes. This includes how socioeconomic factors such as class, gender,

gender identity, nationality etc. make certain individuals more likely to need the services of a forensic anthropologist [i.e. they are particularly targeted for violence or barred from initial forensic services], prevent them from receiving these services, or even prevent them from performing these services. These topics are discussed in part outside of the two main case studies, but all within the realm of human osteological work.

To address the systemic nature of these post-violence contexts and how it contributes to these inequalities, there is an examination of the dynamics between remembering and forgetting at the graveside, as these concepts may act as opposite sides of the same coin. It demonstrates that acts of memorialisation do not occur in a political or social vacuum, and that remembering and forgetting after violence serve a function in establishing narratives and attributions of victimhood that emerge during the transitional justice effort—which then contribute to inequalities in forensic anthropological responses.

This thesis also explores attributions of victimhood and the prioritisations that emerge from delineations thereof and how these are intertwined with socio-political influences. How and why forensic anthropological investigations attribute victimhood play a substantial role in the functioning of these investigations and both emerge from and contribute to the narratives that surround the violence within the affected community and outside of the affected community. This thesis explores how these narratives of victimhood intersect with remembering and forgetting victims of violence—especially through interment of unidentified and uncollectable remains.

Furthermore, this thesis considers the theoretical frameworks that surround contemporary forensic anthropological work, encouraging researchers and practitioners to consider the integral intersection of the forensic and the

anthropological as it applies to the identification of human remains after political violence. It does this in order to establish a heuristic principle to improve access to, and empowerment within, forensic anthropological services through emphasis on reflexive techniques to achieve transformative justice goals. This examination of theoretical frameworks will emphasise the functional and intersectional understandings of forensic anthropological work as it is applied after political violence, drawing on holistic interpretations of the systems that envelop it.

As the focus of this thesis is the inequalities across forensic anthropological processes and the integration of biological and social anthropology to create a tool to account for these inequalities, this thesis must examine a myriad of data from a myriad of contexts. As such, diversity between the contexts is key, as the study's focus is not necessarily on the comparison of the contexts but rather on overarching influences. By examining forensic anthropological projects that span time, place, type of violence, demography, and governmental vs. non-governmental organisations, the utility of the Forensic Economies Matrix is better demonstrated.

1.1.4 Chapter Structure

These research questions will be addressed in six chapters. First, a literature review is provided to contextualise the practice of forensic anthropology after political violence. This review describes the methodology and practical application of forensic anthropology, the social and political contexts surrounding the two case studies, the role of international organisations in transitional justice efforts [including forensic anthropological investigations], and the role of forensic anthropology in the transitional justice process.

The following chapter contains a discussion of theoretical models, how the intersection of biological and social anthropology presents a unique set of theoretical challenges, and what can be learned from osteoarchaeological models. It demonstrates the need to adopt nuanced perspectives when navigating the inherently different models of the two fields and presents a balanced framework that allows the researcher to consider functionality and systemic influences without relying on outdated paradigms. This chapter also contains the methods employed by this project and their potential limitations.

Chapter Three acts as the first full discussion chapter, providing an ethnography in a narrative style. It begins with my arrival in Guatemala, continues with my formative experiences and subsequent travel to the *Ministerio Publico* and pauper's cemetery, and concludes with an analysis of the political functionality of the systems observable within the Guatemalan forensic process outside of the FAFG's efforts.

Chapter Four presents a consideration of New York City after the 9/11 terrorist attacks on the World Trade Center. This chapter relies on formal interviews with OCME employees, personal experiences, and numerical analysis of OCME datasets to examine potentially underserved demographics and the narratives that emerge around these disparities.

Chapter Five delves into the socioeconomic implications for all involved in these case studies. It examines the role of gender during the violence and during the forensic anthropological investigation—on both the part of survivors and forensic anthropologists. It also examines class structures—and to a lesser extent, ethnicity and nationality—in tandem with gender to produce a more nuanced perspective into the lived experiences of survivors and forensic anthropologists.

The concluding chapter considers the conundrum forensic anthropologists might face when balancing priorities and values within a project. And finally, it provides a summary of analyses and potential avenues for future research.

1.2 Literature Review

This thesis attempts to integrate two subfields of anthropological study, the social and the biological. This analysis will utilise concepts and vocabularies from both fields that may not possess the same definition or understanding across them. It is necessary, therefore, to address the important concepts and terms that will be used consistently throughout the thesis.

This literature review will explore the fundamentals of forensic anthropology in a global context and in the specific case studies. The socio-political context of the case studies will also be explored to facilitate a holistic examination of the forensic anthropological response. The broader context of humanitarian intervention and transitional/transformational justice programmes, and the problems presented by contemporary practices are also explored.

Certain social anthropological concepts are imperative to this research. Central to the research are 'prescriptivism', which is an analytical lens that contextualises behaviour, culture, language etc. within predetermined sets of rules, and 'descriptivism' which is an analytical lens that rejects these sets of rules in favour of simply recording what is observed (Straaijer 2015). These concepts emerged specifically in sociolinguistics (Mesthrie 2000) but are eminently relevant generally within other forms of social anthropological research. From the 'cultural relativism' perspective—accepting the legitimacy of another culture even [and especially] when that culture diverges from that of the observer (Brown 2007)—the prescriptivist lens is considered

inappropriate and the descriptivist model is usually adopted. These dynamics will prove to be an integral part of this thesis.

This thesis contextualises the forensic anthropological process within a framework that uses the terms ‘political’, ‘socioeconomic’, and ‘academic’. In the interest of clarity, political here means in connection to national governments, their affiliated departments and organisations, and the maintenance of these governmental agents’ power. The term socioeconomic is used to represent social factors that impact the individuals’ experiences within a community or the world more broadly, including class, gender, ethnicity, nationality etc. Academic influences are understood to mean the values and expectations related to university-based research, including publication, methodology and theory, and academic career trajectories.

It is also important to understand the nuances of humanitarian, ‘multilateral’ projects [projects organised by more than one nation] when they take the form of ‘intervention’ and ‘transitional justice’—when an international organisation intervenes in a conflict to [hopefully] facilitate a ceasefire (Moore 1998), or when it provides services to transition a country or community from a time of violence to a time of peace (Shaw & Waldorf 2010). In these situations, ‘colonialism’ and ‘paternalism’ may become influencing factors. Colonialism in this context is the subjugation of a people by a foreign state, which deprives them of their right to self-determination, freedom, and independence in the economic and political interests of the subjugating power (Churchill 2011), and paternalism is the tendency of a powerful country, group, or individual to dictate values, priorities etc. to less established or powerful entities ‘without adequate consultation or due diligence’ regarding the wants and needs of those they seek to assist (Murithi 2007: 2). The presence of neo-colonialism has been observed in forensic anthropology (Cox 2016).

1.2.1 Forensic Anthropology

The most critical terms surround the practice of forensic anthropology. Forensic anthropology is understood in this thesis as the use of anthropological methods to recover and analyse human skeletal remains for identification and to offer an opinion on cause of death if possible. This process may culminate in legal prosecution of the perpetrators of the violence or it may not, depending on the goals of the project (Thomsen 2017).

Christensen et al. (2019) define forensic anthropology as ‘the application of anthropological methods and theory to matters of legal concern, particularly those that relate to the recovery and analysis of the skeleton’ (Christensen et al. 2019: 2). The forensic anthropologist uses these skills to estimate the biological parameters observable in human remains, which then assist in the identification of the individual or may elucidate other aspects of the circumstances surrounding the individual’s death. This estimation is known as the biological profile (Christensen et al. 2019). The forensic anthropologist may also be involved in the search and recovery efforts, trauma analysis, taphonomic analysis (Christensen et al. 2019), facial approximations, photographic superimposition (Ubelaker 2018a), recovery and analysis of orthopaedic devices and other medical devices (Ubelaker 2018b), and even in the analysis of the living (Blau & Ubelaker 2016, Wood & Cunningham 2011). As Blau and Ubelaker (2016) observe, the varying roles and responsibilities of the forensic anthropologist speaks to the diversity of the subject and how it is understood across contexts.

A broadly accepted core responsibility of the forensic anthropologist is establishing this biological profile for the individual or individuals in question. This is done utilising techniques in macroscopic and microscopic skeletal analysis, which provide an estimation of biological sex, age at death, ancestry, stature etc. (Christensen

et al. 2019). Biological sex estimations rely upon sexually dimorphic traits in skeletal morphology, especially in the pelvis, and are presented on a scale of feminine to masculine (Gowland & Thompson 2013). Age estimations are calculated from 'well-documented patterns of skeletal maturation', beginning with the development of ossification centres, morphological changes in these centres, their closure, and subsequent degradation (Purves et al. 2011, Wood & Cunningham 2011: 3). The methodology for ancestry determinations has faced criticism that is discussed below, but also relies upon perceived differences in skeletal morphology (Sauer 1992). These examinations assist in the identification process, although it can be difficult to secure a positive identification through these methods alone as the traits must be sufficiently unique (Ubelaker 2018b).

The process of positively identifying an individual is impacted by several factors. In order to achieve a positive identification, unique characteristics of the skeletal remains must be matched with a missing person in a process called 'factors of individualisation' (Iscañ & Olivera 2000). Problems in this process arise when missing persons are not reported to the police [and therefore there is no comparable individual] and when documentation of unique characteristics [i.e. medical records] are not kept by police for extended periods—as is common in poorer countries (Iscañ & Olivera 2000).

Forensic anthropologists may also examine trauma and pathology in the skeleton, either for identification purposes or for establishing cause and manner of death (Christensen et al. 2019). The skeleton reacts distinctly to different types of trauma; therefore, these injuries may reveal details of the individual's death. Certain injuries in the skeleton are associated with specific types of violence [i.e. healed blunt force trauma as an indicator of abuse (David 2018)] or even types of activities [5th metacarpal fracture known as the 'boxer's fracture' (Brickley & Smith 2006)]. The

forensic anthropologist will also be able to determine whether the trauma occurred antemortem [has signs of bone remodelling], perimortem [living bone during injury but shows no remodelling], or post-mortem—although some of these distinctions are still contested (Pechníková et al. 2011, Sauer 1998). The presence of any specific diseases within the skeleton may help identify the individual based upon medical records (Cunha 2006). Forensic anthropologists have been instrumental in analyses of mass fatality and highly commingled contexts as their knowledge of the skeleton and skeletal trauma assists in the organised recovery of skeletal elements (Mundorff 2008).

Forensic anthropologists in a mortuary context have a number of responsibilities, including separating bone from non-bone, separating human bone from non-human bone, separating comingled remains, analysing small fragments, siding of skeletal elements, analysis of cross sections, analysing damaged remains [i.e. incinerated remains], estimating minimum number of individuals, and providing an opinion regarding ante/peri/post-mortem trauma and pathologies (Blau & Briggs 2011). The presence of a forensic anthropologist in the field is also valuable for the retrieval process (Blau & Briggs 2011) and to address taphonomic processes [the impact of the surrounding environment on the remains] by reconstructing ante and peri mortem contexts (Ubelaker 1997).

Forensic anthropology is often used in conjunction with other forensic sciences (Thompson 2015). This integration is considered essential, especially DNA analysis as argued by Mundorff et al. (2008). In a forensic context, primary identifiers are the gold standard of positive identification and include fingerprint matching, forensic odontology [forensic tooth analysis], and DNA analysis. Secondary identifiers, which include personal data [medical records, anthropological analysis, personal effects], are

considered acceptable when primary identifiers are unavailable (Interpol³). In the case studies used in this thesis, the forensic anthropology initiatives include the testing of DNA from human skeletal samples performed by, and in association with, forensic anthropological teams. While the testing of DNA may be considered a separate forensic science, it is also appropriate to consider forensic anthropology as a sum of what forensic anthropologists actually do. As both the FAFG and OCME forensic anthropology teams participate in and enable the testing of DNA from skeletal samples, it is reasonable to consider this as part of the process.

Forensic anthropologists will also employ social anthropological techniques to collect ante-mortem evidence (Baraybar 2008). Fondebrider (2016) describes efforts to identify potential gravesites in South America through the analysis of documentary evidence as perpetrators will leave traces of their actions in court records, death certificates, and cemetery archives. The role of the forensic anthropologist in these scenarios is holistic, further demonstrating the value of including social anthropological perspectives on theory as well.

In this thesis, the terms 'excavation', 'exhumation', and 'disinterment', while subtly different, are used interchangeably and are understood to mean the specific unearthing and removal of skeletonised remains. The process of determining who the decedents are after the exhumation/excavation/disinterment has occurred is referred to as the 'identification process' and is considered separate from the excavation/exhumation/disinterment process. The broader efforts of forensic anthropologists, including excavation/exhumation/disinterment and identification, as well as family outreach, clerical and other laboratory work, and interactions with local

³ There is no publication date available for this source

and international organisations, are referred to as forensic anthropological 'endeavours', 'initiatives', 'projects', or 'programmes.' The term 'victim' may be used in several ways, including the deceased individuals that the forensic anthropologists exhume and identify, as well as living victims of the violence including family members of the deceased and those who survived direct violence that others did not. 'Inhumations' or 'interments' are used to describe the initial burial of the remains, while reinterment is used to describe the act of reburial after exhumation.

Development as a Discipline

Forensic anthropology emerged in the United States from a four-field anthropology tradition that includes social anthropology, archaeology, linguistics, and physical [or biological] anthropology, all of which are practiced under the umbrella of 'Anthropology' (Brickley and Ferllini 2007). In the American system, therefore, forensic anthropology includes archaeological methods as well as biological anthropological methods. Before World War II, there was little interest among academics in collaborating with police forces, which stymied the development of forensic applications of anthropological methods (Kennedy 2000). After the hostilities of the second world war ended, the American Graves Registration Command deployed teams to locate, collect, identify, and repatriate remains of American soldiers (Wood & Stanley 1989). As time went on, their identification methods became increasingly inadequate for advanced states of decay. As a response, they collaborated with physical anthropologists at the National Museum of Natural History in order to create identification centres staffed with teams trained in skeletal analysis (Wood and Stanley 1989). Since this collaboration, forensic anthropology has proliferated throughout the country's legal systems. Forensic anthropologists Kerley, Snow, and Bass helped

establish physical anthropology in the American Academy of Forensic Sciences [AAFS], and by the 1980s forensic anthropology was utilised in human rights investigations (Brickley & Ferllini 2007).

European forensic anthropology, especially British forensic anthropology, emerged from a system that separates anthropology and archaeology, which created a distinction between forensic anthropology and forensic archaeology. (Brickley & Ferllini 2007). The primary distinction is arguably in the retrieval stage, as forensic archaeologists use archaeological excavation methods and will also focus on artefacts at the scene. The forensic anthropological role is primarily in the skeletal analysis phase (Blau & Ubelaker 2016). However, forensic anthropologists are also often involved in the retrieval stage (Blau & Briggs 2011) and osteoarchaeologists have expertise in skeletal analysis—indeed, many forensic anthropologists come to the field from osteoarchaeological backgrounds (Brickley & Ferllini 2007). A nuanced division of these two subfields may also limit their potential, as Cox (2016) observes, the impact of losing social anthropological training in forensic archaeological programmes is great. Conversely, osteoarchaeology has much to offer forensic anthropological research in terms of excavation theory, as will be discussed in the following chapter. In some literature, there appears to be no distinction between these two fields, for example in Iscan and Olivera (2000). As this thesis focuses on two case studies that utilise methods from the US tradition, a strict separation of these subfields may not be appropriate, but it is necessary to discuss these differences to clarify this decision.

Within forensic anthropology globally, there is a distinction between forensic anthropologists that are based in professional organisations and those based in academic institutions. As Cattaneo et al. explain, there can be strict delineations between forensic scientists and academic researchers, which can even prevent useful

anthropological techniques from being applied in forensic contexts (Cattaneo et al. 2016). In many European countries, forensic anthropology is taught solely in non-academic contexts—such as medical school programmes (Brickley & Ferllini 2007). This dynamic may contribute to the resistance observed by Cattaneo et al. (2016), as only forensic scientists—not anthropologists or archaeologists—may be allowed to participate in an investigation in some contexts. In the United Kingdom, most forensic anthropologists are based in academic institutions, although some work for professional organisations (Brickley & Ferllini 2007). Many forensic anthropologists in the United States work in non-academic contexts, such as the Office of the Chief Medical Examiner in the World Trade Center case study. This distinction is important to consider in a forensic anthropological context, as the methodological priorities may depend on the context in which the forensic anthropologist is working—such as incorporating social anthropological concepts such as reflexivity and relativism. This will be addressed further in the following chapter.

Humanitarian Forensic Anthropology

Most of the forensic anthropological initiatives discussed in this thesis occur in the context of humanitarian work, which is understood here to mean the pursuit and promotion of human rights, especially in international contexts and overseen by international organisations such as the United Nations, the International Committee of the Red Cross [ICRC] etc. Indeed, ‘Humanitarian Forensic Action’ [HFA] is a term coined by the ICRC to describe the various applications of forensic science in humanitarian contexts (Cordner & Tidball-Binz 2017).

The international community now expects swift action in response to atrocity, and this response has grown to include forensic anthropological work—especially as

burial sites and human remains are often damaged by non-professionals, taphonomy, and perpetrators in the aftermath of political violence (Steadman & Haglund 2005).

Forensic anthropological responses to human rights violations have taken place across the world including Argentina, Spain, the Balkans, Rwanda, and beyond.

One of the first organised applications of HFA was the establishment of the Equipo Argentino de Antropología Forense [EAAF] in Argentina with the assistance of Dr. Snow and the AAFS, driven by the activism of the relatives of disappeared persons—victims of the military regime between 1976-1983 (Cordner & Tidball-Binz 2017). The initial lack of expertise in forensic anthropology left graves in Argentina subject to damage and comingling, and any experts that were affiliated with state institutions were treated with suspicion by the families of the disappeared (Doretti & Snow 2003). Forensic anthropological training allowed for a systematic investigation of these mass graves and anonymous municipal graves (Doretti & Snow 2003). The EAAF is still functioning today throughout South America (Fondebrier 2016).

In Spain, forensic anthropological investigations are still undertaken to identify victims of arbitrary executions during the Spanish civil war. These programmes locate and excavate mass graves of political prisoners that were 'released' to paramilitaries and executed en masse—it is estimated that 150,000 people were killed off the battlefield in Spain during the conflict (Ríos et al. 2010). In this case, forensic anthropological work has been integrated with social anthropological techniques to compile ante-mortem evidence from witnesses and exhumations are undertaken at the request of families. These programmes also use DNA testing to augment skeletal analyses as there are limited reference samples available for these analyses (Ríos et al. 2010).

The UN Security Council created the International Criminal Tribunal for the Former Yugoslavia [ICTY] (Cordner & Tidball-Binz 2017). The goal of this tribunal was to collect evidence that would confirm whether war crimes had been committed in the Former Yugoslavia, which would require the analysis of human remains for cause and manner of death, but not necessarily the identification of the victims analysed (Cordner & Tidball-Binz 2017). As a response, the International Commission of Missing Persons [ICMP] was formed to fulfil this humanitarian need and has identified 70% of the 40,000 presumed dead in the Former Yugoslavia (Cordner & Tidball-Binz 2017). The ICTY has since stated that accountability endeavours should not be separated from humanitarian endeavours; that there is an ethical obligation to the deceased and their families that requires participation in the identification process (Cordner & Tidball-Binz 2017).

In 1994, between 500,000 and 1 million people were killed in Rwanda in an attempt to eliminate the ethnic Tutsi and political opponents of the extremist regime of the time. After the Rwandan Patriotic Front overthrew the government, the UN established a tribunal [ICTR] to try the perpetrators of the genocide (Cook 2006). Forensic intervention, including forensic anthropological intervention, has been an integral part of the attempts to grapple with this violence—through memorialisation, education, and legal proceedings (Cook 2006). Exhumations of mass graves are overseen by local governmental bodies including the National Commission for the Fight Against Genocide [CNLG] (Major 2015). However, exhumations of mass graves in Rwanda often do not lead to successful identification of victims and many remains are reinterred without a positive identification (Major 2015). Major (2015) draws a comparison between the Rwanda example and the Spanish example and argues that humanitarian exhumation in both scenarios consolidates narratives and memories of

the conflict. However, in the Rwandan example this consolidation is meant to silence, while the Spanish example is meant to empower.

The development of forensic anthropology as HFA was not without difficulties. The response in the Balkans, for example, led to an influx of international entities that did not agree upon methods, which then impacted protocols, which then further impacted identification efforts, which finally created confusion among the family members of the deceased. In response, the ICRC established the Missing Project to consolidate both methods and expectations (Fondebrider 2016). Fondebrider (2016) also problematises the dominant 'Anglo-Saxon' perspective that pervades the forensic anthropological literature when much forensic anthropological work is performed outside of Western contexts. This is echoed by Cox (2016), who argues that forensic anthropology in humanitarian contexts often has lower standards of practice that would not be considered acceptable in countries such as the UK. To Cox (2016) and Fondebrider (2016), it is a moral imperative to consider and comment on these occurrences and their implications. As Fondebrider (2016) states, forensic anthropologists globally want equal participation under equal conditions—a transformative model for the discipline itself.

As such, the issue of ethics in forensic anthropological work has long been of interest to practitioners. Many protocols for conducting forensic anthropological research are built upon on foundational understandings of respect for the dead and their kin, including respecting the wishes of the deceased and their relatives while also adhering to a generalised respect for the dead (Walsh-Haney & Lieberman 2005). The development of specific protocols has been necessary, however. For example, some forensic anthropologists working in medical examiners' offices have had significant leeway to conduct research during autopsy without express consent from the individual

or their relatives (Walsh-Haney & Lieberman 2005). Some states in the US have even adopted specific legal policies guaranteeing the rights of relatives to control the fate of the remains in response (Walsh-Haney & Lieberman 2005). Indeed, ethics may be defined as the establishment of protocols such as these to guide behaviour in a professional setting (Blau 2016). While respect for the dead may be universal priority, there is discussion surrounding what that entails in a practical sense—for example, if it is appropriate to decapitate a deceased individual to help establish cause of death (Blau 2016). In a humanitarian context, it is important to consider the ethical implications of participating in an investigation that does not seek to identify the victims, such as the ICTY. Blau (2016) argues that in such a context, legal justice might prevail, but social justice does not. Conversely, a context in which identification is the primary or only goal, as such the IFIFT, it may not be ethical to participate in a system of judicial impunity (Blau 2016).

The need to grapple with difficult ethical questions continues to grow in forensic anthropology as it is applied in greater frequency and in greater contexts across the world (Marquez-Grant et al. 2019). If this process is to include the experiences of forensic anthropologists as suggested by Fondebrider (2016) and Cox (2016), the intersectional model used in this thesis to analyse inequalities would further this objective.

Limitations of Foundational Knowledge

While forensic anthropology has proved to be a useful forensic field, it is important to consider the overall utility of forensic anthropology and its genuine limitations as a forensic science. As Thompson (2015: 65) describes it, forensic anthropology is a ‘fuzzy’ science. In the context of a murder investigation, it usually

becomes useful when nearly all other evidence is gone or it is used in conjunction with other forensic sciences (Márquez-Grant 2015, Rainwater et al. 2012). Indeed, forensic anthropology rarely offers definitive proof of identification (Thompson 2015). The American Society of Crime Laboratory Directors/Laboratory Accreditation Board does not even consider forensic anthropology to be independently credible (Christensen & Crowder 2009). For this reason, many forensic anthropologists are calling for further standardisation of practice, quality assurance, validation studies, and increased reliance on quantitative data (Christensen & Crowder 2009, Márquez-Grant 2015, Wilson et al. 2010). As forensic anthropology vies for its place at the scientific table, we must not forget the realities that the discipline faces, especially when its limitations may contribute to socioeconomic and political delineations of victim.

Forensic anthropology is subject to the same web of influence as any other aspect of the reconciliation effort. Although this may not be an obvious observation, as forensic anthropology has made a home for itself in the forensic sciences, entrenching itself in the natural sciences and increasing its reliance on quantitative data to meet stricter courtroom expectations, assure quality control, and to increase operational utility (Christensen & Crowder 2009, Dirkmaat et al. 2008, Mundoff 2012). Indeed, the popular conception of forensic science, and especially forensic anthropology, has strayed beyond the practical challenges of the discipline. To the layperson, crimes are solved quickly and identification established with certainty (Tersigni-Tarrant & Shirley 2013). Relatively little attention has been given to the theoretical issues surrounding forensic anthropological methods in a social and political context—although the theoretical bases of forensic anthropology are beginning to be explored (Boyd & Boyd 2018). Even as a science, forensic anthropology is subject to bias, cognitive (Nakhaeizadeh et al. 2014), methodological (Gowland & Thompson 2013), and even

discriminatory (Walker 1995) that may in turn contribute to bias in the reconciliation process.

As a discipline, forensic anthropology is undergoing generalised theoretical shifts, which will be discussed in the following chapter. In spite of this, however, forensic anthropology still suffers from several specific theoretical and methodological deficiencies. In human identification processes in general, but also specifically within forensic anthropology, human identity—or at least identifying information—is broken into distinct categories. Yet, these categories, often corresponding to social descriptors, are truly fluid concepts, the boundaries of which intersect and overlap—complicating the attempt to categorise. These descriptors—gender, age, ethnicity, and class—may be passively experienced but also actively constructed; identity is how we view ourselves *and* how others perceive us (Gowland & Thompson 2013). The social expectations for those within these identifying categories, especially on the part of those attempting to identify, have been observed to reinforce apparently biological delineations—for example, creating dichotomies between the biological sexes, conflating this understanding with social concepts such as gender, and disregarding the continuum on which much of sex and gender data fall (Gowland & Thompson 2013). These intersecting concepts, surrounding seemingly clear and empirically observable categories, problematise the forensic effort from the onset, for if categories such as sex must be conceptualised on a continuum [as Gowland and Thompson 2013 argue], and the sex of the individual does not necessarily reflect the way in which they, or others, perceived themselves, the forensic anthropological methods are necessarily limited—or should be considered as such. Therefore, even in the broadest terms, forensic science, and particularly forensic anthropology, must contend with complex and nuanced

definitions of identity. This will become particularly relevant in later discussions of gender identity and access to forensic investigative services.

These concerns are echoed in other prevalent criticisms of forensic anthropology's methodology, such as the broad use of techniques developed on highly specific samples of human remains. Much of the methodology that anthropologists heavily rely upon today was created using population specific collections. The implication of this is that the metric and non-metric standards of practice were developed on human remains from specific communities from specific periods of time and will therefore not appropriately reflect contemporary or diverse communities (Márquez-Grant 2015, Rissech et al. 2012, Wilson et al. 2010). However, using these standards across populations is, well, standard. From a practical standpoint, it would be an enormous undertaking to create forensic discriminate functions for every single discrete population in the world. But more importantly, it would not be possible, as skeletal collections for each discrete population in the world do not exist. But, as Rissech et al. (2012) warn, osteological methods are not universal, and we cannot reasonably apply these methods without consideration of origin.

There also remains an assumption that foundational, yet dated, knowledge can be relied upon without scrutiny. For example, in sex estimation the skull is popularly believed to be the second most useful skeletal element after the pelvis. However, as Spradley and Jantz (2011) discuss, univariate analysis of postcranial elements is significantly more effective than multivariate analysis of cranial elements. While using cranial elements to determine sex is by no means inaccurate [up to 90%], postcranial elements will provide data with even higher accuracy [94%], this of course on appropriate communities based on population specific data (Spradley & Jantz 2011). Additionally, Christensen and Crowder (2009) blame the subjectivity inherent to non-

metric observations, and the over-emphasis of practical experience, for the prolonged misinterpretation of certain types of skeletal trauma, specifically butterfly fractures. Instead of empirically testing the subjective methods before these assumptions were adopted, it took an empirical study after the fact to prove that these accepted assumptions about bone under mechanical loading were erroneous.

In addition to these theoretical and methodological issues, there are a host of practical issues for forensic anthropologists as well. Even the very nature of putrefaction and the degeneration of bone presents academics with an entanglement of scientific and socioeconomic problems from the moment of death. For example, putrefaction is caused by bacteria moving from the gut into other bodily tissues, however, bacterial growth will cease if the body falls below a certain temperature (Henderson 1987). This indicates that the environment in which a person dies is incredibly influential concerning the rate of decay, meaning that those who are unlucky enough to meet their end in warm, moist climates will be more likely to need additional identifying measures than those whose features are preserved in colder climates. This may not in and of itself prove to be a social or political matter, but it shows that from the moment of death, cadavers are on an unequal playing field, and this inequality seeps into the forensic anthropological process.

1.2.2 Socio-Political Influences in Forensic Initiatives

Analysis of the response to the Indian Ocean tsunami of 2004 offers a distinctly socioeconomic perspective. Forensic anthropologists benefit greatly from access to medical records to aid in the identification process. Dental records are also helpful, although these are analysed by forensic odontologists. After the tsunami in 2004, those with dental records were identified at a significantly higher rate than those without

dental records, which inevitably split the dead along socioeconomic lines (Petju et al. 2007). Intrinsically connected to this socioeconomic delineation was nationality delineation, as Europeans were identified more quickly and more accurately. Additionally, the warm, moist climate, coupled with the standing ocean water, meant that preservation of the human remains was severely compromised. Many victims were buried in shallow graves to await identification but were then exhumed to ensure no Western victims had been interred (Merli & Buck 2015). To separate Western tourists from locals, bodies were separated by hair colour, assuming that fair-haired individuals were European and dark-haired individuals were Asian. Of course, this is terribly problematic as it assumes the categories 'European' and 'Asian' are phenotypically homogenous, disregards the existence of immigrant communities and their descendants, and ignores the fact that hair colour is easily changed. It is also clear that the international support for the identification efforts was significantly skewed to assist projects in countries where Europeans had disappeared, leaving the surrounding areas largely unaided. Countries that sustained higher total death rates but fewer European deaths, received little or no assistance, further demonstrating the socioeconomic, national, and racial disparity in the application of forensic anthropology (Merli & Buck 2015). While these specific examples fall within the realm of forensic science more generally, those that are more difficult to identify or those who fall into demographics that are not prioritised during the initial identification process, will be more likely to require the specialised expertise of forensic anthropologists in the long term.

Similar disparities exist in the excavations of clandestine graves in Guatemala and other Central and South American countries, and reports indicate that while the presence of a forensic anthropologist in Central and South American laboratories did increase the rate of positive identifications, that rate still averaged at just 26% over

seven years (Iscañ & Olivera 2000). These numbers are even lower in mass interment contexts post-genocide as these contexts are complicated by additional factors. In Guatemala, Peru and other Latin American countries, those killed and buried in anonymous graves are unlikely to have medical or dental records to confirm identity (Baraybar 2008). In these cases, anthropologists often rely heavily on ante-mortem [AM] evidence. This is mainly composed of family and witness testimonies (Baraybar 2008, Sanford 2009). In such cases where the anthropologist can make a connection between a group of unidentified remains and a probable relative, a common method of narrowing the possibilities is setting up what is known as a 'clothing exhibition.' This process exposes a group of families to the personal artefacts associated with the unidentified remains, washed and out of context, to trigger a memory (Baraybar 2008). This experience is described as proactive and cathartic for the families and is considered a reasonable substitute when other evidence is scarce (Baraybar 2008). Yet, as stated above, this process only narrows the possibilities and the deceased would have had to possess unique items in order to be distinguishable, although witness testimony regarding clothing evidence seems to be reliable after many years (Fowler & Thompson 2015).

Apart from these pragmatic considerations, the social perceptions [namely the popularity] of forensic anthropology wields influence, particularly regarding work post-genocide. Popular culture has biased and defined the perceptions of forensic anthropology, regardless of accuracy. Many archaeologists and anthropologists now feel compelled to delve into the forensic world out of a sense of responsibility, and many students pursue forensic anthropology for similar reasons but are woefully unprepared for the reality of the work (Hunter & Cox 2005).

Much of the popular interest in forensics is media driven. Troublingly, the media functions by pursuing the angle that will provoke response, for example the chaos of early exhumations in Iraq was far more interesting from a media perspective than the highly organised excavations efforts that followed (Hunter & Cox 2005). As Joyce and Stover (1991) observe, events that provoke public shock, such as an air crash, garner far more attention than the accumulation of bodies during conflict. Perhaps observers are unintentionally victim-blaming, or they search for reasons not to empathise with the victims (Joyce & Stover 1991). In such cases, the media and viewer enter a social, political, and even emotional dynamic, manipulating the experiences of forensic anthropologists and victims to fit their needs, expectations, and attributions of victimhood. Within this dynamic, observers and forensic practitioners alike are further encouraged to attribute levels of victimhood to the deceased.

Socio-Political Considerations in Forensic Anthropological Methodology

Even in the application of forensic anthropology, these interwoven political and social economies actively affect how and to whom aid is given. However, we can delve further into this relationship and its relationship with biological realities, such as the decomposition process. After the flesh has decayed, we are still left with inconsistencies in the rate of bone diagenesis as it relates to demography. Age has proven important in relation to bone preservation. Non-adults show higher rates of decay, which has been largely attributed to bone size, and senile osteoporosis can increase susceptibility to the destructive forces of taphonomy (Henderson 1987, Walker 1995). The presence of antemortem and perimortem injury appears to also accelerate bone decomposition (Henderson 1987), which is especially relevant to the examination of skeletal remains in post-violence contexts. Poor preservation of skeletal remains can limit the forensic

anthropologist in more ways than just obscuring elements used to establish a biological profile. Poor preservation limits sampling for DNA analysis, as only certain aspects of the skeleton contain DNA after an extended period. DNA may not survive at all in a destructive environment (Fowler & Thompson 2015). In Guatemala, incomplete preservation of remains limits testing and local knowledge of DNA initiatives is scattered at best. Even with femoral and tooth samples, DNA was often in various stages of degradation (Garcia et al. 2009).

Alongside the implications of increased rate of decay for the young, the elderly, and those buried in damaging environments, there remain some other fundamental problems with age estimation in forensic anthropology. Determining the age of a non-adult using epiphyseal fusion is relatively easy, especially when juxtaposed with establishing the age for an adult. Wood and Cunningham (2011) go so far as to say that aging a non-adult is sometimes the only aspect of an individual that can be determined accurately. However, now we must refer back to population specific studies and the problems they present. The collections used for age estimation standards do not correspond to changes in nutrition and health status seen in contemporary populations, and many skeletal atlases rely on data collected from white, middle class communities (Wood & Cunningham 2011). Therefore, the only populations that will be properly served by these studies are white, middle class communities. Rissech et al. (2012) reiterate the importance of using population specific studies appropriately when aging non-adults. It is also important to consider the socio-cultural vs. physiological concepts of age. As Gowland & Thompson (2013: 24) write, 'the body does not develop and degenerate according to a predetermined genetic clock from conception to death,' and 'biology and culture are in a dialectical relationship' (Moore 1994:19 as cited in Gowland and Thompson 2013: 25). This nuanced understanding of age allows us to

consider the socio-cultural contexts from which the unidentified remains originated alongside whatever skeletal observations are made.

For age estimation in adults, the science becomes murkier. Normal variation between individuals means that no two people will show age-related skeletal changes in the same way or at the same time (Purves et al. 2011). Variations can be so great that different ageing rates can be observed in different elements within the same person, creating a 'mosaic' of traits—also observable when determining sex (Gowland & Thompson 2013: 111). Considering this, age estimates for adults must be given in ranges based upon patterns of degradation in specific joints. This requires a fine balance as the range must be specific enough to be useful, but not too specific to risk omitting the correct identity (Purves et al. 2011). The broad boundaries of this methodology further exemplify the need for forensic anthropologists to work alongside other forms of forensic inquiry, as it may be able to narrow the possibilities in one investigation (Rainwater et al. 2012) but may conversely need another type of inquiry to achieve usable results.

Similar to the problems of decomposition as it affects age specific groups, sex estimation methods have potentially impacted one particular group—that is to say, females. Weiss (1972) and Walker (1995) have observed the tendency of archaeologists in the field to identify significantly more males than females. One explanation could be that male skeletons tend to be more robust than females within a population and will survive better for longer. Walker (1995) explains that some archaeologists believed men had longer life expectancies due to this discrepancy. Another explanation worth considering, however, is that the methodology is skewed towards identifying more males than females, either by falsely sexing females as males, or by categorising more females as indeterminate. A more contemporary study of morphological sexing methods

used in a laboratory context found a 94.7% accuracy rate, however, Thomas et al. (2016) observes that the accuracy rate for a laboratory technique cannot be applied to field contexts, and that anthropologists should be encouraged to categorise individuals as indeterminate if there are uncertainties. This, coupled with the Weiss and Walker observations, indicates that indeed more females are being categorised as male rather than indeterminate in the field, as the Thomas et al. study recommends that anthropologists use the indeterminate category more often. This is supported by Walker's (1995) study that indicates females tend to undergo age-related morphological changes and that many human osteologists are prone to stereotyping female morphology as gracile, leaving out females with more robust skeletons.

Beyond forensic anthropologist error in sexing methods, it appears that females are at another disadvantage. Within the Guatemala context, DNA analysis of excavated remains from the civil war can be difficult due to degradation (Garcia et al. 2009). An STR profiling study on remains found in Guatemala indicate that these tests only produced results for 36.3% of the samples tested. However, these numbers dropped further for female remains by a statistically significant margin. This has been attributed to bone density (Johnston & Stephenson 2016). Therefore, even methods with less observer error still do not serve females as much as they do males—at least in this Guatemala example.

These efforts to identify biological sex also do not truly inform the forensic anthropologist of the social identity of the individual—the life that the deceased was actually leading—in regard to gender. These methods inherently exclude transgender and non-binary individuals, as gender expression cannot be reliably observed in the skeleton at this time, and this may hinder the effective identification of certain subsets of remains. Some forensic scientists are exploring potential physiological differences,

such as skeletal evidence left by male-to-female feminising surgery (Buchanan 2014) or even palate shape (Saxena et al. 2015) [although this study utilises problematic terminology]. Some anthropologists warn against applying contemporary, western concepts of sex, gender, and gender identity on skeletons from culturally distinct populations (Geller 2019)—however, this critique focuses on archaeological remains and transgender individuals exist in the case studies examined in this thesis.

Along similar lines, a continuously controversial sociological issue within forensic anthropological analysis is the concept of race and ancestry⁴. While anthropologists have long since thrown out the concept of 'biological race,' there remain many forensic anthropologists who use metric and non-metric methods to determine ancestry categorised as 'Caucasian', 'Black', and 'Asian.' These methods were originally developed with the intent to rank skeletal features as superior and inferior (Spradley & Weisensee 2013) using quantitative techniques, inputting metric data into functions that do not reflect our current understanding of race (Sauer 1992). There is significant debate over how successful these techniques are, with many attributing any success to 'assortative mating processes' in the USA or the long-term experience of an anthropologist with one demographic (Spradley & Weisensee 2013). Spradley and Weisensee (2013) admit that should one introduce the remains of an individual from a region entirely foreign to the anthropologist, it would leave the anthropologist perplexed. Regardless, this issue presents a profound problem for those anthropologists who feel a responsibility to proactively overhaul these notions of race and the ways these notions contribute to racism across the world.

⁴ When covering the topic of ancestry analysis during my MSc studies in palaeopathology, we were told that they were teaching us these methods so we would know what *not* to do.

There is evidence that discriminate functions have been helpful in identifying ancestry, especially as it overlaps with sex estimation (Spradley & Jantz 2011). It was also revealed during the course of this research that the New York City Police Department sometimes insists they receive victim ancestry information from forensic anthropologists at the Office of the Chief Medical Examiner. If we take this into account, we can directly see how social and political influences in living communities are contributing to the development and use of forensic methods—and sometimes effectively. But, of course, these methods are still limited by the theoretical paradigms discussed above, such as population specific studies, which then limits the use of these methods in diverse or unfamiliar field contexts. Additionally, as the victims of genocide are often targeted for their ancestry or ethnicity, ancestry identification may prove to be of little relevance in post-genocide excavations. Realistically, the use of ancestry determination in a post-genocide context may be highly inflammatory for, in the case of ethnic cleansing, physical similarities or differences are often accentuated to push an agenda (Simmons & Haglund 2005).

It should also be noted that whatever effectiveness these methods might have, it is in regard to geographical region and not 'race.' Race and ethnicity are social constructs that function in perception more than genetics. A person may not identify as the 'race' of their genetic ancestors and may not be perceived as such by others (Brace 1994). This creates an enormous problem for forensic anthropologists attempting to provide an identification, as the methods may provide geographical heritage that could actually exclude the missing person in question. In much the same way that gender expression and sex indicators in the skeleton may not correlate, social understandings of race, ancestry, and ethnicity may not correlate with biological understanding of these

concepts. And yet, police officers will often insist that forensic anthropologists at the OCME provide them with this data, regardless of the possible drawbacks.

It is clear that from the methodology to the application, forensic anthropology after political violence is influenced by socioeconomic and political factors. It is also clear that these influences include an academic dynamic, as both the development of methods is part of the academic process but is also impacted by academic frameworks within the discipline. The demographics of the remains, the manner of their deaths, and even the location of their deaths impact forensic anthropological analyses. These considerations are especially exacerbated in the context of political violence, where specific demographics are targeted by physical similarities, lifestyle, and cultural history—or even location as in the 9/11 example. These influences are present in forensic anthropological initiatives at every level, manifesting in various ways depending on the needs, expectations, and values of the people creating the models, performing the analysis, overseeing the investigations, and even funding the investigations. This dynamic is not dissimilar to the dynamics found broadly in transitional justice and humanitarian intervention that are discussed above. It is, therefore, possible to include forensic anthropology as a discipline within this holistic examination of the socio-political influences on responses to political violence in a transformative framework.

1.2.3 The Case Studies

This thesis examines two case studies in depth in order to fulfil its research goals. Both examples contribute imperative and inherently different perspectives on forensic anthropology after political violence and the contexts in which it operates. The Guatemalan Civil War, the forensic anthropological initiatives that have emerged from

this conflict, and the contemporary state of violence and identification are contextualised through field research. The 9/11 attacks on the World Trade Center, the forensic identifications of its victims, and the contemporary contexts in which these identifications are enabled, are examined through interviews and previous, personal experiences with the Office of the Chief Medical Examiner of New York. In order to fully examine these examples and how the examples fit together in the broader conversations on transitional justice and transformative justice, however, it is essential to understand the nature of the violence, its history, and the relevant social and forensic anthropological research that surrounds these issues.

The Guatemalan Civil War

Determining a definite date for the beginning of the conflict in Guatemala is difficult, as the answer will depend on whom one asks. To some, the conflict began after the installation of a militarised government in the 1950s, to others the conflict began at the moment of the CIA-assisted coup that overthrew the democratically elected government. To others, the start of the conflict was truly at the moment of Spanish colonisation (Arriaza & Arriaza 2010, Nelson 2009). While the official dates of the civil war in Guatemala are considered to be around 1960 (MINGUA 2003)—especially by international aid organisations that sometimes contextualise the conflict within their participation (e.g. Verstegen⁵)—these dates often do not consider the larger context in which the violence of the civil war began. Indeed, it is impossible to understand the civil war in Guatemala and the state of contemporary violence without an understanding of

⁵ This source does not contain a publication date

the colonisation of the area and the systems of disempowerment that this colonisation built.

During the colonised years of Guatemala's history, indigenous groups were systematically disempowered in order to advance European economic interests. The successful agricultural development of indigenous land, and the forced labour of indigenous people, made Guatemala a tremendous asset to colonising powers. These economic interests merged with political power and fostered the development of social strata designed with the express purpose of disenfranchisement of poor or indigenous demographics—who were captured in a form of slavery (Kistler 2018). In order to develop these colonised lands into the major agri-businesses of the 20th century, indigenous and poor labour was required for little or no wage. This was achieved in several ways. Landowners were given the right to draft indigenous labour through *repartimientos* [or *mandamientos*] (McCreery 1994). While this mandatory labour was paid, many labourers complained about low wages, dangerous conditions, and the economic damage this caused to their own communities as this took them away from their own crops during planting season and devalued their own products (McCreery 1994). Additionally, many indigenous people sold their labour pre-emptively to these plantations [*haciendas*] in exchange for small loans, which put them under the power of landowners as they owed them a debt (McCreery 1994, Metz 2006). When this debt was called in, these workers became entrapped in agricultural servitude for these *haciendas* (Kistler 2018, Metz 2006).

It would be remiss not to contextualise this practice. According to McCreery (1994), becoming an indentured labourer [*colono*] for a hacienda was not an unattractive option for poor and indigenous workers at the time, as *haciendas* could shield *colonos* from other debtors or the state while providing for basic needs through

credit—at the expense of the landowner. Yet McCreery does concede the coercive nature of these policies:

In other instances, and Guatemala's history reveals a number, subsistence producers are coerced involuntarily into the market, by systems of forced wage labor...or through the forced purchase of sale of goods...To this extent the peasant is part of a larger social, economic, and political system usually structured to extract rent, labor, and product from him on exploitative terms (McCreery 1994:5).

Here McCreery makes an important observation. An ethnography of Guatemala, at least until the 1940s, can be understood in terms of social, economic, and political systems. These factors operate together in order to create an environment of exploitation in colonised Guatemala, and arguably, these factors must therefore be examined in conjunction with one another.

Guatemala officially declared independence from Spain in 1821 (Metz 2006). However, these underlying social, economic, and political dynamics remained in play well into the 20th century. After declaring independence from Spain, Guatemala was governed by a series of dictatorial leaders that maintained socioeconomic hierarchies established during Spanish colonisation and ruled with fear. Until the 1940s, these leaders sustained their political power through intimidation and political sabotage (Metz 2006). In a popular political uprising in 1944, dubbed the 'October Revolution,' left-wing Guatemalans overthrew the country's long-standing dictator Jorge Ubico, who was known for his concessions to large agri-businesses and for the torture of political dissidents (Metz 2006). The October Revolution, led by Jacobo Arbenz, paved the way to Guatemala's first democratic elections. In 1945, Guatemala elected a leftist government, with Juan José Arévalo, and subsequently Jacobo Arbenz, at its head (Gleijeses 1991). However, these political shifts, and those happening across Latin America, would be

contextualised in Cold War tensions, subjected to the scrutiny of foreign powers that were hypervigilant in their search for signs of Communist activities (Barret 2011).

During the next 10 years, the Guatemalan government would introduce new policies on agrarian law, greatly increasing the participation of the citizenry in agricultural profits and limiting the hold major agribusinesses, like the United Fruit Company, had over the Guatemalan economy (Barret 2011, Giron 2007, Gleijeses 1991). This expropriation of lands and assets increasingly rankled prominent U.S. investors and the Guatemalan elite, whose new role in the Guatemalan economy was insecure (Handy 1988). In 1954, during the height of Cold War tensions and increasing fears of Communist influence, powerful U.S. leaders, including President Eisenhower, the Secretary of State, and the head of the CIA, were successfully lobbied into intervening in Guatemala. Convinced that Guatemala had become 'red', CIA officials directed Guatemalan military leaders in a mission to overthrow the standing president Jacobo 'the Red Jacobo' Arbenz (Barrett 2011, Gleijeses 1991). This coup d'état, records of which are now declassified by the CIA, would usher in decades of internal violence against political dissidents, the poor, and indigenous communities. Guerrilla movements emerged to combat the growing military presence in the following years. The militarised government retaliated by instituting a scorched-earth policy by targeting the families and potential allies of the guerrilla fighters, with a heavy on emphasis on indigenous communities (Giron 2007, Jonas 2000, Solares 1997). This strategy left 150,000 dead and 50,000 forcibly disappeared (Garcia et al. 2009) by government sanctioned, paramilitary death squads that left the corpses of victims in mass graves both in villages and in execution centres (CEH 1999, Clouser 2009).

Chilling, first-hand accounts of this violence can be found in Rigoberta Menchú's autobiographical book *I, Rigoberta Menchú. An Indian Woman in Guatemala* (1984),

which has been a fundamental text for understanding the indigenous Guatemalan's experience in the war (Nelson 2009). Menchú describes her early childhood on a plantation that was not only negligent regarding worker safety, but actively contributed to the demise of her brother and of her friend, the first through starvation and the second through sexual harassment and murder (Menchú 1984). Menchú describes in detail the horrors to which her community was subjected as the violence of the war intensified, how these experiences are contextualised in her community's cultural understandings of the world, and the instigating factors that compelled her to join the guerrilla movement. She describes how her brother was captured by paramilitary groups and tortured for days before being publicly executed in front of Menchú and her community. According to her work, her brother had been held in a pit with cadavers, had his fingernails removed, had portions of flesh cut or burned off his body, and had been badly beaten before being publicly set on fire (Menchú 1984).

These stories proliferated in international consciousness before the end of the war, and Menchú was awarded the Nobel Peace Prize for this work (nobelprize.org). These narratives that emerged from the war came to broadly represent the indigenous Guatemalan's experience, which would later be supported by the investigations organised by the United Nations after the ceasefire. Indeed, after the dissemination of these stories from the civil war in the international community, the United Nations decided to officially intervene.

Under the supervision of the United Nations, peace agreements were finally reached in 1996 between the Guatemala National Revolutionary Union and the Guatemalan government (Giron 2007). These negotiations included provisions such as the formation of the Commission for Historical Clarification [CEH] (UN 1999) and the Accord on Identity and Rights of Indigenous Peoples, which acknowledged the cultures

of indigenous groups as part of the Guatemalan Nation (Giron 2007). However, in the years following, crime increased, including violent crime such as lynchings (Brands 2011, Giron 2007). The civil war has also appeared to intensify gender, regional, and ethnic disparities (Chamarbagwala & Moran 2011). Giron attributes the increase in violent crime to the desire on the part of the marginalised to create 'some semblance of normality in their lives in the face of a justice system that has failed them' (Giron 2007:357).

Transitional justice and education initiatives since the ceasefire have revealed emergent research problems for those studying post-war Guatemala. The election of Otto Perez Molina in 2012, a retired military official, sparked public debate about Guatemala's return to a military government. Molina was overthrown as this research was conducted, but on corruption charges unrelated to his participation in the civil war (Malkin 2016). The subsequent president, Jimmy Morales, has also been implicated in corrupt political campaigning. He has come under the heavy scrutiny of the global community as his government exiled a United Nations corruption watchdog from the Commission Against Impunity in Guatemala [CICIG] (Philips 2019). With the increase in political corruption, crime, marginalisation, and poverty, many indigenous people's memories of the civil war are often contextualised in, or overshadowed by, the reality of living in today's violence (Bellino 2015). Bellino states 'comparisons can create a hierarchy of suffering that renders the violent past unimportant amid contemporary violence' (Bellino 2014: 58). This hierarchy of suffering has become a thematic presence throughout this research, as it has manifested in delineations of victim and in the political and forensic responses to the conflict.

The Commission for Historical Clarification [CEH] was formed in 1997 to investigate accusations of war crimes committed by the Guatemalan government during

the civil war (U.N. 1999). With the United Nations' support, they collected testimonies of witnesses and searched for any documentary evidence—and found none, although this lack of documentary evidence does not indicate that the violence did not occur. The commission determined that genocide had been committed, citing the particular violence against pregnant women and infants, however, it was not under the commission's purview to bring charges against those responsible (U.N. 1999). In the CEH report, released in 1999, numerous methods of reconciliation are discussed, the most relevant to this research project are the recommendations for exhumations. These recommendations include the excavation of clandestine graves to restore the dignity of victims, the return of individuals to their families for reburial, and calls for support of non-governmental organisations [NGOs] specialising in forensic anthropology working in Guatemala (CEH 1999).

The Fundación de Antopología Forense de Guatemala, or the Forensic Anthropology Foundation of Guatemala [FAFG], began its work shortly after the release of this report and still functions as a first point of contact for those who have lost family in the civil war. It was because of the FAFG that former president, José Efraín Ríos Montt, was brought to trial and convicted for genocide and crimes against humanity (Stuesse et al. 2013), although this conviction was overturned ten days later (Barker et al. 2016, Burt 2013). It should be noted that during my time in Guatemala⁶, Montt was brought to trial again. However, Montt passed away before the trial finished and the proceedings ground to a halt. A Guatemalan contact observed that the decision to drop the charges because the accused had died was a blow to survivors and denied them respect and closure.

⁶ April 2018

Nearly all forensic excavations of clandestine, and even non-clandestine, cemeteries in Guatemala are run through the FAFG, which in turn comply with the Commission for Historical Clarification report recommendations for exhumations of genocide victims (FAFG.org, Garcia et al. 2009, Henderson et al. 2014). The FAFG was not the first to perform exhumations of mass graves in Guatemala, as earlier exhumations had been carried out before the ceasefire by groups of non-specialists (Tejada 2019). The formation of the FAFG offered a more scientific and controlled method of exhumation than these initial exhumations and, as of 2009, the FAFG now works in at least 22 different regions and has conducted 946 investigations of clandestine mass graves. In the same year, they began efforts to become a fully functional and licensed DNA laboratory, which they have now achieved (FAFG.org), funded by the U.S. Department of State, the Netherlands, and Sweden to meet the demands for the return of skeletal remains to family members (Garcia et al. 2009).

Yet, to contextualise the political violence in Guatemala through only colonisation, dictatorship, military coups, transitional justice efforts, and 'peacetime' would only offer an incomplete understanding of the violence. Indeed, it would run contrary to the observations of numerous social researchers indicating that contemporary violence in Guatemala has overshadowed the violence of the civil war (Bellino 2015), has left many communities without legal recourse (Giron 2007), and has exacerbated inequalities across the board (Chamarbagwala & Moran 2011). Guatemala now contends with a new landscape of violence (Smith & Offit 2010). Nearly 5,000 homicides were reported in Guatemala during 2018, the majority of which were gang related (gov.uk). Human Rights Watch describes Guatemala's judicial system as grossly incompetent and corrupt, with a 95% rate of impunity for homicides in 2010 (hrw.org). Some anthropologists believe that Guatemala is in the throes of femicide (Sanford

2008), and Sandford observes that if violence continues to increase at present rates [as of 2008] more people will be killed in the first 25 years of peace than in the 36 year civil war itself. The Guatemalan police have also been implicated in contemporary extrajudicial executions and arbitrary detainments of suspected gang members (hrw.org), and gang violence is having observable, traumatic effects on young people in urban areas (Winton 2006).

Even outside of gang violence, reports have indicated that there remains labour exploitation on contemporary plantations. A project conducted by Verité, found that labourers on a coffee plantation experienced 'lack of consent and menace of penalty' including: confinement, psychological compulsion, non-payment, induced indebtedness, deception, confiscation of identification documents, deprivation of food and shelter, physical violence, financial penalties, and dismissal (Verité 2011:57). In the sugarcane sector, 88% of workers in one study reported that they could not leave the plantation until their debts had been repaid, and entire families [including children] are often expected to fulfil contracts between the head of the household [usually the father] and the plantation or work-broker (Ergon 2018).

Considering this evidence, it is clear that the ceasefire agreement, while currently acting as the official end of Guatemala's internal conflict, does not represent an end of the violence nor of the frameworks that created the conflict—corrupt government, labour exploitation, entrenched poverty [especially for indigenous groups], and violent deaths. Rather, the paramilitary violence has morphed into gang violence, unrestrained by an impotent justice system. This will reveal itself to be a critical facet of the forensic anthropological endeavours currently taking place in Guatemala.

The World Trade Center Attacks

On the morning of September 11th, 2001, two Boeing 767-200 aircrafts weighing 132 tons and carrying 10,000 gallons of fuel, struck the World Trade Center buildings at 429 to 586 miles per hour (Gill 2006), reducing thousands of people to tens of thousands of bodily fragments (OCME 2018). In the wake of these terrorist strikes on the World Trade Center on September 11th, 2001, anthropologists describe a fundamental shift in global outlooks both locally and internationally. Rothenbuhler (2005) describes this act of violence against civilians, that would ultimately claim nearly 3,000 lives, as one that 'scrambled' our basic understandings of the world and our place within it.

It converted tools of commerce and leisure into weapons of mass destruction. It converted workplace and tourist attraction into deathplace. It scattered debris and human remains over square miles of civil setting. It converted lives into bodies that could not be found because they no longer existed (176).

Anthropologists would be involved at many levels of response to the 9/11 attacks on the World Trade Center, navigating rapidly changing notions of patriotism, internationalism, and intellectualism—which would fundamentally change global outlooks on humanitarian intervention and transitional justice efforts (Hazan 2010). Checker et al (2011) retell the myriad of anthropological involvement in the aftermath, from running public panels discussing the cultural history of warfare and fundamentalism, to complicating simplistic delineations between victims and perpetrators in the public eye, and identifying the human remains that could be collected from the debris through forensic anthropological efforts.

Regardless of the profound public interest evident in these considerations of violence and the West's position in the broader global context that precipitated the attacks (Wali 2011), anthropologists found themselves 'catapulted into a decidedly new

historical-political moment' (DeGenova 2011: 494). This moment would manifest itself in a newfound pessimism in internationalism and in the understandings of international endeavours such as transitional justice (Hazan 2010), and an anti-intellectual quagmire that would actively inhibit the production of new research—reflexive or otherwise. Clarke (2004) paints the aftermath of the 9/11 attacks as a 'strange symbolic place' that was both 'above-politics' and 'hyper-political' (Clarke 2004: 9-10). While the period after the attacks would seem to transcend any earthly conversation of politics, it simultaneously condensed global historical-political conflicts into stark delineations of good vs evil and freedom vs tyranny (Clarke 2004). Calls for nuanced understandings of the War on Terror, and open criticisms of it, sparked accusations of academics as unpatriotic (Checker et al 2011).

New ideas about national security pervaded political and social discourse. As Susser (2004) explains, the 9/11 attacks generated sobering reflections on historical-political contexts, but also generated the 'multiple forms of retaliation that have dominated public attention' (Susser 2004: 5) i.e. the War on Terror. Barbara Johnston, an anthropologist researching weapons of mass destruction and biological warfare, found that her work took on a new set of questionable connotations in the wake of the 9/11 attacks. Not only did Johnston worry that her work would now be considered a security threat, the data she previously accessed for her research had been removed by the United States government for national security reasons (Johnston 2011).

Even in the face of these new, dominating conceptions of international politics and homeland security, public dissent radiated throughout the United States. Residents of New York City participated in the largest anti-war demonstration in living memory [as of 2004], even as these nationalistic notions permeated the American zeitgeist (Susser 2004). Yet, we are often left with an unnuanced presentation of this American

cultural moment. As Susser explains, ‘from beyond New York, or beyond the United States, the Bush empire appeared to represent a unified population of vengeful, ignorant flag-waving Americans’ (Susser 2004: 5), revealing a fundamental split in the American socio-political understandings of the post-9/11 world.

Here we are reminded of the vital importance of nuanced and reflexive analysis of post-violence contexts. Clarke (2004) offers invaluable insight,

To study 9/11 poses hard questions about the intersection between the professional, the political, and the personal. Traditionally these distinctions were formalized as separate and sealed domains, kept apart to avoid the contamination of professional academic practice by either political imperatives or private passions. These distinctions have been blurred and undermined by the challenges to this conception of professional insulation...but here we can see the imperative to think across them—to engage with the emotional, the ambivalent, the enraged personal response, and to engage with the dominant political representations, uses and consequences of the events (10).

The specific circumstances surrounding 9/11, and the academic environment that emerged from them, necessitated the consideration of intersecting influences and the examination of the personal experience. The nature of this example of political violence blurred the separation between the political, the social, and the personal from an academic perspective, which Clarke goes so far as to deem ‘imperative’ for a holistic understanding of this violence and the consequences of it.

Anthropological involvement in the post-9/11 context continues today, especially within the realm of forensic anthropology. The social anthropological analysis of the attacks themselves have continued as well as the forensic anthropological attempts to identify the victims, which has continued through the Office of the Chief Medical Examiner of New York (OCME 2018). Current efforts include the continuation of DNA testing on fragmented remains collected in the aftermath and from an

excavation of the debris some years later (Mundorff 2008, Mundorff et al. 2008). This enormous effort seeks to identify all of the fragments that have been collected, devoting significant funds and time to this end (Ritter 2007). Both the Guatemala and OCME forensic anthropological efforts shall be described in more detail throughout this thesis.

Yet, 9/11 as an integral turning point also represents an intriguing opportunity to consider the global role of forensic anthropology as transitional justice. As will be discussed below, the changes in socio-political understandings of internationalism catalysed by the 9/11 attacks, would shift understandings in transitional justice efforts across the world (Hazan 2010). This interpretation allows us to examine the juxtaposition between two intrinsically different examples of forensic anthropological responses to political violence [pre-9/11 Guatemala and post-9/11 New York City], to understand how these responses have manifested, and the socio-political context that allows these projects to continue.

Forensic Anthropology in the Guatemala and NYC Examples

Both the Guatemala and New York City examples pose their own challenges to the exhumation, identification, and reclamation processes. These dynamics will be explored in significantly more depth in the discussion chapters, however, it is important to contextualise these forensic anthropological projects more generally. The FAFG participates in both identification for reclamation purposes (Fowler & Thompson 2015) and for prosecutorial purposes (Barker et al. 2016). Forensic anthropological methods in the Guatemala example must accommodate for the problems inherently present in mass interments contexts. The violence perpetrated against indigenous communities was both localised in their own villages (Schmitt 2002) and removed, as the largest mass graves from the war have been found in military compounds that acted as

execution centres (Fowler & Thompson 2015). The highly commingled, often poorly preserved, and demographically similar contexts of these mass graves have presented difficulties for forensic anthropologists even from the earliest exhumations. Population specific studies had to be developed for Maya communities, as other methods were found to be ineffective, especially regarding long bone length estimations (Wright & Vásquez 2003). DNA testing, while often assumed to be a straightforward identification technique, also presented problems in the Guatemala context. New protocols were developed to accommodate the low sequence diversity that had been observed in Guatemalan mass graves (Boles et al. 1995). Additionally, DNA analysis was further limited by the decomposition process over the decades since the original interment (Fowler & Thompson 2015, Garcia et al. 2009), and in some instances there was no genetic kinship between the *desaparecido* and their searching loved ones (Fowler & Thompson 2015).

Alongside the DNA analysis, now conducted in their own laboratory (Garcia et al. 2009), the FAFG uses morphological analyses of the skeleton to establish the biological profiles of the exhumed victims (Barker et al. 2016). In their prosecutorial victories, even if some were short lived [e.g. Montt], the FAFG demonstrated the non-combative nature of the victims exhumed from these mass graves, arguing that a large proportion of the remains were non-adults and pregnant women. These analyses included examinations of skeletal trauma as well, indicating that projectile trauma, sharp force trauma, and blunt force trauma were all inflicted on these non-combatants (Barker et al. 2016). However, the preservation of some skeletal material has been impacted by taphonomic processes. This has been attributed to the manner of deposition of corpses by the paramilitaries, as they would utilise shallow graves that were susceptible to agricultural activities (Schmitt 2002).

The FAFG is still exhuming and identifying human remains found in mass graves from the civil war (FAFG.org). They believe this to be a re-dignifying of the victims in the grave, an opportunity for emotional closure for the families, and a clarification of contested histories (Henderson et al. 2014). Indeed, the FAFG's exhumation and identification efforts appear to be highly community centric, respecting and fulfilling the needs of the living loved ones of the dead (Fowler & Thompson 2015, Sanford 2003, Tejada 2019)—at least within pre-ceasefire projects.

The OCME example differs in a myriad of ways, which shall be juxtaposed in Chapter Five. The nature of the violence left the deceased victims in varying levels of fragmentation, including many that were pulverised, over a short period of time (Mundorff 2008). This complicated the recovery process and presented the greatest forensic identification challenge in US history (Ritter 2007). The mass graves in Guatemala often represent what is known as a 'open context', when the identities of the individuals within a commingled context are unknown, although early identifications based upon anthropological analysis were performed on 'closed context' mass graves, where the identities of the victims were known but not yet attributed to the remains (Schmitt & Mazoori 2017). The World Trade Center deaths were largely a 'closed context', as many [but not all] of the identities of the victims were known (Mundorff 2008). These realities have led to identifications heavily oriented towards DNA analysis of recovered skeletal remains, although this is used in conjunction with other modes of identification such as dental x-ray, fingerprints, and personal effects. More details regarding the specifics of the OCME identifications are provided in Chapter Four.

1.2.4 Political Influence in Humanitarian Intervention

The internal conflict in Guatemala officially came to an end with the intervention of the United Nations and the ceasefire agreement it helped create (MINGUA 2003). Just as the ceasefire agreement has been problematised by numerous social researchers working in ‘post-conflict’ Guatemala (Bellino 2015, Sanford 2008, Smith & Offit 2010), the very act of intervention and multilateral humanitarianism has been similarly problematised. The decision to intervene in an internal conflict, even in the case of state violence, is impacted by the priorities and values of participating countries—often with unintended consequences. Even with no intentional maleficence, international intervention and humanitarian projects may still exacerbate problems on the ground. It is imperative to understand these dynamics to understand the implications of international funding for forensic anthropological endeavours in Guatemala—even for non-governmental organisations [NGOs] such as the FAFG.

Problematising Intervention

Humanitarian intervention, as an international response to human rights abuses, has long been a point of interest for a host of disciplines. Much of this discussion emerges from the precarious legal and ethical position that international organisations, such as the United Nations, often find themselves in when facing a humanitarian crisis (Holzgrefe 2003)—such as the Guatemala example. Not only are these organisations limited in their scope by previous international agreements, such as the United Nations’ extensive collection of doctrines and charters, but also by the needs and desires of member states. As Binder (2017) observes, the United Nations has responded to humanitarian crises unevenly, seemingly prioritising some human rights abuses over others. Binder attributes this selectivity to factors including the extent of the human

suffering, if the conflict has crossed borders, the military strength of the country in question, and if the United Nations has already committed resources to the resolution. These factors indicate that the decision to intervene in conflict on an international scale is, in some part, determined not by the existence of human suffering but by 'the military and economic interests of powerful states' (Binder 2017). This idea is echoed in Wheeler's (2000) analysis of the United Nations' response to the genocide committed in Rwanda:

The barrier to intervention was not any doctrinal disagreement among members as to the legitimate purview of Security Council action. Instead, as Kofi Annan acknowledged in his 1999 Annual Report, 'the failure to intervene was driven more by the reluctance of Member States to pay the human and other costs of intervention, and by doubts that the use of force would be successful, than by concerns about sovereignty'...The fact is that no western government has intervened to defend human rights in the 1990s unless it has been very confident that the risks of casualties were almost zero (Wheeler 2000:299-300).

In this context, Annan's account does confirm to some extent that political and militaristic interests may compel member states to avoid intervention. However, some academics disagree on the systemic nature of these factors.

Finnemore (1996) observes that humanitarian interventions often occur in countries of no geostrategic or economic interest, and therefore intervention cannot simply be attributed to the interests of powerful states. Finnemore goes on to argue that international organisations are beholden to social influences, described as 'normative understandings that coordinate values, expectations, and behaviour' (Finnemore 1996: 3). Yet, Finneman concedes that the motivation behind intervention is inherently mixed, and genuine motives may only be one aspect of the context surrounding intervention. Moore (1998), a long-time servant of the United Nations and U.S. Department of State, reflects this constellation of motivations, political and social, in his volume *Hard Choices*:

Moral Dilemmas in Humanitarian Intervention. ‘Moral factors do not lie apart from this clutter of complexity and difficulty. They are embedded, often discordantly; moral imperatives compete not only with more material and temporal elements but also with one another’ (Moore 1998: 2). Moore encourages us to consider humanitarian intervention as an intrinsically complex, and even discordant, endeavour that lies at the intersection of political, social, and practical considerations.

Indeed, it is imperative to consider this larger, multifaceted context surrounding international intervention. Even if every motivation is genuine in nature, we are still left with the practical obstacles in the intervention’s implementation. Unintended consequences have dogged the rollout of intervention and reconciliation initiatives. As Anderson (1998) observes:

Time after time, aid that was meant as simple, neutral, and pure “act of mercy” becomes tainted by subsequent negative ramifications in the complex settings of today’s war-induced crises...We know that, even as it saves lives and reduces human suffering, humanitarian assistance can also lead to dependency on the part of those who receive it. We know that aid provided in conflict settings can feed into and exacerbate the conflicts that cause the suffering it is meant to alleviate. And we know that aid too often does nothing to alter—and very often reinforces—the fundamental circumstances that produced the needs it temporarily meets (137).

Some have argued that, in the face of this, it is better to not intervene at all. Yet, as Anderson astutely observes, this is a poor understanding of correlation, ‘[i]f there is moral ambiguity in providing aid, there is moral ambiguity in providing no aid’ (Anderson 1998: 138). However, if international aid continues fall within the trap of these unintended consequences, it is vital that those involved in the formulation and implementation of this aid to adopt a holistic and reflexive understanding of the conflict and their role within it. Freedman and Boren (1992) observe that intervention that does

not or cannot address the underlying framework that led to the violence, cannot possibly guarantee that the violence will not recur.

This argument should not be considered an attempt to dissuade international intervention and aid, rather a call to actively consider the inevitable intricacies at the foundations of conflict and of intervention. As Moore (1998) reiterates,

[T]here is an inherent truth here that if all the best motivations, intentions, and policies cannot be put to work effectively, cannot be applied and implemented fruitfully, then their moral vitality is merely an abstraction, only a dream. To be moral is to be operational, one might say, and this pragmatic purpose requires compromise and flexibility (Moore 1998:6-7).

Yet, it is crucial to remember that when international intervention includes the exhumations of graves, this process occurs against a backdrop of inequality, and even well-intentioned forensic responses can manifest in unintended negative consequences (Rosenblatt 2015). As it stands, the current international guidelines that exist to address these unintended consequences during exhumation concern the problems that emerge after the investigations have begun and are largely apart from politics (Rosenblatt 2015). It is, therefore, important to consider how to effectively expand these guidelines to include pre-emptive amelioration of political, socioeconomic, and academic influences that may, unintentionally, disempower certain demographics within the investigation process.

The NGO in Multilateral Responses to Conflict

Within these complicated and discordant processes of intervention, it is also imperative to consider the reconciliation processes that occur after the intervention, as it is in this context that forensic anthropology is applied. In the Guatemala example, forensic anthropology is carried out predominantly by the FAFG, which is an NGO—a

non-governmental organisation (FAFG.org). The term NGO is a broad, often generalising, moniker that has also been referred to as the 'independent sector, volunteer sector, civic society, grassroots organisations, private voluntary organisations, transnational social movement organisations, grassroots social change organisations and non-state actors' (Gordenker & Weiss 1996). The general idea, however, is that NGOs are defined by 'durable, bonded, voluntary relationships among individuals to produce a particular product, using specific techniques' (Gordenker & Weiss 1996:18)—or at least they should be.

Gordenker and Weiss (1996) call upon a metaphor to explain the position of the NGO in the state-wide context, although they concede that it is an imperfect example. Governmental power, economic power, and social power [the NGO] may be represented by the archetypal 'Prince', 'Merchant', and 'Citizen'. The NGO in this description is meant to further the interests of the citizenry, competing and cooperating with the state and economic powers. Of course, this metaphor glorifies the NGO as a non-political entity with the sole interest of empowering citizens—but often this is not the reality (Gordenker & Weiss 1996). In many cases, the NGO actually becomes a vehicle of preventing fundamental social changes. Sinwell (2013) observes that the formalised nature of the NGO turns the struggle for change into 'nine-to five jobs that benefit the pockets of careerists' (102). He goes on to cite the Latin American experience with NGOs, where NGOs have been accused of emerging as alternative forms of social reform that do more to hinder change than encourage it. Indeed, to Petras (1997), the NGO in Latin America is truly an effort to subvert 'the growth of social movements challenging the neoliberal model' (Petras 1997 as cited in Sinwell 2013: 102).

This aspect of the NGO is echoed across contexts. Kapoor (2013) describes the fraught relationship between activists, NGOs, and the government in rural India. Kapoor

argues that the NGO acts as a form of 'political obscurantism'; activists view NGOs as not only complicit in undermining anti-colonial and anti-mining movements, but as 'contributory agents' of state and economic efforts to displace rural communities. In this perspective, the NGO is not representative of the 'Citizen' but of the 'Prince' and 'Merchant'. To make matters more complex, the government in Kapoor's example targeted the blame for increasing hostilities at the NGOs, claiming that the NGOs were truly the ones who did not understand the will of the citizenry (Kapoor 2013). Regardless of the perspective, in this scenario, the NGOs are not empowering local people—even if the state and movement activists are not either. Further problems arise when NGOs are beholden to the priorities of outside parties and not to those of the local communities—as is a consistent problem in the proliferation of transitional justice mechanisms discussed in subsequent sections (Kim & Campbell 2013).

'NGO', as established above, is a generalised term. There are different types of NGOs and these are often delineated by funding and their connections with national and international governmental powers. While an NGO may not be a governmental organisation, some NGOs are government-affiliated and will take some funding from governmental entities such as the United Nations or local governments. These are called quasi-NGOs or QUANGOs (Gordenker & Weiss 1996). Still other NGOs are funded by donors and are called donor-organised-NGOS or DONGOs (Gordenker & Weiss 1996). Both present obstacles for NGOs in terms of their priorities and values, or as Gordenker & Weiss eloquently put it, in how willing the NGO is to bite the hand that feeds it. The FAFG is both as it accepts funding from the United Nations Development Fund (UNDP) and other, non-governmental donors. The OCME is a governmental organisation.

Even as early as 1996, the inherent problems of undue influence of funders on NGOs was clear to the academics studying these multilateral dynamics. This coupled

with the 'Prince, Merchant, Citizen' metaphor is compelling, as it offers a multidimensional way to approach the complexity of the NGO and the multilateral response to political violence—similar to the dynamics expressed by McCreery when examining systems of Guatemalan labour exploitation. We have political powers, economic powers, and social powers in play, all of which will compete and cooperate to fulfil their goals [often to the detriment of local people], and which are all deeply influenced by funding. And these considerations are still at the forefront of this academic discourse, as Choudry and Kapoor (2013) write:

The processes of external and internal regulation, funding criteria, accreditation and recognition from governments, United Nations (UN) agencies or other international institutions discipline organizations to operate within parameters and frameworks set by these actors. In turn, many NGOs are charged with being self-referential in the sense that they develop priorities and strategies internally without reference to peoples and social movements they claim to advocate on behalf of, or communities in which they operate (13).

Of course, the influence of funding is not unique to NGOs, transitional justice efforts, or forensic anthropology. Disparities in funding for forensic investigations occur across the world. A well-known example of this dynamic in the UK is the investigation into the disappearance of Madeleine McCann, the search for whom has accumulated 11 million pounds in expenditures as of 2018 (BBC 2018). For comparison, a 2013 estimate puts the average expenditure for a medium risk/medium term missing person investigation in the UK at 2,415.80 (Greene & Pakes 2013). This disparity may be attributed to a number of factors, i.e. press coverage, international attention, etc. Regardless, the presence of these funding influences in contexts outside of forensic anthropology and NGOs, does not negate the importance of the influences on NGO and

forensic anthropology specific contexts. It merely demonstrates the broad, systematic nature of this type of disparity.

Political and economic dynamics have also been observed in forensic anthropological initiatives explicitly. As Wagner (2008) observes in her analysis of DNA initiatives in Srebrenica. While DNA initiatives were cast as ‘transcending’ politics and fundamentally truthful and humanitarian, the initiatives themselves acted as means for local and international government to ‘assert authority’ (Wagner 2008 p. 89). These programmes appealed to the United Nations as well, as they demonstrated that the United Nations was committed to the reconciliation efforts, when many families pointed the finger of blame at the United Nations for the exacerbation of the conflict.

As Rosenblatt (2015) observes, forensic teams [including NGOs] must walk ‘razor thin lines’ in order to maintain their political autonomy. The fact remains that these forensic teams can rarely fund investigations and access sites without the benefaction of outside sources—including political organisations. In this dynamic, forensic teams maintain some level of agency through the prioritisation of some interests over others, or through the omission of certain interests entirely (Rosenblatt 2015). This relationship between forensic ‘stakeholders’ [e.g. local governments, international organisations, forensic teams, victims’ families, and even perpetrators] has been observed to prop up the very frameworks of the violence and even downplay the motivations of the victims—especially when those overseeing the investigation are implicated in the production or coverup of the graves exhumed. Rosenblatt (2015) recounts an example of identification efforts in Chile, where mounting governmental pressure on the identification teams paired with little practical support [e.g. funding] effectively derailed the identification process. In Peru, the CVR [Comisión de la Verdad y Reconciliación] and the EPAF [Equipo Peruano de Antropología Forense], took part

in exhumations of graves from the internal conflict. By the end of this investigation 2,000 individuals had been exhumed but only 700 identified and returned to their families. Of the 700, most were alleged victims of guerrilla groups, while the remaining 1,300 were victims killed by the state (Rojas-Perez 2015). These examples are not unique, those in political power across contexts will act in their best interests in regard to forensic identification efforts—whether this is best served through allowing the investigation, such as transitional governmental entities that need to re-establish trust, or implicated governmental agencies stymieing the process (Rosenblatt 2015). And while an NGO may not officially be a governmental organisation, they are still beholden to these powerful, political needs in order to maintain their security and autonomy (Rosenblatt 2015).

It is unclear at this stage how a forensic anthropological NGO, such as the FAFG, might function outside of these influences. Indeed, the ability to navigate these influences and perform their work successfully is impressive, especially considering the restrictions on autonomy, resources, and security discussed above. Explicitly naming these influences and acknowledging the contributing factors that are in our control, however, is the first step to empowering these NGOs to perform more effectively and equally.

1.2.5 Social Influence in the Reconciliation Process

While problematic multilateral intervention is an important feature of the Guatemala context, forensic anthropology is not truly an intervening measure. Rather, it is a reconciliation or truth-seeking mechanism, meant to assist in the process of transitioning a community or country into a time of peace. This might be through recording the extent of the violence, through identification of victims in order to return

them to loved ones, or through bringing criminal charges against the perpetrators—and all of these priorities come with their own ethical ramifications (Thomsen 2017). Yet, it has been observed that, like multilateral intervention in human rights abuses, these efforts are often influenced by outsider perspectives, priorities, and political manoeuvring. These influences then shape how transitional justice and reconciliation processes define victims and create hierarchies of victim through the narratives they create or maintain.

Transitional vs. Transformative Justice

In the conversations that surround the conflict in Guatemala, and to some extent the World Trade Center attacks, forensic anthropology is often described as an integral part of ‘transitional justice’ efforts—especially when the worlds of forensic anthropology and NGOs overlap. Yet, transitional justice is often portrayed as a monolithic concept with very little clarification of its function, goals, or even its definition. As Teitel (2010:vii) aptly describes in the preface of the book *Localizing Transitional Justice: Interventions and Priorities after Mass Violence*:

We are witnessing what I have elsewhere identified as a “global” and “normalized” phase of transitional justice, a proliferation of accountability mechanisms and processes at and across different levels—international, regional, domestic, and local...Yet it is often unclear what these developments actually mean, either theoretically or operationally, at the intersection of the international and the local...This searching book sets out to get beyond generalizations about the global moment, to take a hard, close look at local realities and impacts on the ground, and to interrogate the state of current responses to conflict and repression. The contributors challenge the teleological assumptions of transitional justice, examining the concrete ways in which its mechanisms intersect with survivors’ practices, standpoints, and priorities in specific places and times.

It is clear that the academics immersed in transitional justice studies are considering the broader implications of the ‘proliferation of accountability mechanisms’—of which forensic anthropology is one—and how these mechanisms realistically operate at different levels across the world. These critical examinations of transitional justice, as it is practiced, allow for the injection of reflexivity in these analyses of global responses to atrocity, embracing the presence of subjectivity, and even misdeed, in their application. In the same volume, editors Shaw and Waldorf (2010) state that the current iteration of transitional justice is ‘frequently marked by disconnections between international legal norms and local priorities and practices’ (Shaw and Waldorf 2010: 3). This dichotomy between the international entities responsible for the deployment of transitional justice mechanisms and those who would theoretically benefit from these mechanisms is clearly present in Guatemala—as we will see—and warrants an examination of the motivations within transitional justice efforts. For if transitional justice does not provide justice for the victims of the violence from the victims’ perspectives, then who is it truly serving?

Hazan (2010) argues that transitional justice functions under the assumption that history is a progressive concept, that ameliorating injustices of the past will secure a peaceful future, which is echoed in transformative justice literature (Gready & Robins 2014). Hazan (2010) describes how this understanding of transition became the accepted framework with which to understand any shifting political situation across the world from the 1980s until the 9/11 attacks in 2001. Before this moment, transitional justice was fuelled by optimism, the same optimism that enabled the growth of multilateralism and NGOs—creating a ‘new rapport between politics and morality’ (Hazan 2010: 50). Hazan argues that there is ‘hubris’ in this understanding of history, ‘[i]n a vocabulary of book-keeping, transitional justice thus promises a settling of

accounts. It refuses the inevitability of the irreparable, the irreconcilable in history' (Hazan 2010: 54).

Perhaps more than hubris is present in the dissemination of transitional justice efforts, however, especially in the years following the 9/11 attacks. Under the Bush administration, militaristic national interest replaced the optimism of transitional justice, and humanitarian law was marginalised in the international community. This resurgence in national interest was cloaked in moralism, constructing a new framework for understanding shifting political dynamics—that sometimes democracy and peace must be built with force (Hazan 2010). Hazan goes on to argue that national interests deeply influence the application of transitional justice mechanisms, that these tools are strategically used or abandoned depending on the needs of the countries deploying them,

Afghanistan is another example par excellence of how the [transitional justice] toolkit could be used or discarded according to the strategic objectives of various governments, independently of the desire of the population. Neither the authorities nor the UN (which is profoundly implicated)—nor even more so, the United States, which has deployed thousands of soldiers and is the foremost political supporter of President Karzai—have opened the slightest inquiry against the perpetrators of war crimes and crimes against humanity. In fact, since the late 1970s Afghanistan has experienced a continuous state of civil war punctuated by foreign occupations in the forms of the 1979 Soviet invasion and the 2001 U.S.-led invasion that toppled the Taliban government. Warlords from all sides committed gross human rights violations, such as mass bombardments of villages, arbitrary detentions, summary executions of prisoners, torture, rape of women and children, forced disappearances, and massacres. Despite this grim history, the United States and, subsequently, the UN, have even been active agents in the process of co-opting the warlords to political power in the idea this alliance would allow them to hit the Taliban. (59)

Hazan's description of transitional justice here harkens back to political realities of humanitarian intervention discussed in the previous section. It is clear that political motivations, social understandings of international relationships, and even academic theoretical frameworks, fundamentally intersect within the application of transitional justice.

Yet, even if these influences are identified, they remain difficult to appropriately account for in practice. Weinstein et al. (2010), depict the problems that emerge from engaging with these factors without nuance and reflexivity. They acknowledge that the United Nations addresses the inadequacy of a 'one-size-fits-all' model for transitional justice—reflected in Wagner's (2011) analysis of 'universalism' and 'particularism' in the Srebrenica example—but argue that its assessment was superficial and did not account for the interplay between transitional justice and political ambition, nor the role the United Nations itself has played in complicating efforts to determine accountability. Indeed, relying entirely on local, culturally appropriate mechanisms can present critical problems. Rwandan transitional justice efforts, that rely on a 'supposedly' traditional court-system called *gacaca*, have been strong-armed by the local government (Weinstein et al. 2010). This has created an absolute dichotomy between victims and perpetrators that threatens the safety of participants—who are legally compelled to take part (Shaw and Waldorf 2010). These efforts, while based on local ideas of justice, have themselves generated a context of anger and fear.

Considering the *gacaca* example, it seems that the success or failure of a transitional justice project is not necessarily fixed to the employment of cultural practices, but to the genuine, uninhibited consideration of the community's wants and needs. But more importantly, Weinstein et al. argues, we must 'calibrate our expectations.' We cannot assume that transitional justice will invariably 'lead to

reconciliation and forgiveness, deter further abuses, combat impunity, promote social reconstruction, and alleviate the effects of trauma' (Weinstein et al 2010: 31). It may do those things in some situations, but it is not fundamental guarantee of the process.

Sanford and Lincoln's (2011) criticism of the narratives that situate Guatemala's violence in a pre-ceasefire era, is in part grounded in a criticism of the international transitional justice efforts that have taken place since the ceasefire. In the volume *Transitional Justice: Global Mechanisms and Local Realities after Genocide and Mass Violence* (Hinton ed. 2011) she encourages anthropologists to become proactive, if not in open criticism of the administrators, then in the application of public pressure to convince international organisations to help end impunity for murderers in Guatemala. It is her assertion that failed transitional justice policy is a primary contributor to the rampant violence, especially against women, that she has observed. Therefore, one cannot truly understand forensic investigative programmes in Guatemala, without considering the successes and failures of transitional justice programmes.

Some scholars have encouraged the formulation of a different process that could replace the concept of transitional justice—transformative justice (Gready & Robins 2014). Transformative justice is the emphasis on transforming the context that the violence occurred in, as opposed to reconciling the violence itself (Gready & Robins 2014). This process does not assume that no conflict is irreconcilable, nor that violence cannot happen again once the conflict has been resolved. The transformative model, in fact, accepts the opposite. It attempts to tackle the frameworks that have enabled the violence in order to prevent further suffering. The UNDP has even conceded that its projects in Guatemala have failed to make 'long lasting structural changes of the type that can transform the power structures in Guatemala' (Pillay: 34). It is difficult to contextualise forensic anthropology within a transformative framework, however, as

forensic identification of human remains is primarily a response to violence that has occurred. Yet, the context in which forensic anthropology is enabled is fundamentally intertwined with the contexts that enabled the violence to occur. As such, these contexts should be critically examined to understand the political, social, and even academic influences that may be affecting forensic anthropology as a transitional justice mechanism, and to explore how forensic anthropology may best contribute to a transformative model.

Understanding Victimhood in Humanitarian Initiatives

A crucial question in the application of transitional justice is: what defines a victim? This theme is present in the plethora of research regarding transitional justice, humanitarian intervention, and genocide studies. Its prominence as a research focal point comes from the simultaneous difficulty and necessity of making these attributions of victimhood, at least from a practical point of view. If the purpose of a transitional justice effort or humanitarian intervention is to stop the violence, reconcile the parties, and eventually assist or compensate victims, then attributing victimhood to individuals, communities, or even entire ethnicities or social strata is a fundamental part of allowing those efforts to function.

The attribution of victimhood, as discussed at length in transitional justice and intervention research, are never easy to make—however straightforward the conflict seems. In her book *Buried Secrets*, Sanford (2003) describes her encounters with victims of the violence during the Guatemalan civil war who then became perpetrators of the same violence. In her account, a young man joined the paramilitary forces through coercion and torture at the hands of the paramilitary before victimising others. When ascribing victimhood in this context, dichotomous understandings of victimhood

become problematic. It is unclear which category he would fall into—and who would make that determination. Wagner, during her work in Bosnia and Herzegovina, observed that attributions of victimhood served as social demarcations within communities affected by the violence (2008). These attributions decided who would receive aid, and within that model, who would receive the most aid and the least aid. These delineated, hierarchical attitudes towards victimhood then manifested themselves in quality of life, e.g. those with the most aid rebuilt their homes (Wagner 2008), creating a quid-pro-quo commerce of suffering. This dynamic contributed to the formation of a narrative surrounding victimhood that Wagner describes in her book *To Know Where He Lies*. Victims in this scenario did not misrepresent their experience to receive more aid, rather victims seemed to downplay their experiences and then rationalise that they therefore required and deserved less assistance.

In *Sociopolitics of Migrant Death and Repatriation: Perspectives from Forensic Science* (Latham & O'Daniel 2017), we are presented with the quandary faced by forensic anthropologists working on the U.S.-Mexico border. Migrants who cross the border between ports of entry and fall victim to exposure, dehydration, starvation, or violence, are left in a victimhood/perpetrator loophole as well as a jurisdictional one. On one hand, they are victims of a treacherous journey, yet on the other hand, the socio-political context of this treacherous journey has rendered them culpable for their own demise—as their deaths could [theoretically] have been avoided by crossing at a legal port of entry. Here, migrants are both the victims and perpetrators of their own deaths, and within a dichotomous model, migrants are largely held to blame. According to De León (2015), when migrants perish during this crossing and fall into local jurisdictions, limited evidence collection is performed [a few photos and a GPS location], before the body is turned over to the small forensic team responsible for migrant identifications,

representing their marginalised victim status within the existing forensic system. This is also reflected in the work of Soler and Beatrice (2017) who observe that the skeletal remains of deceased migrants on the US-Mexico border have indicators of physiological stress, which they argue is an embodiment of systematic violence.

From these examples, it is clear that the victim/perpetrator dichotomy is not a dichotomy at all, it is a spectrum that is treated like a dichotomy to make decisions, such as who will receive access to international aid, forensic services, and even to public sympathy. In an applied field such as forensic anthropology, or any other transitional justice effort, the ability to make decisions is intrinsic to the functioning of the effort. Therefore, it is understandable that attributions of victimhood would play a fundamental part in the implementation of these programmes, and that these attributions would, by necessity, be relatively limited in their scope in order to help a large proportion of victims efficiently.

Yet, even outside of pure functionality and efficiency of transitional justice programmes, the researcher and the layperson alike are compelled to participate in the attribution of victimhood and denunciation of 'false victims' through public analyses of victim memory and testimony. Some years after Rigoberta Menchú won the Nobel Prize for her autobiographical account of the Guatemalan civil war and the war crimes that were inflicted upon her community, David Stoll, an anthropologist, published a piece claiming that parts of her story were impossible (Stoll 1999). This was picked up by the New York Times and was followed by frenzied media coverage across American newspapers (Nelson 2009). Stoll had interviewed members of Menchú's family and community looking for corroboration of her stories. While the interviewees were sympathetic to Menchú, they explicitly refuted her accounts of her brother's execution by immolation and her other brother's death by starvation (Nelson 2009, Stoll 1999).

Other accounts contradict Menchú's account of her education—namely that she had in fact received some formal education when she had claimed that she had not (Nelson 2009, Stoll 1999). After these claims of inaccuracy were made, Menchú offered a statement that said she never claimed that her book was entirely accurate although it contained no intentional errors (Preston 1999).

Nelson (2009) picks up this debacle in her book *Reckoning*, questioning the nature and value of the conversation surrounding Menchú's potential dishonesty. Indeed, *Reckoning* attempts to reckon with the theme of 'duplicity' that seems to surround the Guatemalan civil war and the research that has emerged during the violence and after the violence officially ended. Nelson argues that while attempting to elucidate some aspect of the conflict, Stoll was merely playing into this theme by categorising Menchú as an 'Indian Giver' [to use her words], and pointed out Stoll's own biases, which seemed to cast the military in a nuanced light that could be considered favourable (Nelson 2009). Sanford (2003) argues that Stoll's account was as duplicitous as he claimed Menchú's to be—as his analysis comes apart where primary evidence is available. This theme of 'duplicity', while immediately evident to me in its own way on the heels of my research in Guatemala, does reflect back on this idea of ascribed victimhood. Indeed, in Stoll's account of Menchú's 'duplicity', he encourages readers to ascribe Menchú with a new identity. No longer can she be considered merely a victim, but she must now be considered a perpetrator—her inaccurate portrayals intrinsically shifting her from one side of the dichotomy to the other. Without the ability to consider these circumstances, and all circumstances during and after political violence, in a nuanced way, we are forced to categorise bluntly. This will inevitably impact the research we perform, the aid that is given, and the forensic investigations that are performed, such as in the Guatemala example.

Beyond our personal understandings of victimhood, we must consider this victim/perpetrator dichotomy and this more-deserving/less-deserving victim dichotomy in a broader and reflexive sense. As researchers or field-based anthropologists, it is easy to fall into this understanding as it is simple and utilitarian. However, as the research shows, it profoundly impacts the demographics of the supported communities and the accepted narratives surrounding political violence. As will be demonstrated in the Guatemala example, narrow attributions of victimhood and a stark more-deserving/less-deserving delineation, have explicitly precluded specific individuals from forensic anthropological investigation. Thus, in ways that are not dissimilar to Wagner's (2008) Bosnia and Herzegovina example, specific narratives regarding victimhood and deservedness have pervaded the forensic process in Guatemala. This thesis takes this examination of victimhood a step further and scrutinise the functionality of such systems, the social and political motivations of those involved in the forensic process, and ultimately where we as anthropologists stand in this matrix of narratives and influence.

Forensic Anthropology as Transitional Justice

We have established that intervention and transitional justice efforts are bound to social, political, and economic influences at many levels. Forensic anthropology as a transitional justice mechanism is similarly beholden to these influences, even as a form of forensic science. The specific methodological outcomes of these influences will be discussed in the following section, but it is also necessary to consider the broader, social impacts that forensic anthropology may have on a transitional justice project.

The interwoven narratives surrounding forensic anthropological efforts have been observed in varying contexts. As Moon (2013) notes, the forensic examination and

interpretation of human remains, regardless of their objectives or claims of categorical truth, are merely situated in competing narratives and interpretations, as the network of motivations surrounding the humans remains resists a final settlement. Moon (2013) argues, similarly to Rosenblatt (2015), that these networks of institutions, artefacts [human remains], perpetrators, and investigators all have different—and often competing—stakes within the investigation process. Indeed, when exhumations, intentionally or unintentionally, contribute to a superficial, one-sided, or incomplete accounts of the violence, they reinforce ‘simplistic moral fables’ (Rosenblatt 2015: 26), that can emerge from international organisations’ [in his example, the International Committee of the Red Cross] tendencies to ‘collapse a complex history and present-day landscape into a single story’ (Rosenblatt 2019: 75).

When working in a context such as investigations into political violence, the forensic anthropologist must be cognisant of the unique dynamics that may emerge. As Fondebrider (2015) explains, in a typical forensic context, the forensic practitioner may be seen as an objective third party and uninvolved with the crime. However, after state violence, a forensic practitioner may be associated with the very same state apparatus that committed the violence that is being investigated (Fondebrider 2015). Rosenblatt (2015) also observes that some personnel overseeing the forensic investigation may be directly complicit in the violence. Some post-violence contexts remain so deeply divided that forensic anthropologists must make a concerted effort to prevent perceptions of favouritism—i.e. the use of one local language and not another (Thompson 2015).

As forensic anthropology after political violence is a direct response to that violence, it is difficult to reconceptualise forensic anthropology as anything other than a transitional justice or a reconciliation mechanism. However, traditional transitional justice mechanisms often do not dismantle the socio-political frameworks that led to the

violence, like those of transformative justice models. To begin this reconceptualisation, we must be judicious regarding the socio-political contexts in which forensic anthropology is practiced and the myriad of ways that forensic anthropological projects maintain narratives surrounding victimhood and hierarchies of suffering—especially when influenced by complicit parties.

1.3 Consolidation of Concepts

This literature review seeks to contextualise the myriad of relevant historical, political, economic, and social frameworks that are present in the Guatemala and 9/11 examples, and how anthropologists and other social researchers have approached these intersecting factors.

The conflict in Guatemala, which would claim the lives of 200,000 people, emerged from the social, economic, and political exploitation of poor and indigenous Guatemalans from Spanish colonisation to the mid 20th century. It was catalysed by Western influences working on behalf of large corporations, which organised a military coup through the CIA. After decades of violence, the United Nations intervened in 1996 and helped broker a ceasefire agreement, which would include the formulation of a report on the violence that would lead to the formation of the FAFG, a quasi and donor-organised NGO. Today the FAFG is still active in the identification of human remains through the benefaction of international organisations. Yet, many researchers have observed that the violence never truly ceased but rather morphed into endemic gang violence, entrenched poverty, and impotent judicial systems. It is, therefore, important to consider the political, social, and even academic influences that may be at work within the FAFG identification process.

The intervention in Guatemala occurred at a time when there was global optimism in internationalism and multilateralism. The theoretical frameworks underpinning transitional justice and humanitarian intervention, however, assumed that history was progressive, and that these international efforts would not only ameliorate conflict but prevent further violence. Yet, even from the 1990s, there was evidence that these international mechanisms were not applied equally, were often determined by the needs and wants of more powerful states, and had unanticipated repercussions for the communities that received this aid. It also became evident that some conflicts were irreconcilable and that transitional justice efforts, especially as provided by NGOs, did not empower local communities, often on account of funding.

The 9/11 attacks on the World Trade Center marked a turning point in national and international outlooks on multilateralism. The optimism of the 1990s gave way to moralistic and dichotomous understandings of political violence that would lay the foundation for the War on Terror. Anthropologists became involved in post-9/11 discourse and identification efforts and observed a fundamental shift in nationalistic ideas of patriotism and academia. Forensic anthropological identifications are still conducted through the OCME, which has received state and national support to create an extensive DNA testing facility for fragments that have been recovered from the debris.

These examples, therefore, occur in two distinctive eras of global discourse regarding political violence. The Guatemala example, created through multilateral intervention and support in a time of optimism, exemplifies how multilateral conceptions of transitional justice and the implementation of these programmes do and do not reflect the lived experiences of local people, may emerge from the priorities of foreign powers, and do not address the intersecting political, economic, and social

issues that underpinned the conflict. The 9/11 example occurred in a moment of historical-political upheaval; one that would drastically change conceptions of internationalism and previously accepted theoretical frameworks. The forensic anthropological investigations in both examples reflect these fundamental differences in national and global outlook and can be examined through the analysis of intersecting political, socioeconomic, and academic influences.

Yet, outside of these social anthropological understandings of political violence in these scenarios, there is room to consider the biological anthropological understandings of the skeleton, skeletal trauma, and the act of interment after political violence. In both the methodologies and practical application of forensic anthropology, it is clear that political violence—especially genocide and mass casualty events—exacerbates existing shortcomings within the discipline. This thesis includes a brief examination of potential methodological shortcomings, but also seeks to establish a broader analytical framework, with which forensic anthropologists can be better equipped to begin examining the extent of these problems. This framework, like that for the social anthropological questions addressed above, utilises analysis of intersecting political, socioeconomic, and academic influences within forensic anthropological investigations.

The exacerbation of these shortcomings in the application of the discipline, both socially and methodologically, is intrinsically tied to attributions of victimhood to certain demographics after political violence, and that these ascriptions correlate to the political, economic, and social systems that enable forensic anthropological work to occur. It will further argue that the act of inhumation, the act of exhumation, the act of identification, and the use of cemeteries and memorialisation, reflect these political, economic, and social realities for both the Guatemala and 9/11 examples. It will

conclude by examining the possible ways forensic anthropologists, and those that enable them, can utilise an interdisciplinary social and biological anthropological framework to better empower local people, the families of the missing or deceased, and even themselves.

2. Forensic Anthropology and the Anthropology of Forensic Science: Theoretical Frameworks and Project Methods

'Here we see the importance of a particular place and its dynamic role in the identity of the dead and of his/her identity in the ongoing life and in the identity of the living person who conducts this private right [interment] with his remains.' (Davis & Rumble 2012)

This chapter considers the theoretical challenges of merging biological anthropology and social anthropology, as both use distinct theoretical models. Referencing biocultural and bioarchaeological concepts, it argues that a functional perspective, while not necessarily appropriate for most ethnographic work, suits this research as it shares some roots with biological anthropological concepts and allows for the analysis of systems. A background of anthropological functionalism is provided to contextualise the discontinuation of the model among social anthropologists. In order to accommodate for the limitations of the functional model in ethnography, it has been modified to emphasise nuanced perspectives and concomitant factors through intersectionality. It also embraces the systematic as secondary to human behaviour, adopting a resilience-mechanism understanding of functionality—reflective of evolutionary selective pressures.

The methods used in this research are also included in this chapter. These are situated in ethnographic research and ethical recommendations, especially those for ethnography after political violence such as genocide and terrorism. This research includes informal, semi-formal, and formal interviews, utilising unstructured and semi-structured formats. It also uses autoethnographic concepts in order to contextualise ethnographic data in previous personal experiences and includes a brief statistical

analysis of small datasets. There is also a discussion on the potential limitations of this project, including its small sample sizes.

2.1 Interments in the Anthropological Perspective

Burial, exhumation, reburial, and memorialisation are all imbued with particular significance in post-violence conditions, as they represent the living's interaction with the corpse and the values of those who conducted the interment. Indeed, the act of interment speaks to our experiences and identities as human beings—even as *Homo sapiens sapiens*. This section delves into the complex dynamic of remembering and forgetting at the graveside and argues that the cemetery may be used as a theoretical lens to examine the experiences of the living. The formation, destruction, excavation, and remaking of burials are fundamental aspects of the forensic anthropological endeavour, revealing the priorities of the project and the consequences emerging from these priorities.

2.1.1 Interment as Analytical Lens

When considering the work of an organisation such as the FAFG in Guatemala, or any other forensic anthropological group, it is necessary to ask the basic question: what exactly is a cemetery?

Cemeteries are places for dead people. More accurately, however, they are places where we put dead people, as cemeteries are first and foremost for people who are still living. Cemeteries are only for the dead inasmuch as the living put them there. They are created, curated, and maintained—or not maintained as the case may be—by the living, serving a multitude of purposes for the living. Thus, the cemetery is for both the living and the dead. It has long been observed by archaeologists examining burial

contexts that a burial will often tell us more about the people who buried the individual than the deceased in question (Fahlander & Oestigaard 2008, Parker Pearson 1999).

The dead do not bury themselves (Parker Pearson 1999).

Understanding the theoretical frameworks of burial in anthropology as a holistic discipline, allows us to gain new perspectives on the role of the cemetery in the lives of the living, especially in a mass fatality context. The ways in which humans deposit the dead speak volumes about the living communities that do the depositing, from ecological, economical, and cultural needs, to the evolution of our conscious minds. In this way, cemeteries may represent the fulfilment of specific functions which represent the needs of the living.

Ritualised burial of the dead has long been a subject of interest to anthropologists and archaeologists alike as it offers a glimpse into ancient life, and a method to analyse the potentially humanlike behaviour of our evolutionary ancestors.. Some of the earliest examples of formal inhumation are arguably seen in the burials of Skhul V and Qafzeh, attributed to anatomically modern humans 100,000 years before present. These burials contain the remains of a wild boar and a deer placed deliberately in the hands of the deceased individuals. The presence of these grave goods indicates cognitive abilities reminiscent our own (Lieberman 1991).

From the anthropological and archaeological perspective, burial of the dead is representative of human cognitive function, the critical outlook onto the world that accounts for the distinctly human experience of culture (Pettitt 2011). From these representations, archaeologists seek to understand the culture of those that did the burying. And while it is impossible to fully understand the mindset of those responsible for these ancient burials, archaeologists can come to tenable conclusions about the symbolism and rationale of such actions and how they might relate to the community's

values over all (Fahlander & Oestigaard 2008). Contemporary forensic and ethnographic work can do the same.

Burial and the deliberate placement of the dead is seen across temporal, geographic, and cultural boundaries, each instance fulfilling a particular economic, ecological, emotional, or even political need of the living. Several examples of cross-cultural uses of interment to fulfil these particular needs are discussed in this section. There is the obvious functional need to dispose of the corpse before the decomposition process affects the quality of life for the community in the immediate vicinity, and this is then coupled with the plethora of subjective needs of the community connected to the deceased (Cohen 2002)—whether this is an outward display of respect and love, or the hurried disposal of a hated or ostracised individual. What is done to the corpus of the dead in contemporary burials, therefore, reflects the needs and wants of the living and can act as a lens to analyse the community's state of mind.

Remembering is a common function of any cemetery, although it takes many forms, and the act of remembering may serve to fulfil a myriad of needs. To the survivors of the civil war in Guatemala, the graves act as a stark reminder of the terror and violence they witnessed (Sanford 2009). Other graves may hold commemorative power, monuments or tombstones erected to honour the memory of the dead (). Still other graves may physically represent the continuation of memory, for example the addition of small stones during a visit to a larger tombstone as in the Jewish tradition, the addition of names or pictures to the FAFG memorial in Guatemala City [see figure], or the annual laying down of poppies for fallen British servicemen in the United Kingdom.

From an archaeological perspective, the material culture included in a burial context that seeks to memorialise the deceased can help researchers create paradigms

in which to effectively analyse the demography of historical cemeteries. The addition of engraved markers in churchyard burials in Cambridgeshire, U.K., was likely a tactic for mourners to protect burials from pillaging or disruption during subsequent burials, and the use of stone markers allowed this protection to last beyond the living memory of the deceased (Cannon 1995). Consequently, these tangible acts of memorialisation have contributed to differential preservation of skeletal remains, often falling along socioeconomic boundaries. Males are represented significantly more than females, adults more than children, and the rich more than the poor (Cannon 1995). Thus, we must consider the act of remembering as indicative of the social constructs in which the burials occur and as a direct complicating factor in demographic analysis. With this perspective, while memorialisation is done in the name of the dead, it is clearly done so by the living, for the living, serving a particular function.

These dynamics, while presented here as fundamental traits of the cemetery, are not limited to burials alone. Indeed, many other forms of interments represent precisely this dynamic. An example of this is the 9/11 repository for the unidentified and uncollected human remains recovered after the attack. These unidentified remains are currently stored in the National September 11 Memorial, a decision that has cleaved the families of the deceased (Colwell-Chanthaphonh & Greenwald 2011, Toom 2015). The remains of the victims are housed in the basement of the museum, and while the families of the victims do not have to pay to visit the repository, tourists have access to the area outside of the repository with the purchase of a ticket—although not to the repository itself. Some families have felt that this does not appropriately memorialise nor honour their deceased loved ones (Toom 2015) and have even protested outside of the museum against this form of interment. The families who have actively protested, and even in one instance turned to litigation (Toom 2015), feel that their needs have

been subverted in the name of monetising their loss (Kandell 2014). In this case, the living family members of the deceased lose their agency with little recourse. These circumstances will be addressed further in the discussion chapters.

2.1.2 Remembering and Forgetting at the Graveside

If on one hand cemeteries and other interments serve as means of remembering, on the other they serve as means to forget. Once the practical needs of removing the body are met, we must investigate the subjective needs of the community and how the act of burial serves to fulfil those needs. This may be influenced by cultural differences, but also by the different realities that the deceased individuals represent. One example of the cemetery as a place to forget are those found on the premises of asylums for the 'feble-minded' (Applebome 2007). In Letchworth, New York, the grave markers in a cemetery on the grounds of one such asylum are marked only with a number in order to spare the family of the deceased the shame of association. There is now a movement to identify the persons in these graves and memorialise them (Applebome 2007).



Figure 3: *Letchworth Cemetery* (DeChillo 2007)



Figure 4: *Letchworth Memorial* (Alexandra Charitan)

Another example is Hart Island in New York City. In a New York Times exposé, the public cemetery on Hart island in New York City, was reported to contain the remains of over a million unclaimed, unidentified, or poor people in largely unmarked graves (Berstein 2016). Interestingly, the act of burial is now carried out by prisoners which are ferried to and from the island (Kearney 2016). In this case, the ostracised deceased are interred by the ostracised living.



Figure 5: *Potter's Field, NY* (Riis 1890)

In 2012, a team of forensic anthropologists and archaeologists discovered the remains of dozens of children in unmarked graves on the grounds of Dozier, a state-run school for delinquent boys in Florida [see Image 7]. These boys are reported to have been beaten to death, and there are no records of where any of these boys were buried (Blakemore 2016). The forensic and archaeological excavations taking place to determine identity and cause of death, as well as movements to memorialise the forgotten dead, are means for the living now to remember, but at the time these burials were means for the living to forget the deaths of those considered pariahs or deviants.



Figure 6: *First body, Dozier* (Fountain 2016)

Interments across these temporal, geographic, and cultural boundaries additionally represent the need to forget and to remember. This dynamic in the context of genocide can be seen in the disposal of the dead during the Holocaust. The creation of mass graves and the systematic cremation of the dead in the Nazi concentration and death camps [or even outside villages and ghettos in the early stages of the Holocaust] were not to inspire lasting terror among targeted communities. Indeed, many did not even believe the stories of those who survived to bear witness. The few survivors of early roadside executions were even chastised for creating panic upon their return or accused of losing their minds (Nizkor⁸). The ultimate goal of the Nazis was to use this systematic violence to completely eradicate the Jews, Romani, homosexuals, disabled, and all other personae non gratae throughout Europe (Friedländer 1995), there was no need for them to create a culture of terrorising remembrance if they intended to leave

⁸ Nizkor is a database of testimonies given by Holocaust survivors that is maintained by Yad Vashem

no survivors to do the remembering. Yet the Nazis did wish to remember their feats of eradication for themselves, relentlessly documenting their actions, the names of the people they killed, and stealing the property of the dead for museums that would honour their 'achievements' (Boissoneault 2018, Feliciano 1997).

Political motivations influence the remembering and forgetting intersection in forensic reconciliation processes, which shall be discussed in more depth in following sections, as made clear in Wagner's (2011) chapter on universalism and particularism in Bosnia and Herzegovina. She observes that the actions of political figures at gravesites can have enormous consequences. Political figures wield tremendous power over narratives of the conflict through acts of memorialisation. By attending the memorialisation ceremony at Srebrenica and refusing to acknowledge the Serbian deaths that occurred there, politicians further cleaved an already divided narrative. Wagner argues that the memorialisation of one group and not another can extend conflict by manipulating the narratives of both groups, debilitating any unified understanding of the conflict.

Just as the act of burial serves specific needs of the living, the act of exhumation serves [or fails to serve] the needs of the living as well. As Crossland and Joyce (2015: 3) observe, 'emotionally charged reactions and responses to the emergent dead reveal the ways in which different understandings of the dead body are unmade and remade through the body's exposure in the grave.' The process of exhumation may, therefore, also act as a lens through which we can analyse the state of anthropology as a humanitarian discipline and its relationship with the living it attempts to serve.

Furthermore, these instances of exhumation give further insight into the priorities, expectations, and attitudes toward the role of burial sites. The decision to exhume or not to exhume remains from a burial may function similarly to the

relationship between remembering and forgetting a burial. Often, governments that hold any culpability in the violence will only agree to enable the excavation of graves if those excavations position state violence in the past (Fondebrider 2015, Rosenblatt 2015). In Lebanon, for example, the lack of political interest coupled with general amnesty laws protecting participants in the conflict, who willingly provided self-incriminating evidence to establish the extent of the violence, lead to decades of inaction (ICTJ 2016). Additionally, there are instances where government entities are bad actors within the forensic investigation, In Zimbabwe, the official response to the discovery of a mass grave drew criticism from forensic anthropologists, as it refused expert forensic assistance in favour of communicating with the spirits of the dead for identification (Benyera 2014). This, alongside the inexpert excavation of remains, indicated to the national and international community that the government was actively impeding identification efforts to manipulate the narratives surrounding the violence in their favour (Benyera 2014).

Thus, the forensic anthropological initiatives that are not carried out, and the manner in which they are carried out, when used as a lens, reveal the reality of the influences effecting the discipline. However, there is room for nuance. As identification processes are often dependent on family participation, if there is reticence on their part to become involved—e.g. because they are suspicious of intentions like in the early Argentina example (Doretto & Snow 2003)—the effort may not proceed. In such a context, the initiative that does not move forward actually represents family empowerment.

2.2 Merging the Forensic and the Social

The questions that this thesis attempts to answer are complicated in multifaceted ways, presenting both practical and theoretical boundaries to full examination. As Gowland & Thompson explain, ‘there is a lack of integration of the biological and the social literature concerning the body, in addition to a lack of full and proper integration *within* individual disciplines [e.g. archaeology, anthropology]’ (Gowland & Thompson 2013: 182). Even forensic anthropology itself is betwixt and between, occupying both the academic sphere of anthropology and the applied sphere of forensic science. Additionally, forensic anthropology is practiced internationally and—more importantly—interculturally, blurring the lines between what is reasonably expected from an academic discipline and what is reasonably protected by anthropological concepts such as cultural relativism—the acceptance of another culture’s legitimacy, even when its customs and values conflict with the observer’s perspective (Brown 2007, MacDonald 2001). This has already had an impact on the practice of forensic anthropology in HFA contexts. As Fondebrider (2016) explains, forensic anthropological literature is dominated by Western experiences, even though a significant proportion of forensic anthropology occurs in non-western contexts—leaving a sense in many regions, such as Latin America, that their participation is unequal and undervalued.

It is no surprise then that the theoretical frameworks required by this thesis must be equally as nuanced. We see this nuance in recent texts such as *Mapping the Forensic Turn* (Dziuban 2017), in which academics wrestle with assumption that ‘Forensics’ is an entirely objective, scientific process appropriate for examinations of political and/or historical violence. This assumption [or ‘The Forensic Turn’] prevents practitioners from engaging in reflexive analysis, as such research would be

unnecessary in this theoretical model. In *Mapping the Forensic Turn*, however, the position of forensic science is resituated as both a science and social science, subjected to the same biases and power structures as any other endeavour after political violence. In this new model, identity and identification are not limited to the biological, it is understood as a dynamic, social concept that forensic anthropologists are deeply involved in and wield influence over, as Gowland & Thompson (2013) also argue. Similar research is developing in forensic contexts from all over the world (Anstett & Dreyfus 2014, Crossland & Joyce 2015, Dreyfus & Anstett 2015, Rosenblatt 2015) from contemporary migrant death and identification (Latham & O'Daniel 2017), to war crime investigations and memorialisation (Jugo & Wastell 2015, Jugo & Wagner 2017), and historical violence in an era of evidentiary 'traces' (Mazzucchelli 2017).

This perspective echoes biocultural understandings of the inherent overlap of the biological and the cultural experience (Hruschka et al 2005), and of bioarchaeological understandings of the grave as a representation of the living community who buried the dead, not necessarily of the dead themselves (Parker Pearson 1999). The biocultural approach, a framework employed largely by medical anthropologists, is useful as it navigates the relationship between people or communities and their biology, arguing that the two are fundamentally integrated (Hruschka et al 2005). In the bioarchaeological perspective, the grave acts as a window, not into the identity of the interred, but rather into the community who created the grave. Both archaeologists and anthropologists understand the dead to represent more than just the life of a single individual; forensic anthropology is no exception in the 'Mapping the Forensic Turn' model, which is supported by the biocultural approach.

These observations are supported in other works, such as Crossland and Joyce (2015), which emphasise the fundamentally revealing nature of the forensic excavation,

both of the remains themselves and of the attitudes of those who witness them. Indeed, the theoretical trajectory for the forensic anthropologist seems to be a move towards the conceptually anthropological rather than the applied forensic. Even forensic anthropological research, emerging from what could be considered purely forensic programmes, underscores the importance of reflexivity in contemporary contexts. For example, the attempts to create a scientifically rigorous [and certifiable] template in the USA for forensic anthropologists working with law enforcement have been driven by a newfound emphasis on reflexive critique. The Daubert case marked a turning point for forensic sciences in the USA, especially for forensic anthropologists (Lesciotto 2015). This case changed admissibility standards for forensic sciences in US courts, pushing the forensic anthropology literature towards confirmation studies (Lesciotto 2015), which may explain the trajectory towards reflexive analyses. To Christensen and Crowder (2009), it was evident that previous understandings of bone fracture patterns were based upon anecdotal data, but this observation could have only been made through a subtle paradigm shift that encouraged forensic anthropologists to reconsider the building blocks of osteological research.

This shift is not necessarily new, some paradigms in human osteological research have morphed drastically since the discipline's inception, especially its relationship to concepts such as race and ancestry (Sauer 1992, Brace 1994) as discussed previously, and to illness and health such as the osteological paradox (DeWitte & Stojanowski 2015, Wood 1992). Yet, current understandings of forensic anthropology, and the role of the forensic anthropologist, present a burgeoning field of inquiry. In a discipline that treads an increasingly blurry line between science and social science, the academic and the applied, and the theoretical and the practical, how do anthropological models of reflexivity and relativity function?

The weight on functionality here is fitting, even though ‘Functionalism’ as a theoretical model for social anthropological research is essentially defunct. In this context, however, such an understanding may hold some value—especially to forensic anthropologists. As a social anthropological theoretical model, functionalism is the understanding of a society in terms of its parts and of the function that each part serves to the whole (Davis 1959, Eisenstadt 1990, Lesser 1935, Malinowski 1944). This understanding is often analogised to the functioning of an organism, where each part of society acts as an organ that allows the body as a whole/the society as a whole to survive. The original components of functionalism have, by and large, lost their popularity amongst social anthropologists (Eisenstadt 1990, Asad 1973). Although some social anthropologists encourage a return to functionalist ideas (Carrier 2012, Eisenstadt 1990, Pettit 1996), the reasons for which will be discussed in the following section. Yet, it is a compelling framework to return to, at least to some extent, in such a context. If it is possible to examine the physical body to learn about the community that buried it, then the opposite process may hold some value. If we can consider a body in terms of the society, perhaps we can examine the society in terms of a body.

At the outset of the original project, the theoretical frameworks were necessarily different—as the nature of the project was fundamentally different. During the fieldwork portion of the research, when it became clear that the original project could not move forward as intended, the functionality of the processes I observed was striking. The investigations, and the people conducting them, could only function under very specific circumstances, which inevitably leads one to question the function that the investigations themselves are serving—which harkens back to Rosenblatt (2015), what purpose are the investigations serving and on whose behalf? This, I would discover, did not have a straightforward answer. The interwoven complexity of these ‘organ systems’

in Guatemala could not be fully teased apart and would lose their significance if separated by force—much like an organ system in a human body. Therefore, the functionalist perspective, while considered out-dated by some social anthropologists, became a potentially useful model for this new project—although moderated by some necessary alterations.

While considering the function of the investigations would prove to be useful, it was immediately apparent that these functions were not occurring within a vacuum. These functions were beholden to a host of socioeconomic influences including poverty, gender, ethnicity, ethnocentrism, and colonialism. To examine the functionality of the forensic systems in Guatemala, and in New York, without deep consideration of these themes would be useless. It is fitting, therefore, to emphasise these particular influences within the project's theoretical framework. To do this, 'Intersectional' understandings of these systems were integrated into the functionalist perspective, allowing for a more holistic analysis of forensic anthropology as it is practiced in Guatemala and across the world.

2.2.1 Anthropological Functionalism

To address the lack of integration within the discipline of anthropology, there must first be a discussion of the theoretical models that inhabit both the social anthropological realm and the biological anthropological realm. Namely, both subdisciplines currently rely on distinct, and sometimes mutually exclusive, methodological and theoretical concepts. Both disciplines also rely upon differing vocabularies and differing modes of data presentation within their bodies of research. Considering these obstacles, proper integration of social and biological anthropology, especially in one thesis, is challenging—as data are prioritised, collected, and analysed

differently. This thesis will utilise the vocabularies of both, seeking accessibility to readers from both disciplines. But, perhaps the most challenging aspect of this process is finding an appropriate theoretical model that satisfies both social and forensic analyses. Here it is appropriate to return to the model of functionalism, for even if largely defunct in name amongst social anthropologists, there is room to re-establish aspects of this model—especially when used in conjunction with forensic anthropological analyses.

Functionalism emerged in the first half of the 20th century and maintained its popularity until the 1960s, when it was largely discarded (Eisenstadt 1990). These were formative years for anthropology as an academic discipline, as it struggled to define itself within the Arts and Sciences (Smith 1962). This struggle emphasised deep divisions amongst social anthropologists and their understandings of culture, human behaviour, and even the goal of anthropology itself. To Radcliffe-Brown, a famous proponent of functionalism, society is a natural system making any study of society a natural science, and therefore any society may be understood in terms of fundamental laws (Radcliffe-Brown 1952, Smith 1962). The ‘organic model’ of society proposed by functionalists encouraged researchers to consider culture as an organism, with each aspect ‘satisfying a need’ the organism may have for survival (Malinowski 1944). This mind-set allowed the emphasis of ethnography to fundamentally shift from an ‘Evolutionist’ understanding of social history—where cultural traits were only understood in reference to what had previously been—to focus instead on the importance of the contemporary context (Lesser 1935). Within this model, the past loses its pre-eminence to the immediate present.

To the anthropologists that vocally disagreed with functionalists such as Radcliffe-Brown, anthropology was an art or philosophy that should concern itself with

description and not explanation (Evans-Pritchard 1950, Smith 1962). To Evans-Pritchard, social anthropology 'studies societies as moral systems, not natural systems, that it is interested in design rather than in process, and that it therefore seeks patterns and not scientific laws, and interprets rather than explains' (Evans-Pritchard 1950). It is clear that while functionalism was a step away from earlier scientifically-underpinned understandings of society, it was still steeped in scientific values—or in fact, more so, as previous models relied upon conceptions of what may have been instead of immediately observable facts. Functionalism as a framework, therefore, cleaved social anthropologists into camps of scientists and philosophers. This offers an interesting insight into the intersection of social and forensic anthropology approached in this thesis, as it requires a unification of these camps.

Functionalism in its early stages can be interpreted as an attempt to link the study of culture with the scientific method, creating a system that Smith (1962) refers to as 'Anthropological Scientism.' This was not without considerable flaws, however. In fact, the perceived flaws in this understanding of culture were so profound that functionalism was largely abandoned by anthropologists—although not entirely (Eisenstadt 1990). Functionalists were described as teleological, conservative, or 'worse' according to Davis (1958). The emphasis on the immediate often manifested in the extreme where only the immediate context mattered, not the origin of observed phenomena (Lesser 1935). Yet, Eisenstadt (1990) argues that, despite its failings, functionalism may still have a role to play in contemporary anthropology. But to understand how we can appropriately use functionalism today we must dive into those flaws and learn how to compensate for them.

The most glaring of these problems is that functionalism is poorly defined. Each proponent of functionalism, in anthropology and sociology, seems to have a different

understanding of functionalism and how to use functionalism in research. Davis (1959) attempts to tackle this lack of consensus and offers a very basic definition.

Functionalism is based upon two suppositions. One, that functionalism attempts to ‘...relate parts of society to the whole, and to relate one part to another’ and ‘...by seeing one part as “performing a function for” or “meeting a need of requirement of” the whole society or some part of it’ (758). Davis goes on to argue that these suppositions are present in any science and ‘describes what *any* science does’ (758). He explains that functionalism is not distinctive in its method [scientific], only distinctive in its subject [society/culture]. This understanding would appear legitimate to any anthropologist who considers anthropology to be a science, but would certainly not appeal to anthropologists, such as Evans-Pritchard, who considered anthropology to be philosophy or an art—and certainly not a science.

Yet, Davis’s account of functionalism is in truth highly critical. The argument Davis presents is that functionalism is not truly a theoretical framework unique to anthropology or sociology, but rather just the scientific method plastered onto studies of society. He describes its vague definitions and use of ‘ordinary’ language [such as ‘function’, ‘dysfunction’ (763)] as reliant on recognisable—but unverified—intuitions, promoting prescriptivist arguments that are ‘strikingly inappropriate for objective and detached explanation’ (763).

Generality of definitions and unverifiable suppositions are persistent themes in the critique of functionalism. Eisenstadt (1990), presents a different two-pronged definition of functionalism, and describes one as ‘weak’ and the other ‘strong’. The weak postulate: all social interactions consist of patterns and parts that are closely interrelated. The strong postulate: these relationships between parts must be examined in terms of systematic frameworks. To Eisenstadt, the unverifiable supposition exists in

the assumption that societies are contained within systematic frameworks without which they would degenerate, but not necessarily in the assumption that systems exist within society. Here emerges another critical trope amongst anti-functionalists, as a theoretical model functionalism cannot account for change. Indeed, Radcliffe-Brown (1952), who broke away from the trend of vague definitions, describes a cultural equilibrium that is generated from structural systems, '...process is dependent on structure, and continuity of structure is dependent on process' (9-11). Smith (1962), condemns this understanding of culture as '...eternally repetitive and therefore the theory cannot address change' (77). Smith goes on to argue that this elimination of change is then seen as proof that change does not actually exist—which, of course, it does.

The inability to account for change is perhaps a symptom of a larger problem, however. Davis, Eisenstadt, and Smith all argue that functionalism immerses itself in generalities, that its fixity and unnuanced approach leaves it unable to examine specific processes such as power dynamics or 'disapproved' institutions [i.e. political corruption] (Davis 1959), or to examine individual autonomy (Eisenstadt 1990). Considering these criticisms, functionalism is presented with a paradoxical conundrum. The more general its definitions the less able it is to examine general processes, the more specific its definitions the less able it is to examine specific processes. Even the 'society as organism' analogy, referenced by Davis (1959), falls prey to this dynamic. The more literally we consider society to be an organism, the greater the risk that our analyses will leave out processes that do not directly correlate to biological functioning, and the greater the risk our analyses will rely on generalised trends to compensate. Whereas, the more figuratively we consider society to be an organism, the more equipped we are to include divergent processes and examine them in detail.

Yet, this does not appear to be a fatal flaw in functionalism as a theory, especially in regard to this thesis. In fact, such a dialectical dilemma offers an opportunity to explore the grey areas between both options and adapt according to the specific needs of the research. Asad (1973) contextualises the downfall of functionalism in British Social Anthropology as a knock-on effect of American Social Anthropology's rejection of functionalism. The reason for this, according to Asad, was the failure of anthropologists of the time to differentiate between 'totalizing' [parts explained in reference to structure] and 'ethnographic holism' [parts described and linked to one another] (p. 88). The emphasis of functionalism may have been fixed systems and unnuanced analysis of societies, but the fixed and unnuanced understandings of functionalism itself contributed to these very paradigms.

Other academics even promote functionalism as a practical heuristic device—a framework that is not perfect but eminently useful. Chilcott (1998), explains that in small-scale contexts, i.e. schools, functionalism's practical nature is readily understood by educators and can help solve their problems. So, while it may not lend itself to large scale examinations of culture, it offers an appropriate lens with which to consider specific institutions, how those institutions work, and how those institutions may improve. This harkens back to Eisenstadt's (1990) analysis, that the strong postulate of functionalism is the idea that societies contain systems, and the weak postulate is that all aspects of society must work in this way. Considering this, it is possible to use functionalism in a limited capacity to better understand the systems we do observe.

While a problem-solving mentality is not necessarily appropriate for ethnographic analysis in a majority of anthropological work, this thesis examines a discipline that occupies a nuanced space between academic and non-academic identity. This science-oriented and applied anthropological system is inevitably presented with

practical considerations that require heuristic devices—where a problem-solving perspective may be appropriate.

Additionally, Eisenstadt (1990) discusses the re-emergence of functionalism in anthropological research on power dynamics and political economies [a departure from Davis' earlier perspective], an important thematic subject in this thesis. And while conceding that functionalism may be useful in situations such as these, Eisenstadt criticises these authors for actively distancing themselves from the term functionalism, leaving the connection implicit and the intrinsic problems of the theory unaccounted for—for example, the lack of discussion regarding individual actors. This is key. Functionalism can function within specific contexts, but if researchers distance themselves from the idea then the problems go unchecked. Functionalism can work when given the necessary modifications to enable it to overcome its tendencies toward generalities, vagueness of definition, conservatism, and teleology. In order to do this, researchers must actively identify their intentions to utilise this framework and explain their approach to overcoming functionalism's limitations.

It is necessary to temper these predispositions by infusing functionalism with other relevant theoretical paradigms [that will be discussed below] that can compensate for the problems discussed above. The socio-political economies present in the practice of forensic anthropology must be approached with a nuanced understanding of function, embracing that both the needs of the system and of the individuals within the system are worthy of examination. It will adopt a definition of function that embraces the importance of both the origin and purpose of a trait, leading to a more holistic understanding of the institutions it examines. And while it will move forward with the postulation that systems within culture exist, it will abandon the assumption that such systems are fixed and delve into the intricacies of these dynamics.

2.2.2 Intersectionality

These modifications to the functionalist paradigm present a far more nuanced approach to analysing social systems. Yet, it is possible to take this nuance a step further and begin to accommodate for the socioeconomic circumstances that invariably influence these systems. An appropriate way to do this is to refer to theoretical models that explicitly tackle these very types of influences in social research, albeit outside of anthropology.

Intersectionality is a concept that emerged from Black Feminist scholarship in the latter part of the 20th century (Carastathis 2014). First proposed in its academic form by the legal scholar Kimberlé Williams Crenshaw, intersectionality proposed a new perspective for analysing systems of oppression. It postulates that social inequalities that do not operate 'as unitary, mutually exclusive entities' (Collins & Bilge 2015 p. 2) but as multiple, interlaced systems. In Crenshaw's model, we are asked to envisage an accident in an intersection where the traffic is an analogy for inequality. The traffic may flow in one direction or another, and an accident in said intersection may be caused by traffic travelling in multiple directions (Crenshaw 1989). Intersectionality presents a theoretical and methodological model that examines these systems of inequality in simultaneous, complex, irreducible, and inclusive ways, and promotes the use of 'equally salient', 'co-constituting analytic categories' to construct institutionalised practices and lived experiences (Carastathis 2014, p. 307).

Intersectionality developed as a critique to discourse in feminist theory that claimed inequality and discrimination towards women could be understood through gender alone—excluding concomitant inequality like racism—and attempts to illustrate the inadequacy of models which separate these systems of oppression (Carastathis 2014). Yet, intersectionality as a paradigm has spread far and wide across disciplines

and across the world (Carbado et al 2013, Cho et al 2013). Intersectionality in academia is even moving towards its own independent field of 'Intersectionality Studies' (Cho et al 2013), indicating that anthropology and intersectionality have room to commingle. However, this crossover, while well intentioned, can be imperfect—removing its roots in Black Feminism (Carastathis 2014, Carbado et al 2013). For this reason, it is important to contextualise the emergence of intersectionality before applying it to projects outside of the Black Feminist remit.

In addition to political narratives, the successful identification of human skeletal remains is impacted by social inequalities and the systems that maintain these inequalities, i.e. the lack of medical records for identifications in the Indian Ocean tsunami (Merli & Buck 2015) and Peru (Baraybar 2008) contexts, or the unequal distributions of identifications in Peru favouring state-affiliated victims of non-state actors (Rojas-Perez 2015). Functionalism allows us to examine how parts of these systems function to maintain the status quo in forensic anthropology, while intersectionality prevents us from reducing complex systems and experiences into unitary categories when examining these social inequalities. This intersectional approach to functionalism primes the pump for an analysis of social systems influencing forensic anthropology in the era post-'Forensic Turn'.

2.2.3 Intersections of the Forensic and the Social

Theoretical shifts have occurred within anthropology on a macroscopic level, as demonstrated by the debate surrounding broad paradigms, but these shifts in understanding have also occurred on the microscopic level—in the individual subfields that make up anthropology as a discipline. Forensic anthropology is no exception. Just within the last few years, the role of forensic anthropology, especially in the wake of

political violence, has shifted dramatically as practitioners have attempted to ‘salvage the word “forensics” and wrest it from the grip of state agencies and bureaucratic processes’ (Weizman as quoted in Dziuban 2017 p. 11). In what is now known as the ‘mapping’ the forensic turn, anthropologists approach forensic science as ‘a political, cultural, theoretic, and aesthetic concept (Dziuban 2017 p. 11).

The shift from understanding forensic science as a purely objective and scientific endeavour to an endeavour inherently exposed to subjective, biased, and manipulated interpretation, has entirely remoulded the research surrounding forensic initiatives. This new model allows anthropologists to explore the influences on such initiatives, the economies of such influences, and the consequences of such economies. As Renshaw (2017) explains, forensic evidence is foregrounded into narratives and this evidence is ‘as potentially vulnerable to competing interpretation as any other traces of the past’ (p. 219). Competing interpretation is a binding theme in *Mapping the Forensic Turn* (2017), and other works surrounding this new model. Wagner’s (2010) discussion on universalism and particularism is founded upon this premise—different communities will have different needs, expectations, and reactions to the forensic process, as it is not an entirely objective model that can be applied unilaterally. In *Mapping* (2017), Jugo & Wagner (2017) argue that the ‘divisive politics of memory [are] interwoven into the fabric of the missing persons issue’ (p. 213).

It seems that forensic science across the board must persistently contend with acrimonious narratives that, as Jugo and Wagner (2017) observe, serve a purpose. In Wagner’s (2010) account of memorialisation in Bosnia and Herzegovina, politicians play an integral role in validating some narratives over others, serving their political needs. Renshaw (2017) acknowledges that unearthing the past through forensic science is more likely to occur if the process does not threaten those in the present—echoing

Crossland and Joyce (2015). Within this model, therefore, it is justifiable to assume that the narratives surrounding forensic excavation are constructed according to some form of need, and will thus serve a function. And should these narratives prevent/encourage some excavations over others, or empower/disempower some victims [or even anthropologists] over others, evidence of a system emerges.

Within the 'mapping' model, forensic anthropology is presented as more nuanced than simply an objective science, which perhaps some functionalist predecessors would not have agreed with. Yet, within the 'mapping' model we begin to observe the very systems that functionalism argues exists. This indicates that it is necessary to consider forensic anthropology within a multifaceted theoretical model, using integrative analytical categories to examine the complex systems that surround the discipline and impact its undertakings.

What, therefore, can functional understandings of cultural phenomena tell us at the intersection of forensic and social anthropology? It is an important question to consider as it may bridge a fundamental gap between these two subfields, allowing them to inform each other in both directions. A functional understanding fits comfortably within the realm of forensic science, as Pettit (1996) explains, it harkens to contemporary evolutionary understandings of the development of certain traits. If a trait presents a reproductive benefit to an organism, then it is maintained in the population through selection. This trait is successful because it performs a function that benefits the organism's reproduction. Even within the practice of forensic anthropology, we observe these fundamental understandings at work. A skeletal trait that might differentiate biological sex, for example, is explained in regard to the function this trait performs—i.e. morphological differences in the pelvis exist to accommodate pregnancy and locomotion (Gowland & Thompson 2013,), sexual dimorphism exists as a result of

competition for mates (Larsen 2003) etc. Pettit argues that this understanding makes sense in this context, as selection and reproduction are mechanisms of physical functionality that account for this functional theoretical emphasis. To many social anthropologists, however, cultural traits do not have these underlying mechanisms that emphasise functionality. Or do they? As Pettit goes on to argue, perhaps the functionality cannot account for the presence or emergence of cultural traits but can account for the resilience of these traits within the population. Just as evolutionary theory does not account for the emergence of new traits [attributed to random genetic mutations] it explains, rather, the resilience of that trait within the population. This would also work to address the common 'rational-choice' argument, as resilient traits need not be rational—e.g. large peacock tails that prevent mobility but still appeal to mates—just functional to a specific end in order to be maintained. Nor, indeed, would the resilience of a trait depend upon the explicit awareness of a trait nor an awareness of the function that trait serves—although in a cultural context it is impossible to entirely discredit that explicit awareness of a trait or its function is possible.

The reality for biological anthropologists is that they frequently use these functional understandings of physical and cultural traits in human populations, especially in the biocultural approach—i.e. limited physical activity in communities at higher altitudes to accommodate for low oxygen levels (Richalet 2007), biocultural paradigms of pregnancy trends (McElroy 1990), and even the skeletal evolution of anatomically modern humans as a result of behavioural strategies (Harcourt-Smith 2007) etc. The fundamental difference is that they are, by and large, examining the relationship between humans and their environments or between humans and their own biology—not the intangible relationships between humans and other humans. Here, the interaction between human beings and systematic frameworks is in the

human being's experience within the ecosystem—or their experience with their own bodily systems. Biological anthropologists need no convincing that systems exist; it is an inherent tenant of their theoretical models. So how does one go about successfully marrying these social and biological understandings of *Homo sapiens sapiens*? From a general perspective, there is no definitive answer. However, in the context of forensic anthropology there does exist a possible solution.

The approach of some social anthropologists after the abandonment of functionalism has been to either discredit the idea that systems exist in culture full-stop, or struggle to analyse systems they do observe because of a reticence to consider how the systems function. Indeed, Carrier (2012) claims that contemporary anthropology was 'informed' that culture as a whole does not exist, but it is rather an amalgamation of individual experiences. Carrier explains the ramifications of this on anthropologists and economists:

In their strongest form, those two challenges left members of the two disciplines with no place to stand, no perspective on the world they could use to understand, explain, and assess what they studied...Those who occupied what I have called the commanding heights in anthropology, then, foreswore the systematic use of research to extend and improve our discipline's knowledge of the world and the models by which it made sense of the world. Instead, they sought to record different people's cultural understandings and expressions...If the discipline is reduced to this, our only legitimate intellectual activity...is taxonomy. (Carrier 2012: 126)

Carrier is arguing that the endeavour to solely record the experiences of individuals, rather than explore the ties that bind these individuals into a culture, community, or even an institution, reduces anthropology to a 'cabinet of curiosities' (Carrier 2012: 126). Perhaps this outcome has its place within social anthropology as a discipline, but what of the contexts in which anthropology must be applied? Suddenly, the cabinet of curiosities is obsolete, as there exists no way of analysing its contents let alone utilising them. Thus, while recording the experiences of individuals is valuable in its own right to

social anthropology, there must also be room for the application of these observations. In the case of forensic anthropology, the functional model appears most relevant.

We can observe the usefulness of the functional model in forensic science and other forms of biological anthropology. We may even embrace the necessity of adopting heuristic theoretical models for anthropology that is applied. But there must be a final alteration in the functional model before it can be applied in a contemporary social anthropological context. Carrier describes anthropologists' concerns regarding the nature of systems that functionalists were analysing. There was a functionalist assumption that systems existed outside of the human being, influencing their behaviours and therefore should be considered primary to the human behaviour. The anthropologists that Carrier cites argue that human behaviour can lie outside of the systems they are in; this seems obvious to the contemporary anthropologist. In a contemporary context, functionalism can only operate when the system is considered a secondary aspect of the human-system dynamic. The functionalists of yesteryear may have considered human behaviour to be defined by systematic frameworks—but this ignores the fundamental truth that humans create the systematic frameworks themselves. Genetic mutation creates selection; selection does not create genetic mutation. Yet, the function of selection is to impact genetic variation. Therefore, if we consider the nature of these systematic frameworks as fundamentally secondary to human behaviour, as both a product of and an influence on human behaviour, we are left with an infinitely more nuanced functionalism than that of the 20th century.

2.3 Ethnographic Methodology

According to Barnard (2000), '[t]heory in social and cultural anthropology is dependent on what questions anthropologists ask...and the relation of theory to ethnographic findings are integral to these questions' (p. 13). Yet, while distinct in definition, ethnography and theory must merge into one. As Barnard (2000) explains, to engage in ethnography—the act of writing about people—one must have an understanding of what is important, and it is theory that provides this understanding. Yet, he also says that theory without ethnography is pointless. Reflecting this dynamic, the theoretical perspectives utilised in this research may have shifted with the questions asked, but the methodological models remained largely the same. To examine forensic anthropology in Guatemala, and elsewhere in the world, ethnography and its methods would be the primary tools.

Certain anthropological concepts, which have been emphasised in different ways and to different extents amongst theoretical models (Macdonald 2001), proved to be consistently important during the actual collection of this data and in its analysis. Relativism—the effort to understand a culture through the perspective of those within the culture (Barnard 2000)—and reflexivity—the consideration of the anthropologist's own bias (Macdonald 2001)—were deeply influential during the fieldwork portion of the research and subsequent interviews. Additional understandings of ethnocentrism—the tendency to consider one's own culture the standard and other cultures as deviations from that standard (Barnard 2000)—and colonialism—the subjugation of indigenous peoples by foreign powers and its lasting ramifications—informed the aim of the research, the construction of questions, and the conclusions thereof.

While seemingly straightforward, using these concepts in a context after political violence—especially after genocide or terrorism—offers its own set of problems. The

shift within the research questions and the limitations that emerge in a 'post-conflict' scenario also necessitated a reevaluation of methods for data collection and analysis. What began as an ethnography of the forensic anthropologists working in Guatemala, became an ethnographic analysis of the forensic system in Guatemala and New York City, using reflexivity as a guiding force to navigate the socio-political influences in these examples.

This project utilises participant observation, unstructured interviews, semi-structured interviews, public reports, and requests for information as data. This data is then considered using co-constituting analytic categories, referred to in this thesis as the 'Forensic Economies Matrix'. These methods will be examined further in the following section, but first it is prudent to discuss the methodological frameworks for ethnography after violence.

This research draws upon traditional methods of social anthropological data collection and analysis, as well as basic statistical analyses of forensic anthropological datasets. However, it also uses autoethnographic perspectives as data to contextualise the case studies. This is not a unique practice in ethnography (Behl 2019, Roth 2009, Waterston 2019). As Behl (2019) describes, autoethnography acts as a means of leaning into personal experiences to expose new perspectives. The refocusing of the analytical lens to include the practitioners of forensic science and forensic anthropology has also been a subject of broader trends in forensic anthropological literature (Platt 2015). These methods, while reminiscent of reflexive values, go beyond simply acknowledging personal experiences in the field and uses these experiences as data as well. By presenting ethnographic research in an embodied way, the researcher is able to reflexively engage with the data and acknowledge their own presence in the research context. This is especially important when considering how gender identity and the

implications thereof affect the ethnographic process itself (Hanson & Richards 2019).

Thus, much of the ethnographic data is presented here in a narrative style to contextualise and embody the observations.

2.3.1 Ethnography after Political Violence

When applying social anthropological methods and theory in post-genocide and post-terror contexts, ethnographers are faced with several difficulties. Alexander Hinton provides a rather bleak analysis of the anthropology of genocide, claiming that anthropology in and of itself prevents researchers from approaching these topics at all. 'With few exceptions anthropologists have remained silent on the topic of genocide' (Hinton 2002:1). This silence has been attributed to the insufficiency of existing theoretical and methodological frameworks, which cannot cope with the horrors of genocide. Even some of the fundamental tenets of social anthropology itself—such as cultural relativism—can pose potentially insurmountable ethical quandaries. Powell's (2011) analysis of existing paradigms in genocide research indicates that for genocide to occur, moral sensibilities need not always be deactivated. Indeed, individuals' moral dispositions can sometimes be reinforced by their involvement in genocide, which would give most anthropologists pause in the face of cultural relativism and participant observation. This perspective is echoed by Scheper-Hughes who states, 'everything in our disciplinary training predisposes us not to see the blatant and manifest forms of violence that so often ravage the lives of our subjects' (Scheper-Hughes 2002:348). This is not to say that anthropologists cannot or should not study genocide, merely that anthropologists must be aware of these theoretical and methodological problems before the commencement of fieldwork. Anthropological research is not a form of conflict mediation between two cultural parties, and the researcher is under no obligation to

take on the role of peace-broker. However, it is necessary to consider the myriad ways in which such a context may complicate the anthropologist's experience in the field, performing interviews, and analysing data.

The process of project design allows the researcher the opportunity to address the difficult scenarios that may arise during fieldwork, even post-political violence. Contemporary understandings of ethnography principally describe it as a qualitative, and occasionally quantitative, effort conducted locally, that seeks the emic perspective and it does not seek to determine 'right' or 'wrong'—adopting a descriptive rather than prescriptive model. It is also reflexive, taking into account the researcher's life experiences, influences, and subjectivity (Schensul et al. 1999). The researcher in the field must use personal relationships to serve as a primary means of stimulating feelings and insight, as these relationships make it difficult to perceive subjects as one-dimensional (Amit 2000). Methods should be used to get as close to an insider's view as possible, and to become a participant observer. This often requires the abandonment of strict emotional and scientific control, as fieldwork is improvisational and may need to change mid-project (Blomberg et al. 1993). Analyses must take into account that what people say and what people do, or 'ideal vs. manifest behaviour,' are not one and the same and there is often unarticulated cultural knowledge that many participants will be unable to vocalise (Blomberg et al. 1993).

All of these ethnographic methods lead to the 'observer participant'/'participant observer' continuum, the first a 'fly on the wall' method and the second the act of becoming a member of the community that is studied (Blomberg et al. 1993). From this participant observation, the anthropologists themselves become the 'instruments of data' and are able to understand the meaning of their observations (Bernard 2012, Dewalt & Dewalt 2002). So while it may be tempting to control the variables of a project,

such as relying solely upon structured interviews to produce comparable answers, or to remain emotionally distant to maintain objectivity, ethnographic fieldwork thrives when the anthropologist becomes enmeshed in the community and allows its members to guide the direction of the project. This is reflected in Clarke's (2004) analysis of anthropological research in the wake of 9/11, promoting the intersection of objectivity and personal experiences.

Methodological considerations specific to post-genocide or post-terror fieldwork then emerge, although it is possible to compensate for these specific issues. For example, it is normally accepted that fieldwork and interviews should be conducted in the local language (Bernard 2012, Blomberg et al. 1993, Schensul et al. 1999), however there is emerging research indicating that survivors of war crimes and other trauma may be more forthcoming and comfortable discussing their experiences in a second language (Adkins et al. 1999, Gordon 2011). Therefore, it is advisable to perform interviews in the manner which best empowers the interviewee to safely participate.

Even if we embrace participant-led interviews, however, ethical considerations may still arise, including the right of the researcher to 'poke around the lives of people who are slowly coming to terms with their horrendous fate' (Buckley-Zistel 2007:5). But referring back to the La Comisión para el Esclarecimiento Histórico [CEH] report (1999) discussed in the previous chapter, testimony can be cathartic; even Buckley-Zistel (2007) describes how a group of survivors in Rwanda had thanked her for the opportunity to talk about the past and its effect on their present. Keeping this in mind, the best way to proceed is arguably to ask about these experiences with respect and in such a way that empowers the interviewee, while personally preparing for 'painful and sometimes confusing feelings' (Buckley-Zistel 2007).

Interviews about violent conflict may present additional problems for the researcher, including testimonies from so-called 'compromised victims'—or victims who then become the victimisers—and collaborators (Sanford 2009). For example, Maya youth during the civil war in Guatemala were often forcibly recruited by the military, such as the young Maya man named Gaspar. When explaining his decision to join the military he states, 'I saw that the world was made up of abusers and the abused and I didn't want to be abused anymore' (Sanford 2009). This type of testimonial evidence is exactly why Hinton (2002) believes so few anthropologists pursue this type of research, as attributions of victimhood become mired in relativism and objectivity. It is crucial therefore to remain reflexive yet emotionally involved when conducting interviews in a post-genocide context. Bernard says that ideally the interviewer is cordial and nonjudgmental, but also cites Gene Shelley, and recommends that the ethnographer approach each interview as a unique experience and to follow her intuition based on what the respondent needs from the ethnographer (Bernard 2012: 193).

This research includes interviews with more than victims and witnesses to violence, however. The dynamics of researching the official responders to violence, in the field and abroad, are also important to consider. In an official capacity, potential respondents may have different needs and expectations than victims, witnesses, or perpetrators. But these general recommended interviewing strategies should compensate for these different requirements.

2.4 Project Methods

2.4.1 Ethnographic Interviews

The interview is an integral part of the ethnographic process, as ‘most of what we know about what people think...comes from interviews and questionnaires’ (Weller 2015: 343). Within cultural anthropology, Weller (2015) praises the use of an exploratory phase to determine what questions are appropriate for the project, followed by a structured phase to examine specific questions. The unstructured interview, which is formal but lacks predetermined questions, is ideal for gathering exploratory data (Bernard 2012) and structured interviews can create reliable and comparable data, which is useful for examining specific research questions (Weller 2014). In light of this, this project began with unstructured interviews with local people in Guatemala interested in contributing to the project, and participant observation in daily life while awaiting confirmation from the FAFG. Before formal interviews can commence, relationships between the anthropologist and the community must be established. The formal interview phase of the original project would not move forward, but a new formal phase was developed in the field after these relationships had developed. The informal interview, or the casual interactions between ethnographer and members of the community (Bernard 2012), proved to be an excellent way to build rapport and develop a sense of who would be interested in more formal interviews. The flexibility of the informal interview was pivotal to the project as a means to develop relationships before additional, semi-structured interviews were conducted.

The questions that this research should truly ask were not clear until I was in the field, as many ethnographers caution. A new project had to be designed while I was in the field itself. This would not be particularly difficult as my research aims remained the same—to examine the effectiveness of forensic anthropological reconciliation in

Guatemala—it was only the research questions, and the type of data I sought to collect, that would change to reflect what I had observed during this initial fieldwork.

As I had accommodated for informal interviews and the prioritisation of individual narratives in my original project design, I was happy to pursue this new line of enquiry with very little change to the structure of my design. For every interview I would conduct, the interviewee would be shown a consent brief of the research aims, research questions, and my affiliation with Durham University. As the need for additional information from outside of the field revealed itself, formal surveys and interview questions were developed to send via email or conduct over the telephone. These structured methods of data collection were approved by an ethics panel convened by the Department of Anthropology at Durham University.

A limitation that presented itself during data collection was the tight-knit nature of gate-keepers in the forensic community. When the initial contact had fallen through, it became impossible to get access through another source. This hampered the number of accessible interviewees in Guatemala. As a result, only two individuals who have experienced the forensic system in Guatemala could participate in the formal interview stage, while many locals offered their perspectives on the war and the contemporary violence in informal interviews. This lack of involvement in the formal stage was mediated somewhat by an intensive participant observation opportunity, the contribution of the Office of the Chief Medical Examiner of New York, and public reports on FAFG activities.

The ethnographic data collection in Guatemala took place April-May 2017, July-August 2017, and April 2018. The interviews with the OCME occurred in the summer of 2018.

2.4.2 Consideration of Ethics

As with any major anthropological research project, ethical considerations should be taken into account at the commencement of the project design. Before the fieldwork portion of this research, the following guidelines were proposed and accepted by the panel convened by Durham University. These ethical principles are based upon the standards set forth by the Association of Social Anthropology (ASA), the American Anthropological Association (AAA), the British Association for Bioarchaeology and Osteology (BABA0), and the American Association of Physical Anthropologists (AAPA) and were used from the outset of the project. An additional panel was convened during the process of this research to approve the changes to research questions.

Do No Harm

While anthropological research ideally pursues 'knowledge to solve human problems' (AAA 2012), the primary obligation of the researcher is to the participants of the study (AAA 2012, AAPA 2003, ASA 2011). Researchers are obliged to first and foremost do no harm to the dignity, physical, emotional, and social well-being of participants (AAA 2012, AAPA 2003, ASA 2011). These considerations can and must supersede the pursuit of knowledge or the interests of sponsors (AAPA 2003). These responsibilities are particularly important for vulnerable communities (AAA 2012, ASA 2011). The research questions and aims discussed above seek to further dignify the shared histories and narratives of the people studied. They also seek to disseminate these narratives to increase awareness outside of the community, while maintaining the safety of participants by offering anonymity. Had any conflict with these intentions arose, the questions or interview methods employed would have been immediately reconsidered to ensure the safety and wellbeing of the community.

Transparency and Informed Consent

Researchers must be honest regarding their presence (AAA 2012, AAPA 2003, ASA 2011) and the purpose, impact, and sponsors [academic or financial] of their research (AAA 2012, AAPA 2003, BABA0 2007). This transparency is essential for informed consent, which should be obtained in the first instance from participants and continuously maintained throughout the project (AAA 2012, AAPA 2003, ASA 2011), although retroactive consent may sometimes be necessary and ethical (AAA 2012). It is acceptable to use verbal consent since bureaucratic formality, including forms and signatures, can raise suspicion in certain communities (ASA 2011). From my arrival, my identity and research aims were made public knowledge to the community. Before each interview, an informed consent sheet was provided. If a participant was reticent to provide a signature, verbal consent was accepted. The informed consent sheet included my identity, my university affiliations, the purpose of my research, their rights to anonymity, their right to stop the interview or refuse to answer a question, and if they would prefer to have their answers digitally recorded or written down.

Participant Observation

If the researcher is to participate in an event, it might become necessary to receive initial consent from 'gatekeepers,' i.e. local authorities, chiefs, leaders etc. Observations from participating in these public events will likely include individuals that have not been introduced to the researcher nor given informed consent. In these cases, it is the researcher's responsibility to be introduced by local participants, receive retroactive consent, and ensure the privacy of participants before the data is used in the project (ASA 2011). The public events in Antigua, Guatemala were truly intended for public consumption [including tourists] and did not require gate-keeper approval to

observe. Additionally, an excursion with a contact during this research was discussed with the contact, who consented to the excursion beforehand.

Human Remains

The use of human remains in research is a privilege not a right and these remains should be handled with 'dignity and respect regardless of age or provenance' (BABA O 2007). This project did not require taking any remains into custody of the university or myself, but photographs were taken with dignity and respect. In the instance when I was presented with the opportunity to touch or move human remains, I did not to ensure the safety and legality of our presence.

Dissemination of Research and Confidentiality

It is the professional responsibility of the researcher to make their findings accessible. The researcher must not omit relevant data from their findings and complete research on schedule (BABA O 2007). Limitations to this may be acceptable to protect confidentiality of participants or to protect their cultural heritage (AAA 2012). In the interests of protecting participants' privacy, especially in the context of research post-genocide, security of field notes, recordings, and identifying information is paramount. All data collected in the field was to be stored on a password-protected laptop, this policy was later changed to university servers—although the limited number of interviewees made the storage of names unnecessary. There are currently no documents that list the name of anonymous participants with their testimony, and interviews conducted from abroad were completed using password protected email, phone, or messaging services suggested by the interviewee. Recorded interviews were kept securely until I left Guatemala. All interviewees were made aware of their rights to

anonymity as set forward by this project design before their data was used in this study. In the case where data were collected at a group event, relevant gatekeepers were to be informed of these protections and every effort was to be made to receive informed consent from all participants during or after the event—no such context arose during fieldwork.

Employment of Ethics in the Project

An ethics proposal containing the above information regarding the original project was submitted to the Anthropology Department in the fall of 2016. This proposal was approved before the fieldwork commenced. When the direction of this project shifted during fieldwork, the ethical framework of the original proposal supported the examination of these new avenues as long as informed consent was given.

However, as the nature of the research questions had changed dramatically by the time I had returned to the United Kingdom, a new ethics proposal explaining this change was submitted to the Anthropology Department and approved. All formal interviewees were given a brief of my research and their rights as a participant, and all decisions regarding communication and safety were approved by the relevant parties, including use of photographs and video/messaging services, and a copy of this manuscript has been provided to the contacts that requested it for approval before submission to the university.

2.4.3 Data Collection

Formal Research Interviews

During the fieldwork stage, two participants were interviewed in a formal setting in Guatemala. Each interviewee was shown a research brief and informed consent to be interviewed was given. The interviews were semi-structured, meaning that the interview was formal, but only had a few pre-determined questions. These questions were determined after informal interviews with these contributors had occurred and they had indicated their interest in participating. The interviews were conducted in the location of their choice, allowing them the autonomy to participate in this research as they deemed appropriate. The interview materials were kept securely throughout my time in Guatemala, although neither interviewee indicated that they were concerned for their anonymity or safety. Their identities have been kept private in this thesis.

Two employees of the OCME were also interviewed for this research in a formal setting. One such interview was an official interview with the head of the Forensic Anthropology Department and contained entirely pre-determined questions, approved beforehand by the OCME legal team. An informal and a formal interview were also conducted with an additional employee, as this employee felt empowered by the legal department's approval of the official interview. Both employees of the OCME were given a brief and gave informed consent to be interviewed for this research.

Four colleagues in related fields of study were also interviewed for this research, speaking about their experiences with socioeconomic inequalities while performing human osteological analysis/research—including firsthand accounts of gender-based discrimination. These interviews were not in a formal setting, but each contributor has retroactively consented to have their stories shared within this thesis. Additionally, a

semi-structured interview was designed for the FAFG, however, they have not been in touch regarding this interview request.

Surveys and Requests for Information

Surveys can act as another key component to ethnographic research. As Weller (2014, 2015) explains, structured data collection in the form of surveys, questionnaires, and structured interviews allows data to be easily compiled and compared during the analysis. Surveys would prove to be a small aspect of the overall data collection for this thesis, however, in the project design the survey was considered an important data collecting tool for this research.

To examine how external funding bodies allocate money for forensic anthropological projects, a survey was constructed to send to the directors or relevant boards of the organisations that provide such funding. Several organisations that have been involved in forensic anthropological projects were contacted, with an emphasis on those which have contributed to the FAFG. The organisations that received this survey are UNDP Sweden, USAID, the Soros Foundation, the ICMP, and the Sigrid Rausing Trust. The intent of this survey was to gather information about the boards of such organisations, to determine how contributions to these types of projects are made, and what [if any] stipulations come with that funding. Of these organisations, only two responded and agreed to answer the questions. Yet neither organisation saw this process through. So, while a survey was created for this project, it did not bear fruit in the form of comparable answers.

A request was also filed with the *Ministerio Publico* regarding their official forensic procedures, DNA testing, and interment of unidentified individuals, yet this

request was not acknowledged. The templates for the formal interviews, surveys, and requests for information can be found in the appendix.

Analysis of Datasets

As this thesis seeks to integrate social and biological anthropological concepts, this thesis includes a section that uses identification datasets provided by the OCME in order to examine the dynamics of its identification processes from 2015-2018. The analysis of these data includes basic statistics, including mean calculation, discussions of sample representation, and integration of 'minimum number of individuals' (MNI) and 'maximum number of individuals' within the numerical dataset. As the available data are limited, further statistical analysis was not possible at this time. The datasets can be found in the appendix.

The 'Forensic Economics Matrix'

The particulars of data collection for this project are important, but it is only half the methodological battle. It is essential to consider the methods of data analysis as well. Theoretical paradigms allow the analysis to focus on specific dynamics, but it is useful to have methodological tools to assist in this process.

The foundations of Mapping the Forensic Turn, Functionalism, and Intersectionality set the stage for the kind of analysis of functionality this thesis attempts to conduct. Yet, there are systemic dynamics which influence the practice of forensic anthropology that have yet to be considered. These dynamics can be described in terms of 'influences' and the 'assets' influencers use to exert this influence. These influences are entangled, creating complex systems of access and empowerment in the application of forensic initiatives—fitting nicely within an Intersectional Functionalism

paradigm. While they cannot be fully separated into clear-cut categories, the broader themes may be laid on a matrix to improve understanding of specific issues as they function within these dynamics. This matrix offers a method for understanding co-constituting categories as they appear in forensic anthropological efforts.

Throughout fieldwork, three overarching influences on the practice of forensic science revealed themselves to be consistently important: political influence [e.g. government, international and local], socioeconomic influence [e.g. class, gender, ethnicity etc.], and academic influence [e.g. academics, academic institutions, methodology]. Additionally, these influences used three types of assets: money, access, and empowerment. As mentioned above, all of these influences function at once, meaning that it is incredibly difficult to disentangle them completely—they are co-constituting. However, the ability to identify them and examine how they interact has offered tremendous insight into the functioning of forensic science in not only the Guatemala example, but in other initiatives as well. This thesis demonstrates that when these influences are accounted for, the forensic project may be more effectual, and therefore that the use of this matrix can reveal the ways in which a forensic project may improve.

The matrix, which is referred to as the Forensic Economies Matrix in this thesis [Fig. 1], is relatively simple for such a complex set of issues.

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | | |
| Empowerment | | | |

Figure 7: *The Forensic Economies Matrix*

Each facet of the forensic investigative process may be placed within this matrix. In many cases, an aspect of the process may be placed into more than one category. As an example, consider the FAFG's rejection of the original project. This particular scenario falls under 'academic' and 'access', as the FAFG denied an academic project access to their excavations. Yet it also falls within 'socioeconomic' and 'empowerment' since, as a researcher, I may have made unconscious assumptions that as a foreign [Western] academic, I would likely be empowered by an organisation based in the developing world.

Until the data was contextualised in this way, it was exceedingly difficult to understand the dynamics of what was happening to the original project and subsequently what I had observed in other forensic programmes. As these influences function together, when only one facet of this system was immediately obvious, the analysis lost the nuance necessary to fully encapsulate the underlying forces on forensic projects. The Forensic Economies Matrix allows researchers to consider the intersections of multiple influences simultaneously by offering categorisations while maintaining nuances.

This thesis utilises this model as a guiding tool rather than a strict outline, contextualising the trajectory of its analysis. Each data chapter will consider the political, social, and academic influences on forensic work—including those who receive these services and those who provide them—with emphasis on the role of money, access to services, and empowerment. As the matrix is relatively broad, it offers the opportunity to delve into the specific issues that have proven most relevant, i.e. the nature of gender, economics, academic funding, and international politics in forensic science. In doing so, it will demarcate the demographics least served by the status quo,

the functionality of such paradigms, and will reveal the cracks through which we may fall in the pursuit of forensic identification.

2.5 Accounting for Potential Limitations

Throughout this research, as with much of anthropological work, limitations presented themselves and needed to be addressed. Some limitations revealed themselves to be a symptom of an overarching network of influences, becoming the subject of this thesis. Yet, some limitations in the methods and analysis have remained, and it necessary to examine them.

2.5.1. Access

The issue of access has been a consistent consideration for this thesis. Access to excavations in Guatemala proved to be impossible to obtain at the time, as a result of the disappearance of Nicholas and the FAFG's decision to not participate. This made the original questions impossible to answer but opened a new [and arguably more important] avenue of inquiry. Even with these new questions, however, access remained a problem. My original questions relied upon the testimony of families involved in the excavations and the forensic anthropologists performing the excavations. Without access to the excavation, I had no access to the community that was involved with the excavation, including the families who requested and observed FAFG participation and the forensic anthropologists. This was because the IFIFT and the FAFG were to act as gatekeepers.

Limited access was also reflected in my new research questions. The connection with the main informant from San Marcos was formed coincidentally. This, of course, does not speak to the value of the information she provided, but it did limit the scope of

my research as she was one individual and not an entire community. The nature of the connections with my additional contacts were similarly formed—through the act of living in Guatemala, and not through purposeful exposure to relevant parties. These connections were made by chance and as such offered valuable information but would be difficult to replicate.

After the FAFG gave me their decision, they did not respond to my subsequent emails requesting an interview. This effectively barred me from examining their policies and perspective on my informant's case. A statement from the FAFG would have been invaluable to this research, but it simply could not be obtained. This issue was also clearly present in my attempted communications with funding bodies that have contributed to the FAFG and other forensic anthropological projects. Many of these agencies did not respond, and those that did failed to follow through with the survey. Again, their answers would have been extremely informative, but were simply unavailable. The lack of access to these organisations hampered the extent to which this thesis can analyse the economic dynamic between forensic anthropological associations and those that enable their research through funding.

Another considerable limitation to access was the *Ministerio Publico*, as they did not respond to my request for information about their forensic practices and policies. While the act of entering the *Ministerio Publico* was unexpectedly easy, searching through their online information and requesting specific information was unexpectedly difficult. This was also limited by my inability to speak formal Spanish, or speak informal Spanish fluently. It is possible that I would have been able to navigate their online information more proficiently if I were fluent in Spanish. However, based upon my contact's difficulty with the *Ministerio Publico* as a local, I do not believe my chances would have been much better.

This leaves my access to the OCME of New York, which was relatively easy to obtain. While some employees felt empowered to speak with me for this research, others did not and felt they needed explicit permission from their direct superior before participating—which I believe they did not receive. Even in a context where the researcher has some access, not every perspective is accessible in a governmental organisation where confidentiality is an intrinsic part of the job. This dynamic would present itself in any analysis of a similar context and is not necessarily a direct outcome of this project's methods. However, this discomfort may be lessened in a context where the researcher is a consistent presence within the organisation, which I could not be during this project. This, however, does leave a possible avenue for further research.

2.5.2 Sample Size

As a result of limited access, the sample size for this project is small. Only one contact was interviewed about her experiences with the FAFG and the *Ministerio Publico*. Although her testimony was invaluable, it is limited without corroboration. It is difficult to analyse the functioning of an organisation with the testimony of one individual. That being said, I was provided with direct, personal experience of the problems she described. I could confirm on a first-hand basis the level of dysfunction within the *Ministerio Publico* that she reported, and subsequently in the *Cementerio La Verbena*. This research was not focused solely upon the interviews conducted, but on the underlying, observable boundaries that exist within the Guatemala example. In light of this, the sample of size of interviewees, while small, does not automatically impede the research.

Once this thesis' emphasis moved from interviews to theoretical analyses, it became appropriate to utilise my previous experiences and augment my perspective

with additional interviews. The interviews within the OCME were also invaluable, and similarly limited. Three interviews within the OCME were conducted, and a fourth refused. Despite the sample size, the information they provided—especially regarding OCME policy and practice—was immanently useful. While a small number of interviews may not support a thorough ethnography, this thesis does not seek to provide a thorough ethnography. Rather, this thesis seeks to examine some of the influences on forensic anthropological organisations' functioning and some of the consequences that emerge from this process. As such, its focus remains largely on its policies and practices, which are then informed by some personal testimonies.

As this research considers intersectional influences in the functioning of forensic anthropological investigations, the focus of this thesis is consequentially broad. In order to demonstrate the interlinking nature of socio-political economies in forensic anthropology, it was necessary to discuss many interlinking themes. Unfortunately, this prevents the thesis from considering each specific issue in their full, profound complexity. Instead, this thesis provides real world examples of these interlinking themes and attempts to contextualise them in a broader system. This, then, may be considered a form of exploratory research, as it provides several important avenues for further study. Moreover, small sample sizes are not necessarily the exception in social anthropology as the emphasis of qualitative ethnographic research is largely on researcher participation.

Therefore, while the small sample sizes are limiting, this project still provides valuable insight into the functioning of forensic anthropological projects. This thesis provides new and important opportunities for further research into the problems present in forensic anthropology regarding access and empowerment of victims, living and dead. The project's methods may not support the development of a thorough

ethnographic text on Guatemalan forensic anthropologists or OCME forensic anthropologists, however, this was not the specific goal of this research. Instead, this thesis presents an analysis of socio-political influences on forensic anthropology writ large using these examples and formulates heuristic devices to approach these difficulties where appropriate.

3. Digging Deeper: Observations from the Guatemala Case Study

3.1 Commencement of Fieldwork

3.1.1 Arrival and 'Semana Santa' Rituals

I first arrived in Guatemala in April of 2017. Even from the moment the plane began to descend into La Aurora International Airport in Guatemala City, I was entirely overwhelmed by Guatemala's tremendous beauty. The seismic environment has created a jagged topography, with enormous volcanoes protruding through the cloud cover, visible from the airplane window. The jagged and rocky nature of the landscape is softened by the verdant, tropical flora that blankets it. I would discover throughout my journey the oases that have collected in the calderas of these enormous mountains, and the ancient cities that still stand hidden in Guatemala's thickest rain forests. The cities and towns are painted in vibrant colours, beaten by the gale of the rainy season and scorched crisp during the dry. As I made my way from the airport through Guatemala City, I was met by cascades of vibrant flowers flowing over the tall garden walls of expensive housing complexes and over the peeling paint of more humble housing alike.

Guatemala's physical beauty was nothing, however, to the beauty of the people who live there. I, along with the myriad of travellers and expatriates that coalesced in the colonial city of Antigua, observed that everyone in Guatemala takes their lives into their own hands. Motorcyclists zoom up and down the cobbled streets without helmets, the passengers on chicken buses—the flamboyantly painted American school buses that act as public transportation—precariously hang off the back as the bus rumbles down the highway. Antigua's open market heaves with tourists and locals who pack themselves into tight alleyways to find the best deals, and the best food can always be found in the carts on dusty street corners or bought out of the back of someone's car. In my first month, while waiting at a chicken bus stop on the side of a highway, I witnessed

a young man open the door of a moving SUV full of passengers, lift an elderly woman off her feet, and pull her into the back without so much as a '*¿Qué tal?*' Of course, this was the outsider's perspective. It was merely the outward presentation of people's lives, and one would have to dig far deeper to begin to understand the complexity of their worlds.

And yet, I had immense difficulty in reconciling the beauty that I saw with the stories of violence I knew had happened there. I had spent months in a cold, British library familiarising myself with the history of Guatemala's internal conflict, the testimonies of survivors, and the work of forensic anthropologists excavating and identifying the remains of the victims. But none of this truly prepared me for what I would discover, nor the reality of living in such a complex and beautiful place. To my benefit, however, I had some time to become acquainted with this new place where I was living. The FAFG had been slow to respond until this point, but they had agreed to meet with me the following month. So, I decided to get to know this place I was to study—for even if my intention was to study the excavations, I could still gain invaluable knowledge from ethnography of the place itself.

Due to Guatemala City's reputation for violence, I was to live in the old, colonial city of Antigua. Located an hour southwest of Guatemala City. Antigua—Spanish for antique—is almost a time capsule of Spanish Colonialism. The cobbled roadways, bright yellow churches, public fountains, and tree lined avenues all harken back to Spanish architecture and control. These are now coupled with the more contemporary aspects of Guatemalan culture, tuk-tuks buzz along, indigenous women proudly wear their *huipils*—Maya woven clothing—and *La Bodegona* offers every western-brand product one could imagine.

I arrived in Antigua during *Semana Santa*—the week leading up to the holiday of Easter. This experience was formative for me as a newcomer with the intention to stay. *Semana Santa* is marked with daily parades throughout the cobbled streets, but unlike most parades, these are solemn and religious affairs. The male participants wear floor-length, silky robes of bright purple or black, and they carry upon their backs enormous, wooden floats displaying Jesus Christ and the Virgin Mary. Entire orchestras follow these displays, and canons blast in the distance as a Catholic call to prayer. The streets of Antigua transform into the *Via Delarosa*, the floats sway eerily with the rocking motion of those carrying them.

Observing these processions through the streets of Antigua can become meditative and even hypnotic. While undoubtedly grand and intimidating when they first turn the corner, the fervent sway of the enormous floats as they rock with each footstep of the processors leaves the onlooker with a profound sense of empathy. It is easy to find yourself mid-sway in rhythm with the decorated platforms without quite knowing when you joined them. Even the cobble streets that these processions take place upon are fastidiously decorated with petals and vividly coloured sawdust, which splay out in curling patterns across the streets. Anyone can join in the creation of these flower-carpets, and certainly thousands of people across Guatemala spend hours on their knees arranging these petals into the perfect order. In one sense, these carpets hold up the processors as they march, the processors hold up the impressive platforms, and the Christ figure holds up his cross. It is a ritual with an interwoven system of support that includes the entire community.



Figure 8: *Community Carpet Construction* (Rosen 2017)

Among the statues of Christian religious figures are images of death. Skulls, skeletons, and sarcophagi make frequent appearances, and this is not surprising as Easter is a celebration of the dead rising to eternal life. But it made an impression on me, a junior anthropologist waiting to be deployed to study the dead. Was this a celebration of death, or only of death inasmuch as it precedes eternal life? If the procession was a reflection of interwoven participation and support within the community, then how does death feature into this dynamic? To the tourist watching on, this was merely a pretty display of religiosity, and after the processions left the streets, the tourists returned to their hostel's hammocks and small talk. But I remained on the street, left with the sensation something of vital importance had been shown to me—and I did not want to let that feeling go.

While I had not started my project with the FAFG, the essential questions of my thesis were still relevant. I wanted to know the role that death played in community identity, to know how a country reconciles with the genocide of its past. The

processions of *Semana Santa* were ostensibly Catholic, but there was clearly indigenous involvement as well. Maya women, easily identifiable in their brightly coloured, woven clothes, participated by following along behind the processions, by observing them. The processors were mostly male, I would discover that processions lead by women exist but are restricted in number and size. There were, undoubtedly, indigenous male processors that were simply masked by their uniforms. The presence of the indigenous women wearing their culturally traditional clothing actually seemed to diminish after *Semana Santa*. It was mentioned to me by a western-born resident, however, that these women may have only put their huipils on for monetary value, to lure tourists to buy their wares at the market and on street corners—as *Semana Santa* is peak tourist season. And this may be true, as others have observed, indigenous groups in Guatemala have a long and complicated history with their traditional clothing and the context in which they may wear it. Some indigenous communities have been discouraged from wearing their *huipils*, and the decision to reclaim this cultural signifier may be weighted with political implications (Nelson 1999). But it struck me that there may be more to learn regarding the Maya participation in *Semana Santa*.



Figure 9, 10, 11 [left to right]

Carpet Detail (Rosen 2017) *Young Maya Woman* (Rosen 2017) *Huipils* (Rosen 2017)

Perhaps an entire thesis may be written about the ceremonies of *Semana Santa*, but I simply wished to use this event as a mechanism with which to begin answering the questions about death I had set out to answer. What could this ceremony tell me about the way Guatemalans understood death? Or better yet, what further questions could this ceremony inspire about death?

Over the next few months I was exposed to the Maya spiritual interpretations of death and its meaning, although this information would come in tourist friendly packaging. In fact, most practitioners of traditional Maya magic and religion that I came across were not actually of Maya heritage at all. Some were of Spanish descent, others started as white, western tourists and found a home and spiritual meaning in Guatemala. Still others of non-indigenous heritage had written books for dabblers on Maya astrology. I attended a full moon ritual that was supposedly based upon Maya rites, but while there I discovered that the only indigenous people involved had been

hired to clean up afterward. Jade store tourist traps displayed large ledgers of dates, so visitors could identify their Maya astrological signs [*nahuales*], which do not directly translate into the western Zodiac. These stores were often run by indigenous people, but it is unclear how they might feel about selling Maya religious symbols to tourists.

It was in one of these jade stores that I discovered my astrological sign was *Kame*, or Death. *Kame* is represented by an owl and means death, but not in the negative sense of loss, rather a time of ending, the promise of something new, and communication with those that have passed away. In at least the most basic sense, death may mean loss, but it may also mean new beginnings and the journey to communicate with those that have gone. *Kame* teaches that death can only be closure in very specific ways—ways that would reveal themselves as my research continued.

3.1.2 First Contact

From my temporary home of a hostel in central Antigua, I had planned some brief excursions to other parts of Guatemala to get a more complete understanding of the country I would be researching. It is not a large country and travel is reasonably inexpensive, so I would travel as much as possible while staying in areas deemed appropriately safe by the university. After *Semana Santa*, I boarded a large van crowded with tourists and made my way to Lake Atitlan, a lake that had formed in the caldera of a volcano system southeast of Antigua.

Lake Atitlan is surrounded by small villages that are most easily and safely accessible by boat. Each of these towns have their own personalities, and tourists tend to gravitate towards the town that best matches their own personality—whether this is outdoor and rough living, alcohol fuelled partying, or spiritual holism. I decided to go to a town that I felt matched my personality least, as I believed this would give me the

opportunity to practice my ethnographic methods by interacting with a community separate from my own values and upbringing. The town I chose was called San Marcos, the mystical and spiritual hub of the Guatemala tourist circuit, featuring numerous yoga retreats, astrology classes, past life regression sessions, and monthly drum circles. This was a world I was entirely unfamiliar with and I, therefore, believed that this would be an opportunity to practice my ethnographic skills.



Figure 12: *A San Marcos Sentinel* (Rosen 2017)

As the most economical means of living in a town or city temporarily in Guatemala are hostels, I found one with an excellent reputation and checked in for several nights. San Marcos was in the throes of disaster when I arrived. A wildfire further up into the mountains had melted the CVP water piping that runs into the town and provides water to half its occupants. The hostel where I was staying had been affected, however, the management were able to negotiate a deal with neighbouring facilities to allow guests access to water. For those that were not centrally located or were otherwise isolated, I do not know what they would have had to do to access

potable water. In fact, basic access [or lack thereof] to clean water would prove to be a theme in the daily lives of poor Guatemalans during my stay.

All the same, the inhabitants of San Marcos seemed to take this all in stride. Street vendors were out in force, selling their woollen ponchos, discount tacos, and authentic cacao. I enjoyed joining the employees at the hostel, a mix of locals and tourists paying their way through their travels, as they sat around low slung, wooden tables, in woven hammocks, and on cushions stuffed with straw. On my second night, the conversation turned to me and my trip through Guatemala.

Most visitors to this place were young people on gap years, or backpackers already looking forward to the next interesting stop—all displaying a fascination with mysticism, Maya ritual, and some form of Neopaganism. It was surprising to them to hear that I was in Guatemala to conduct ethnographic research for a British university—especially into forensic anthropology. A worryingly large proportion of these visitors had no idea there had been a civil war nor that a genocide had occurred, although the locals who could speak English with me could not say enough about their perspective on the conflict. This was surprising, as my research warned that locals are largely hesitant when speaking about the conflict. However, they were fascinated with the work I was doing, and nearly all of them wanted to be involved somehow. What I did not expect was the question posed to me by a heretofore quiet woman, with long, dark hair, and glasses.

‘When do you think you’ll be done identifying the civil war victims?’

I suppose at face value this question does not seem particularly odd, its importance was in its delivery, revealing something far more complex and unexpected. When I answered that the FAFG may never finish identifying the victims, when I told her

the statistics—12,000 people identified since 1996 out of possibly 200,000—she looked what I would describe as devastated, but inward.

I felt that there was more to learn from her and I gently pressed the issue by asking what inspired her question. It did not take any further prompting, she openly explained that her father had disappeared some years ago. During the initial investigation, she felt that much of the responsibility fell on her as the *Ministerio Público*—the organisation that manages contemporary missing person investigations—had encouraged her to take on much of the investigation herself. Feeling that the *Ministerio Público* was not doing enough, she had contacted the FAFG and requested to participate in their DNA programme. As her father had disappeared in 2008, about 12 years after the ceasefire agreement, the FAFG said that they could not help her. It would not be until the missing persons from the war itself were identified that they would be able to use their DNA facilities for contemporary investigations. As I knew from my research that the FAFG's DNA laboratory was the only accredited testing facility in Central America (at least as of 2009) and that they facilitate other excavations in Mexico, this surprised me. I requested a more formal interview to which she agreed.

The following day, she and I sat together in the hostel's café, drinking cacao and papaya smoothies. I had her read the brief and sign the consent form, although the original formal interview questions would not be relevant in this context. I allowed the conversation to flow as organically as possible, following the guidance for ethnographic interviewing methods. I did not interrupt, I promoted continuation, and I allowed her to drive the interview. My questions arose from her answers, mostly to clarify or expand previous responses but also to cover the aspects of her situation that seemed to be most relevant to my research.

Her father had gone missing from Guatemala City in 2008, after a difficult high season at Lake Atitlan where he owned a small business that relied on the tourist economy. He had travelled to Guatemala City to speak to his brother about supporting him in his business troubles, as the brother had come into an inheritance that should have been shared between them. The father has not been seen since that meeting. His family and then the police searched his house and found his personal items, such as his passport and phone, inside and untouched. This led the police to assume that he had run away, potentially to commit suicide. The police recommended that the family check the hospitals and the morgues over the following weeks to see if he would turn up—in whatever state. She explained how she went to these hospitals and morgues every weekend for months, which turned into years, looking for her missing father.

At the morgues, she was given books filled with Polaroid pictures of the deceased that had been brought in for examination. She was expected to look through these books and attempt to identify anyone who could be her father. She explained to me that the dead were in all states of decay, there were bodies with skeletonised faces that no layperson could hope to identify. She said that because the morgues fill so quickly, the unidentified are sent for burial with only these Polaroid pictures kept for future identification. After months of this, she appealed to the *Ministerio Publico* and asked them if they had any news. They responded by asking her what she and her family had done to try to find him themselves in the intervening months.

During the entirety of the interview, she did not describe the *Ministerio Publico* as helpful, effective, or reassuring at all. From her account, the *Ministerio Publico* seemed to be a formidable barrier to justice, rather than an arbiter of it. She described several attempts to touch base with them in order to discuss her father's case, and with each attempt came no news. To her, the only way her father would ever be found would

be if she kept looking for him herself. With this in mind, she began reaching out to DNA laboratories that could possibly help her, and this is when she contacted the FAFG.

She said that they had told her their DNA laboratory was only used for victims of state violence, that the funding for the laboratory—provided by Sweden and the Netherlands—was given on the condition that it would be used for the identification of victims of the internal conflict. She was told to send her DNA to a private DNA laboratory, where they would test it for a fee of 3,000 dollars. A price a hostel employee in Guatemala could never afford, and who had nothing to compare the sample to anyway.

This stunned me. Not because I found the policy illogical and unfair, which I did, and not because I empathised deeply with this woman who shared her heavy burden with me, which I do. It was stunning because she told me an incredibly specific fact—that the FAFG's DNA laboratory is funded by Sweden and the Netherlands—and she was right. I only knew this from my extensive pre-fieldwork research, and the fact that she knew this too seemed a vindication of the story. Or at least the version of the story she was telling me.

Here was someone who knew the situation, who was educated, aware, and driven, and who was relaying to me the harsh reality for those who fall into this investigative loophole. Her awareness and education were not fundamentally surprising; however, I found the information she articulated to me to be shocking. Within the body of research, I had not discovered a single negative portrayal of the FAFG—indeed, they perform important work—yet here was an explicit example of an individual turned away by the FAFG. The research appears to represent the work the FAFG does, not the work they do not do. This was a vital discovery as it indicated that

there is a demographic of victim that has fallen through the cracks; it revealed that a crack exists.

We talked about the cultural and political differences between Sweden and Guatemala. She told me a story of a Guatemalan prison warden, who decided that it was better to shoot fleeing prisoners [convicted of murder, rape, and other serious offences] than to let them escape when the prison power failed. In Guatemala, no one was phased, this was the natural and proper decision. Sweden, however, condemned this as a breach of international law and asked for the warden to be extradited to Europe for trial. I have not been able to confirm that this happened, but the basic tenants of such an argument are valid and present a clear case of multilateralism disregarding the needs and expectations of local people. If the receiving of international aid is predicated on the needy prioritising the cultural mores of the givers, especially if the givers have no sense their cultural differences, it will inevitably lead to the disempowerment of the community seeking the aid in the first place.

In the case of the DNA laboratory funding, Sweden, the Netherlands, and the United States [who also fund the FAFG laboratory through USAID], have exerted their influence by using money to determine who does and who does not have access to forensic services—in this case, granting access only to those who went missing before the ceasefire agreement in 1996. Considering the ethnographic works cited in previous chapters, this attitude towards the civil war does not take into account the lived experiences of those in Guatemala today—many of which were affected by the clandestine violence after the ceasefire, contemporary gang violence, or the abject poverty the guerrilla fighters were attempting to combat. In a practical sense, the civil war in Guatemala arguably never stopped but rather morphed in its goals and style of violence.

My contact's father had disappeared after his business had failed. He had travelled to Guatemala City to ask for money to save himself from destitution. The police believe he committed suicide, his relatives believe his brother had him disappeared. In a country with no safety net and rampant gang violence, where the economy has been perpetually stagnated for everyone but the richest demographics (Vakis 2003) and where many believe the civil war never truly ended, it takes no stretch of the imagination to classify her father as a casualty of this conflict. Yet, he had fallen into a forensic and jurisdictional loophole. The *Ministerio Publico* did not have the resources, or the inclination, to investigate this disappearance, and the date of his disappearance forced him out of the FAFG's remit. The inevitable questions that follow are: How big is this loophole? Are there more loopholes? And why does it even exist?

As we will see, it is impossible to determine just how extensive this loophole is, although other loopholes did reveal themselves. As for the why of the matter, there are several ways to interpret the attitude of Sweden, the Netherlands, and the United States. One, the funding bodies involved in the FAFG laboratory initiatives either do not understand the contemporary context in which the FAFG functions due to inadvertent or intentional ethnocentrism. Or two, the funding bodies involved in the FAFG laboratory do understand the context and have something to gain from this status quo.

In several months' time, when the FAFG officially rejected my project and the issue of access came to the forefront of my research, the functionality of such decisions became the focus of my analysis.

3.2 Volvamos al Lago

3.2.1 A New Request

It was nearly a year before I could return to San Marcos of Lake Atitlan to meet with my contact and request a follow-up interview. Until this point, my contact had no sense of how important her initial interview had been to the progression of this research, nor of my broken ties with the FAFG. While I was no longer participating in any investigations or excavations in Guatemala, I was beginning to appreciate the enormity of her plight, and the plight of potentially thousands of other Guatemalans stuck in this investigative loophole.

The rainy season had just begun by the time I boarded the small ferryboat from San Pedro La Laguna to San Marcos. The waves of the lake were high and choppy, and debris that had been washed down the steep slopes of the volcanic cliffs by the rains swirled in our wake. San Marcos was as I remembered it, small, covered in climbing vines and flowers, with a faint smell of incense in the air. My contact was waiting for me at the small café she had worked in the previous year, although by now she had moved on to teaching Spanish to tourists. San Marcos is an amalgamation of nearly everything that happens to pass through it, the many communities of indigenous Maya displaced after the civil war, Guatemaltecos from the city looking for an escape from the noise of urban life, and—most notably—western practitioners of pagan esoterica. This is not to say that these groups are distinct from one another, in fact, the overlap is far reaching. It is in this context that my contact, a *Guatemalteca* from the city *and* practitioner of Wicca, discussed her ongoing search for her father.



Figure 13: *San Marcos by Boat* (Rosen 2017)

We sat around a rough-hewn table surrounded by locals and tourists alike, all in woollen ponchos or linen shirts. Her friend joined us for moral support, and probably for the friend's own healthy curiosity as well. Around this table, magic was not only possible but an active part of their daily lives. They wore charms around their necks, sported symbolic tattoos—the Eye of Horus on one of their wrists—and spoke to me frankly about the entities that visit them. To them, death is not a door that is locked until it is time for us to pass through it, these women spent their spiritual lives investigating the many planes of their existence, projecting themselves out of time and space and into the unknown. And they were not alone. Ghosts are real and spirits communicate in San Marcos. And yet, even in the face of this, my contact remains filled with a sense of loss and hopelessness so profound that she cannot not bring herself to attend the memorial service that her sisters are planning for their missing father. She has not given up her search, not because she believes her father is still alive, but because

the unanswered questions weigh that heavily upon her. I asked what she had done since we last spoke.

In the intervening year, she had not been to Guatemala City to discuss her father's disappearance with the *Ministerio Publico*, nor had she been to any of the hospitals, morgues, or cemeteries to attempt an identification. She admitted to me that most of her search had only happened within the first six months of her father's disappearance. After searching all the recommended places every weekend for those months, she reduced her visits for her own financial and emotional wellbeing. Every weekend became every month, every month became six, every six months became every year. She lived several hours away after all, and buses [while relatively inexpensive by the standards of a western tourist] were prohibitive to a Spanish teacher living on the outskirts of Lake Atitlan. She told me about a phone call she had failed to mention during our last interview. Two years before this, a person with an unidentified number had called her to ask how the investigation was progressing and if she had made any further enquiries. When she responded that she did not know, the caller abruptly hung up. She never received another communication from that number or the *Ministerio Publico*.

Now that we were speaking face to face again, and she was clearly comfortable talking with me about this subject, I asked the hardest thing I may ever ask of anybody. I asked if she would visit the *Ministerio Publico* and the morgue again to follow up on the investigation, and if she would allow me to accompany her while she did this. She said yes. The incredibly important and emotionally devastating information she offered me became an act of actualisation, for while I could not influence any investigation into her father's disappearance directly, I could disseminate her story to those who did possess this kind of power.

The following day, she contacted me again, this time to ask if I would be willing to pay for her bus ride to the city as she could not afford the fare. As I had asked her to make this trip, I felt this was more than fair. Although it did reveal to me another way in which money and systemic poverty affects the forensic process. One cannot participate in the ways necessary to ensure an investigation happens in Guatemala, if one cannot afford the bus fare.

The next week I spent in Antigua waiting for her day off, which we would spend in Guatemala City. I let her take point on the schedule, I allowed her to make all of the decisions, only going as far and as long as she was willing. She decided to visit the *Ministerio Publico* to speak to the investigator and then visit the morgue. She added that she would like to visit the pauper's cemetery in Guatemala City. The investigator had not mentioned this cemetery to her before, but she had heard that the cemetery could have additional information.

These were her decisions, however, it would be negligent not to discuss that even though I had offered her autonomy, our relationship could never be truly equal in this respect. I had two assets of my own in this scenario, I had financed the trip and she viewed me as means to influence the investigation process—if not directly for her father, then for others in the future who may face the same hardships. While I could remind her relentlessly that she could leave at any time, that she did not have to do anything she did not want to do regardless of our previous agreements, she was not acting for herself alone nor was she acting in a social vacuum. We may discuss the ethics then of such a request, can it ever be right and fair to ask such of thing of someone when they could never fully consent? While there will always be drawbacks, there are methods we can use to reduce the inequality of such a relationship, or to prevent the transfer of funds from acting as an incentive to participate in an activity that could be

damaging to the subject. I allowed her to approach me for the funds to travel, rather than offering at the outset as a measure to avoid convincing an unwilling participant with cash. While I cannot guarantee that the money I gave her was solely used for the travel, I do not believe policing her use of the funds would be empowering to her—which is the ultimate goal of this research. And as she mentioned not being able to participate in the search for her father as thoroughly as she once had because of her financial wellbeing, it seemed only right to compensate her for her travels to assist this research.

As for myself, I could not properly prepare for what I was about to experience. As discussed in previous chapters, it is difficult for anyone to anticipate their emotional response to a forensic investigation—particularly those in which human skeletal remains are involved. The original research questions for this project were to examine precisely this dynamic: the ability or inability for forensic anthropologists or human osteologists to empathise with the dead they analyse. Even though I was forced to abandon these particular questions, it does not mean these questions are no longer relevant or important. Based on our previous discussion, I anticipated that we would look through these books of the dead together, that I would observe her reactions to this process as well as my own. I would take notes on the varying states of decomposition that were included in these ledgers, if any additional identifying information was noted, and if any samples had been taken for forensic analyses including DNA and fingerprints. While my Spanish was [and remains] subpar, I was ready to take notes on the *Ministerio Público* itself, its organisation, security, the attitude of the investigators and their receptionists—all of the ways an institution may promote or damage the wellbeing of a loved one of the *desaparecidos*.

The couple that owned the hostel where I was living, and that had become my home away from home, were always interested in what I was up to next. The wife was thrilled that I was going to Guatemala City that week as she wanted someone to go shopping with her at the mall. When I gave her the general details of where I was going, she offered a story about her mother. The pauper's cemetery, which was on the list of places to visit with my contact, was once so dangerous no one would go near it. It was not until quite recently that it became accessible to the public, and her mother had been so curious that she had booked a tour. My contact later confirmed this story, explaining that this would be the first time she visited this specific cemetery as it was too dangerous when her father initially went missing and as it had not been explicitly recommended by the investigator. Armed with every form of identification I owned, a prepared response to anyone who might have questions about who I was, and a fully charged phone in case I needed to make an emergency phone call, I headed into Guatemala City.

I was not ignorant of the stories of rampant abuse perpetrated by police officers, or of the gang violence that plagued the inner city. I already knew something of the inefficiencies of the *Ministerio Publico* from my contact's interviews, what I did not know was how any of these people, police officers, investigators, or even gang members, might react to a white woman in places tourists definitely do not go. My contact would be gatekeeper to this other side of the forensic coin in Guatemala. I disabled my cell phone's fingerprint enabled passcode, in case I was physically compelled to unlock my phone, which contained identifying information for my contact. I explained to her in a McDonald's parking lot that she should tell the truth about who I was and do whatever was in her best interest—that we were doing nothing wrong and I would represent myself should there be any trouble. I explain my mind-set here for the juxtaposition of

reality. Not a single person inside the *Ministerio Publico* cared about me or why I was there.

3.2.2 *The Ministerio Publico*

When we arrived at the stark white and imposing building that is the *Ministerio Publico*, there was a short line to pass through a metal detector. The security guard waved me through without a second glance. My contact asked a woman for directions and several minutes later we had spoken to a secretary who asked us to wait on a metal bench until the new investigator could spare a minute. Again, there was not even a look in my direction. When the investigator emerged from the cubicle and waved us inside, I was surprised to see that it was a woman as my contact had previously described the investigator as a man. This new investigator had never met my contact, nor had she read her father's file until that day as we sat on the waiting bench. She brought a second chair around for me without even a word. Much to their shock and concern, there was nothing in the file whatsoever. No notes, reports, or statements—and no phone calls. This indicated to the new investigator that the original investigator had done no work on the case, and so she began again.

The conversation ascended into Spanish I could not understand properly. I glanced around the room taking in the over packed boxes of confidential files and papers held perilously together with blue and white police tape, the figurines sitting on top of her computer, the floral birthday balloons stuck to the ceiling with the same blue and white tape. My contact later explained to me that the investigator wanted her to give the details of the father's disappearance again for the record; where he was last seen, what had happened in the days leading up to his disappearance, and again the question: 'What have *you* done to investigate?'

Even with a new investigator, the responsibility of the investigation would lie on the family's shoulders. Had she not gone back to the *Ministerio Publico* again, had she just continued to visit the morgue, no one would have ever known there was nothing in her father's file, and no one would have done anything about it. The investigator said that the hospitals would serve no further use to the investigation and to try the cemetery once more. Here the investigator revealed new information. The cemetery that my contact had visited before was only used by the *Ministerio Publico* every other month, and that they sent the unidentified bodies from the morgues to *Cementerio La Verbena*—the cemetery that until recently was too dangerous to visit—on alternate months. While my contact remained collected in the room, when we left her frustration and anger were palpable. Over the long years of her father's disappearance she had only ever been directed to one cemetery, never the other. She explained how she had specifically told the original investigator that her father went missing the day after he had dinner with her uncle to talk about money problems, how the investigator told her he had gone to get the uncle's statement. Yet, the file said that he had not.

It occurred to me then what we might be dealing with. If the investigator had lied about taking the statement, and then gave the family false information about where to search for the body, it may go beyond negligence and straight into corruption. Who had made the phone call two years ago, if there was no evidence that it was the *Ministerio Publico*, and why would the mystery caller ask such a question? She told me all of this as we looked out onto the far wall of the main hall which read 'Science', 'Truth', and 'Justice' in Spanish and several dialects of Mayan found in Guatemala.



Figure 14: *Science, Truth, Justice* (Rosen 2018)

3.3 Places to Remember and Places to Forget

3.3.1 *Cementerio La Verbena*

The pauper's cemetery, *Cementerio La Verbena*, is dusty and hot. It sits on a hill between a residential neighbourhood and the empty lots that lead to the main roadway. My contact noted the odd similarity of the concrete vaults for the dead and the cinderblock houses in the distance which outline them. At the cemetery's mouth is a large, red and yellow archway—a *typico* Guatemalan aesthetic. We entered on foot, the only pedestrians in a line of cars and chicken busses waiting to drive through the cemetery itself. To the left was a small doorway leading to a rundown office with a man and a woman attending the desk.



Figure 15: *Cementerio La Verbena* (Rosen 2018)

My contact explains to the woman that her father is a *desaparecido*, that he has been missing for years, and that she has only just now been told to check here. The woman behind the desk asks for the month and year of her father's disappearance, and when told, pulls out three large volumes containing the burial information of the unidentified that took place during that time. My contact and I expected to see the pictures of dead faces, like those featured in the other cemetery ledger. However, the only information included was the sex of the individual and an estimated age. Not an age range, simply one number. To make matters more difficult, the ledgers are not categorised by this

menial information, but rather the order in which each body was buried. No other identifying information is kept. The woman begins to pour over the entries, searching for anything that might match. After five minutes she stops, insists that this search is pointless and there is nothing they can do for her. During this exchange the man ignores us, taking notes on a form. Beside him stands a pile of ledgers devoted to dead children; it stands under a poster that reads in Spanish 'World's Best Dad.'

I express my own sentiments of frustration as my contact and I leave the office. Even after hearing the many shortcomings of the system beforehand, I had no real notion of its reality and the experiences of those who must contend with it. We asked a man selling blank tombstones on the side of the road how to get to the '*Tres Equis*' section of the cemetery—the cemetery for the unidentified. As we walked down the main road towards the back of the cemetery, the sandy loam rose in clouds around our feet. Emerging from this dust were skeletonised remains. I stooped to get a closer look, unconvinced that I could be seeing human and animal remains strewn across pathways in this manner. My contact explained that if families could no longer pay for the cemetery vaults, the bodies of their deceased relatives would be removed and 'thrown away.' 'Thrown *where?*' remains an unanswered question.



Figure 16: *Non-human skeletal Remains in La Verbena*⁹ (Rosen 2018)

I had assumed that the three x's of *Tres Equis* were the stand-in for names they simply did not know and so could not put on a tomb stone. But I discovered that they refer to the three crosses that stand at the mouth of the section for the unidentified. There were no tombstones. Dusty, red fields of graves stretched out from that point—shallow depressions in the earth, accumulating refuse. Across from the three crosses stood the FAFG memorial, plastered with old missing person posters, encouraging those with relatives missing from the internal conflict to submit their DNA for testing. My contact looked at the faces depicted in the missing person posters, knowing that such services could never be accessible to her. Even if the DNA laboratory began processing

⁹ The remains pictured were difficult to characterise at the scene as I could not examine these remains or linger in the area for the safety of myself and my contact. They were subsequently confirmed as non-human.

non-conflict disappearances, Guatemala's investigative system prevents the development of a database to compare samples.



Figure 17, 18, 19 [top to bottom, left to right]:

Tres Equis and Contact, Tres Equis Grave, FAFG Memorial and Contact (Rosen 2018)

As we walked further into the *Tres Equis* section, I saw poking out from the centre of the roadway, something white and familiar. A human talus, or ankle bone, was

emerging from the soil. I instinctively kneeled and began to brush the dust away before I stopped myself. I had no legal or ethical right to touch this bone, even to move it from the road. I had to step back from my responsibilities as a human osteologist for my own safety and the safety of the people around me. Until this point in my career, I had never felt broken by the presence of human remains. I wept as I walked away, thinking of the individuals in graves which are unaccounted for, such as the one I had found under the road. How many were there? Hundreds, thousands? I found my contact in the next field of graves.



Figure 20: *Human Talus in Roadway* (Rosen 2018)

She stood in front of the newest burials, almost all unmarked save a few. It is unclear if those who placed the stones knew if their loved ones were buried there, or if it was just a guess. Although judging by the ledgers back in the office, it is reasonable to assume that it is the latter. She looked at me and I saw that she was weeping too. 'My

father might be here, in this horrible place,' she said to me. I asked then about her belief in magic, about if her beliefs mean her father's spirit has moved on. To which she replied yes, to find his body and to know what happened was just for her now.



Figure 21: *Newest Tres Equis Burials* (Rosen 2018)

3.3.2 XXX: A Web of Influence

To have these powerful, first-hand experiences in the *Ministerio Publico* and *Cementerio La Verbena* is invaluable, but it is not enough. It is critical to contextualise these observations within the framework of influences that are at work in reconciliation efforts. It is clear that anthropologists and archaeologists may learn more about the living who buried the dead than the dead themselves when analysing the burial of the body. By looking at the burial of the unidentified in *La Verbena*, it is possible to make observations about the realities of the system that put them there.

If the supposition is that cemeteries may function as either places of remembering or of forgetting, as examined in previous chapters, *La Verbena* serves as means of both. The *Tres Equis* section of the cemetery, the garbage ridden graves of the unidentified, serves the practical purpose of an economical dumping ground for corpses. The status quo of this unmaintained burial field is enabled by its existence as a place to forget, to obfuscate. In a forensic investigative system that is overrun with governmental corruption (Malkin 2016, Philips 2019, Sanford 2013, Smith & Offit 2010), horrific gang violence (Sanford 2008, Smith & Offit, hrw.org), and international self-absolution, the *desaparecidos* are more easily forgotten than found. When the original investigator failed to include any information in the missing father's file, he was acting out of a limited set of possibilities. He forgot to include his data because to forget is more efficient and economical in an environment of ubiquitous violence and judicial impunity, or someone—the uncle, another suspect, a supervisor—compelled the investigator to forget, with money, threats, or something else coercive. Until now, this method worked. No one noticed that the investigator ‘forgot’ to take statements or ‘forgot’ to mention *La Verbena* until the daughter pressed the issue, and she was only enabled to do this with financing from an outside party. Even the daughter, who holds the memory of her father dearly, was compelled in a sense to forget about pursuing the investigation as it was made inaccessible to her.

Cementerio La Verbena itself features two perspectives on the unidentified dead in Guatemala. The first is represented by the FAFG memorial to the victims of the *Conflicto Armado Interno*. Covered in old disappearance posters and slung with barbed wire, the memorial offers a stark look at the reality of their forensic anthropological efforts. Decades of research has only enabled them to identify a small fraction of the *desaparecidos* from the war itself, and this memorial stands to honour the still missing

dead—encouraging the families of the missing to come forward and submit their DNA in the hope that their loved one might be returned to them one day to be buried in a marked grave. This is how some of Guatemala's living memorialise the unidentified dead from the war. The second perspective on the unidentified dead stands opposite.

The *Tres Equis* cemetery is a sprawling expanse of forgetting. The three blank crosses offer no insight or information, the graves are nearly all unmarked, and from cursory observation it is clear that there are more remains buried there than there are graves registered in the ledger system. Indeed, the cemetery seems to only be known through its notorious reputation as a place to put people one would rather forget, as recounted to me in informal settings with local people. The limited information included for each individual listed in the ledgers forces anyone seeking to locate or memorialise a loved one to abandon their search there, ensuring *Tres Equis* remains a place of unmemorialised anonymity. It also prevents researchers from ascertaining the demography of such a site, and therefore from completely understanding the extent of contemporary violence.

This is not a place of forgetting in the banal way one might forget their keys in the car, nor is it only the forgetfulness of an apathetic public that would prefer to let the memory of its marginalised fade. Rather, it is a calculated forgetting that serves the purposes of a broken forensic system and the corrupt government which benefits from judicial impunity.

If burial of the dead can inform of the living, what can a place of forgetting such as this tell an anthropologist about the people that put them there? Or more specific to the questions asked by this research, what does this place of forgetting reveal about the forensic process in Guatemala? The logical conclusion one must reach upon discovering the skeletal remains of multiple individuals outside the areas designated for graves,

both embedded in and laying on the surface of the soil, is that there exists an unknown number of unaccounted for individuals buried in *Tres Equis*. Therefore, even with the limited ledger system, *La Verbena* could not offer accurate information in regard to the number of people buried and where each person is buried. As this dysfunctional maintenance of *Tres Equis* is arguably means to conceal the true numbers of the unidentified dead, at least to some extent, it is reasonable to consider the possibility that the number of unidentified dead in *Tres Equis* is significantly higher than can be estimated. *Tres Equis* dysfunction must be understood in terms of the function it plays within the larger frameworks.

In this way, the graves of *Tres Equis* are reminiscent of the mass graves of the civil war and may be considered mass graves in and of themselves. The graves of *Tres Equis* serve a political purpose, but instead of terrorising victims' families into silence or compliance, they compel them to abandon their searches. The cemetery may act as a symbolic way to visit the graves of the disappeared—but as my contact demonstrated, there is little comfort to be found in this. And to speak out about the cemetery, about the state of the forensic process, is an act of defiance towards a system that would prefer to forget.

As discussed in previous chapters, the ceasefire did not truly mark the end of the civil war in Guatemala. The forced disappearances and vandalism became clandestine, committed under the cover of darkness instead of in the open as they once had been (Löfving 2004). The violence of the death squads morphed into contemporary gang violence (Smith & Offit 2010, Sanford 2008, Bellino 2015). The systematic inequality and entrenched poverty that the war had been fought over remain, with the poor unable to integrate into the economy (Vakis 2003). Officials responsible for the violence have remained in positions of power until the recent past [e.g. Molina] (Sanford 2013), and

the new faces in Guatemalan politics have been charged with rampant corruption (Malkin 2017). Women face nearly the same level of violence today as at the height of the civil war (Sanford & Lincoln 2011). Police use intimidation tactics against those that speak out against the status quo (Sanford & Lincoln 2011). The false dichotomy of 'pre versus post ceasefire' reinforced by the rhetoric of international bodies involved in the reconciliation process, specifically the governments of Sweden, the Netherlands, and the United States of America, has both allowed the violence to continue and has prevented victims of this continuing violence from seeking justice against the perpetrators. Now it is clear that the contemporary violence reflects the civil war violence in yet another way, which is to say the creation of mass graves by the government.

While these consistencies may be considered obvious to some, the interpretation of these consistencies do not happen in a vacuum. They are just as bound to the influence economy as any other aspect of the reconciliation process. Entities which benefit politically from the continued anonymity of *Tres Equis*, will claim these consistencies do not exist or will seek to explain them in ways which exempt them from accountability. Political figures involved criminal activity, including embezzlement or other forms of corruption, i.e. former president Molina (Alper & Menchu 2015) and subsequent president Morales (Malkin 2016), benefit from a system which enables criminal impunity and will unlikely be inclined to fix this system. If continued state support for forensic anthropological research is predicated on the assumption that their work will situate state violence in the past, no forensic anthropological team will be empowered to investigate *Tres Equis*. If an investigation of *Tres Equis* may impinge on international funding for forensic anthropological teams, those teams will, again, not take on that project. And if the forensic investigative system requires the active physical

and financial participation of missing persons' families, any success will be divided along socioeconomic lines.

In the months after my visit to *La Verbena*, I found myself scrolling through the FAFG's webpage. Under a tab labelled '*Seguridad ciudadana*' or 'citizen security,' they briefly discuss Guatemala's high rates of contemporary violence and their efforts to end violence against women. They even mention *La Verbena* and an exhumation project they had conducted there, which the memorial stands to commemorate. Yet, the exhumations carried out in *La Verbena* were specifically of wartime graves, starkly delineating the separation between those bodies which fall within their remit, and those bodies which do not.

I spoke with my contact again when I discovered new wording on the FAFG's website that appeared to accept applications for non-wartime disappearances. There even seems to be private DNA paternity services available for a fee. She has filled out the form and the FAFG called to confirm the details, but after this, they never contacted her again, leaving her frustrated and still firmly within the loophole.

3.4 The Beginning of a New Perspective

By the time I had organised the trip to the *Ministerio Publico* and the *Cementerio La Verbena* with my primary Guatemala contact, this project had already taken a reflexive turn. The Guatemala example had presented information that inspired me to consider the functionality of the dynamics between forensic anthropological projects and their funders. The experience in *La Verbena* presented an opportunity to include political agenda and socioeconomics to this functionalist perspective, paving the way to the addition of intersectional understandings to this paradigm. Additionally, narratives

and attributions of victimhood to some demographics and not others in Guatemala had begun to reveal themselves through this experience.

According to my contact, the FAFG [a non-governmental organisation] could not offer her assistance in the first instance because of the remit imposed upon the laboratory by international funding bodies. These funding bodies were some of the most influential actors in the Guatemala ceasefire agreement—Sweden, the Netherlands, and the United States of America. The jurisdiction of the case fell to the *Ministerio Público*, a governmental entity, which imposed the burden of the investigation on the family of the missing person—and failed to inform my contact of the existence of the *Cementerio La Verbena* as a potential burial place. Upon my contact's follow up visit, it was discovered that no investigative work had been performed by the original investigator, that *La Verbena's* ledger system is dysfunctional, and that there are more bodies in *La Verbena* than can be accounted for at this time. A second, subsequent request for assistance from the FAFG has gained no traction.

It is possible to contextualise all of this information within a systemic understanding, but of course it is necessary to consider how individual actors may be contributing to this dynamic. Here we are given one example of how the *Ministerio Público* has handled a missing person's case. One example does not necessarily speak to the functioning of an entire system. The original investigator, who did not perform any investigative work in this case, is an individual and not a system. However, if the investigator was an exception, and most investigators do competently perform their investigations, his actions still indicate that there is a lack of oversight that can enable this behaviour. Additionally, the second investigator immediately placed the burden of continuing the investigation on my contact in their first meeting, recommending *La Verbena* as a place to start. As it became clear later that day, *La Verbena's* record

keeping system could not be used to help identify my contact's missing father. It is reasonable to assume then that others have been directed to *La Verbena* and have been forced by the ledger system to give up their inquiries as well. Therefore, even if the individual actors were performing independently, there is clearly an underlying system that prevents thorough investigations into contemporary disappearances.

There may be numerous explanations for these dynamics in Guatemala. It is possible that the local government simply does not prioritise these types of investigations and, therefore, does not provide any oversight of the investigators nor funding to improve and maintain *La Verbena's* ledger system and the *Tres Equis* section of the cemetery. In fact, it is clear that the local government does not prioritise these things, but it is important to consider why it does not. In a functionalist understanding, these priorities may be understood through the functions or purposes these decisions serve. If the outcomes of these decisions are that fewer missing people are identified and that the number of unidentified bodies in *Tres Equis* is indeterminable, then we must consider who benefits from this status quo. Certainly, a government consistently accused of corruption will benefit from an environment of judicial impunity. An investigative body like the *Ministerio Publico*, which seems to operate on a pay-for-participation basis, can facilitate investigations or hamper investigations [as it has been demonstrated to do in other scenarios (Sanford 2011)], leaving those who cannot afford to participate to fend for themselves.

Organisations such as the FAFG, which do enable certain demographics of impoverished Guatemalans to access DNA and forensic anthropological services, are also restricted by prioritisation of governmental entities. Government-affiliated aid organisations, such as the United Nations Development Fund Sweden [UNDP Sweden] and the United States Agency for International Development [USAID] and the

governmental aid from the Netherlands, have apparently defined the remit of the FAFG's outreach. This outreach, as described above, has disempowered a demographic of *desaparecidos* and their families. We can observe here that, as the 'Mapping' model argues, the forensic anthropological work undertaken in Guatemala does indeed maintain specific narratives regarding the internal conflict—specifically when it ended, the successfulness of the ceasefire agreement, and attributions of victimhood. External influences clearly contribute to the maintenance of these narratives, such as the funding bodies' definition of the FAFG's DNA laboratory's remit. It is possible, therefore, that these external funding bodies may also benefit from the maintenance of these narratives.

Most compelling, however, was the possibility that these influences could crossover to other forensic anthropological projects in different contexts. The Guatemala example provided specific insight into the forensic process in that particular situation, yet this process is arguably impacted by generalised concepts such as political agenda, money, access, and remit. These concepts are present in any forensic anthropological project, and if other forensic anthropological projects were to be examined in a similar way, this would allow these influences to be categorised and potentially accounted for in future projects.

Even today, several years after our first meeting, I feel deeply connected to my primary Guatemala contact and the story of her missing father. In her worldview, death is not the final chapter in life—it is not always even a closed door. Yet, even though she believes her father to be dead, she cannot close this chapter of her life. She has demonstrated that death in Guatemala can only mean closure and new beginnings in very specific contexts, and if this process is circumvented, death and the unknown leave behind deep spiritual wounds.

3.5 Visualising the Matrix

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | X | | |
| Empowerment | | | |

Figure 22: *The Forensic Economies Matrix: The Woman from San Marcos and the FAFG*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | X | | |
| Access | | | |
| Empowerment | | | |

Figure 23: *The Forensic Economies Matrix: The FAFG and UNDP, USAID*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | X | |
| Empowerment | | | |

Figure 24: *The Forensic Economies Matrix: The Woman from San Marcos and the Ministerio Publico*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | | |
| Empowerment | | | X |

Figure 25: *The Forensic Economies Matrix: The Woman of San Marcos and Me*

4. Body Politics: The Political Economies of Forensic Science after Political Violence

4.1 The World Trade Center Identifications

This chapter will attempt to contextualise the observations made in Guatemala, regarding the influence of political narratives within the forensic anthropological response, through an analysis of the forensic anthropological response to the 9/11 attacks on the World Trade Center run by the Office of the Chief Medical Examiner of New York [OCME]—an organisation with which I have previous connections. Two forensic anthropologists who have participated in this response were interviewed and two available datasets from the operation were analysed in order to examine how political narratives and attributions of victimhood have potentially impacted the response—especially in terms of underserved demographics. This chapter adopts a definition of forensic anthropology that includes the DNA analysis performed by the OCME as the forensic anthropology department has directly participated in this effort along with other forensic practitioners.

The OCME datasets available at the time of the original analysis, detailing a period between 2015-2018, reveal that there are fewer new identifications than linked identifications [identification of individuals with more than one piece of evidence]. This may either be because the fragment sample is not representative of all the victims or because of a methodological mechanism. Although this is not necessarily unexpected in a context such as the World Trade Center attack, it proves that there are potential complications in the identification, notification, and reclamation process. Subsequent to the numerical analysis of the datasets provided by the OCME and the interviews conducted with OCME employees, a discussion examines the dynamics of proximity to the violence as proxy for victimhood, and the socioeconomic factors that intersect with

this understanding. This discussion then juxtaposes the funding realities for the OCME's World Trade Center operation with those of other 9/11 aid organisations, demonstrating the importance of maintaining political narratives through forensic identification efforts. Finally, this discussion turns to the reflexive and autoethnographic, as I have primary experience of the 9/11 World Trade Center attacks and have been connected to the OCME in several ways—although not through employment or long-term ethnographic work.

I conducted the initial analysis on the OCME datasets that were available in the public record and that had been provided by the OCME. After this research was conducted, the OCME offered additional data on their World Trade Center identification efforts. Many of these data confirmed or clarified these observations and also presented invaluable opportunities for further research that are beyond the current scope of this project.

4.1.1 Juxtaposition of Forensic Contexts

Taking a reflexive approach to the issue of access and refocusing the analytical lens to include a holistic examination of the broader systems in forensic anthropology allowed this research to be applied across contexts. This was an important development, as additional case studies could now be reasonably included in the project's remit. While the ethnography in Guatemala would remain the centralising force of the project, it was crucial to delve into the overarching economies of forensic anthropology as it functions in different scenarios across the world, and especially how these economies encourage attributions of victimhood. It became clear in Guatemala that forensic reconciliation is a process intrinsically tied to political agenda, socioeconomic boundaries, and pedagogical conundrums. Would the same be true elsewhere, or in contexts other than genocide, e.g. disaster or terrorism?

After I returned from Guatemala, I approached the Office of the Chief Medical Examiner of New York to discuss their forensic efforts to identify the victims of the World Trade Center attacks. While this thesis juxtaposes these scenarios, their very natures as forensic anthropological projects differ in significant ways. The OCME works on many types of identifications, and not all are anthropological. One of their major anthropological endeavours has been the excavation, identification, and repatriation of skeletal remains from the World Trade Center attacks on September 11th, 2001. The 9/11 attacks, while also acts of political violence, were situated in an entirely different socio-political context than the Guatemalan Civil War. In Guatemala, the victims of the civil war were tortured and murdered by government-supported forces over the course of decades (CEH 1999), often with little consequence for the perpetrators (Sanford 2008). Victims were often already disenfranchised, and the largest targets of the violence were vulnerable indigenous groups. In the 9/11 attacks on the World Trade Center, the perpetrators committed a large, yet time-limited act of violence in which they themselves perished. The socio-political undercurrents of the 9/11 terror attacks are notably different than the Guatemalan Civil War as well. Teasing apart that power dynamic is tricky; the World Trade Center attacks were carried out upon civilians who benefitted from the socio-political power dynamics of the time, and the World Trade Center represented a global headquarters of finance and entertainment (Greenberg 2003). In Guatemala, however, the victims of the violence were by-and-large those who suffered from the socio-political power dynamic and the perpetrators were those who benefitted from the power dynamic (Painter 1987). The death toll of the World Trade Center attack was a fraction of the Guatemalan civil war death toll as well: 2,753 in Manhattan (OCME 2018, CDC) and potentially 200,000 in Guatemala (CEH 1999), although, the World Trade Center casualties occurred within a fraction of the Guatemala

timeframe and were subjected to trauma that left the remains burned, highly fragmented, or pulverised (Mundorff 2008). 21,905 fragmented human remains have been found and 1,639 individuals have been identified (OCME 2018).

This is in no way an analysis of which acts of violence are ‘worse’; such categorisations are unhelpful in this type of research. It is merely an examination of the differences that could influence both the decision-making of each organisation and their empowerment to carry out identifications. As these differences are clearly both socio-political and practical, each organisation will have different needs and different goals. The deaths in Guatemala far outnumber the deaths of the World Trade Center attack, and the Guatemala victims were killed and their bodies interred across many decades and geographic areas. The World Trade Center victims were dispersed over a small area, but their bodies were fragmented, burned, commingled, or entirely pulverised (Mundorff 2008). In Guatemala, the government was responsible for these acts of violence and the FAFG officially works independently of the government. As the World Trade Center deaths took place in New York and were caused by an act of terror on the part of foreign extremists, the identification effort fell into the remit of the OCME—although the initial field recovery was conducted by the Fire Department of New York [FDNY] and the OCME handled morgue identifications. Both the OCME and FDNY are governmental organisations and have been assisted in the past by a Disaster Mortuary Operational Response Team [DMORT] and the New York City Police Department [NYPD]—also governmental organisations. As a governmental entity, the OCME has always received funding for these projects and is still actively investigating today.

Yet, the value of these comparisons lies not in the differences of the organisations themselves, but rather in the similarities of the dynamics within which they function. Some would argue, fairly, that to compare the FAFG and OCME, would be

akin to comparing apples and oranges. It is abundantly clear that the FAFG and OCME have different goals, expectations, and support in their forensic identification efforts. However, it is this profound difference that makes the comparison of the overarching influences upon their respective forensic efforts meaningful. This chapter will demonstrate that these influences affect these disparate organisations in much the same way, creating comparable outcomes, especially in regard to the maintenance of political narratives and attributions of victimhood. When understood from this perspective, the intrinsically dissimilar nature of these examples strengthens the argument of this thesis: forensic anthropology as a discipline is beholden to an intersecting economy of political, socioeconomic, and academic agenda.

It is also important to specifically consider the attributions of victimhood in both scenarios. This thesis argues that these attributions are mechanisms by which socio-political narratives are maintained after political violence—a deeply entrenched theme in the Guatemala example. There are some observable differences within these attributions across contexts, yet a guiding thread through these examples is the role these attributions play within the implementation of forensic anthropological examinations and disaster response and reconciliation more broadly. Within the 9/11 example, we will see that victimhood is understood in terms of distance from, survival of, and even response to the attack. These are similar themes to those in the Guatemala example; however, these are complicated by the relationships between international and local political powers. Yet, both examples present evidence that there is room to develop more nuanced understandings of identification and repatriation within the forensic anthropological response.

4.1.2 Immediate and Continuous Forensic Responses

This section will recount the involvement of forensic anthropologists at the OCME in the World Trade Center recovery efforts. The head of the Forensic Anthropology Department, Dr. Bradley Adams, consented to a telephone interview after clearance from the OCME legal team. As the head of the department speaking in an official capacity regarding the policies and practices of the OCME in forensic anthropological contexts, he consented to be identified in this thesis. After I received legal clearance from the OCME, members of staff felt comfortable speaking to me about their personal experiences and observations. Their identities have been kept anonymous. While the following information was provided by OCME employees, the analysis of this information is entirely independent of the OCME and may not reflect the position of the OCME or the employees interviewed for this research.

According to Dr. Adams, the Forensic Anthropology Department of the OCME has been involved in the World Trade Center recovery efforts since the 9/11 attacks occurred. While he did not participate in the recovery efforts until 2006, he was able to provide information on the complications of immediate forensic efforts in such a context. After an act of terror or disaster, the first priority of responders must be search and rescue of any potential survivors. Any collection of forensic evidence is secondary to search and rescue efforts, and should these efforts destroy evidence in the process this is considered appropriate. Recovery of evidence only becomes a priority once potential survivors have been located and rescued. These initial recovery efforts were conducted in consultation with a Disaster Mortuary Operational Response Team [DMORT], a federally funded team of specialists in identification of human remains.

After the initial emergency response, forensic anthropological operations have continued through the OCME, utilising New York City funding for dedicated DNA

laboratories. In 2006, additional remains and artefacts were discovered during rebuilding projects in the area. Human remains, as well as personal items, were found on neighbouring rooftops. Forensic anthropologists then monitored the construction sites in the vicinity, and any debris that could have contained human remains was placed into containers labelled with provenience and sent to a designated storage area in a Staten Island landfill called 'Fresh Kills'. The OCME hired a team of archaeologists and forensic anthropologists to examine this debris and retrieve any potential human remains and artefacts, while under the supervision of a forensic anthropologist on the OCME team. Many of these archaeologists had no forensic training, although the key skill required for this project was the recognition of bone fragments. The analysis of this debris required water screening to 3/16 of an inch. The searched material from this process is still stored in the Fresh Kills site and will not be examined again. To ensure quality control, the debris screened by the archaeologists was often 'salted' by the forensic anthropologist supervisor, meaning that animal bone fragments and personal items were placed deliberately into the debris to test the archaeologists' skill at identifying and retrieving material. The archaeologists knew of these quality control tests, and even found them enjoyable according to an OCME employee.

When human remains were found, each fragment of bone was given a specific case number. All that is required for a case number is a single fragment. Samples that are big enough and have not undergone thermal damage are tested in the OCME's dedicated DNA laboratory. This testing will be done even if the DNA test will destroy the sample. If such a test produces a match and destroys the sample, the test-tube that contains traces of DNA will be kept and returned to the family if they wish it. When a match is made, law enforcement will notify the family in person where possible. From this point, families are given a choice. They fill out a form and decide if they would like

to be notified when additional remains are found, or if they would prefer to never be notified again. This choice is not final, as families are entitled to change their minds. They are also given the option to claim the remains or leave them to the repository in the 9/11 memorial. This repository is accessible to the family members of victims for visitation. Should the families wish to claim the remains, this must be done through a funeral home, which charge fees for this service. The OCME cannot release human remains to family members directly, according to New York State law, nor can the OCME recommend any specific funeral home. The OCME has now tested each retrieved fragment and is currently in the retesting phase for the still unidentified fragments.

While the World Trade Center dedicated efforts for retrieval and DNA testing have been generously funded, Dr. Adams observes that this may not be the case for investigations in other jurisdictions. While the New York City government has offered extreme support for World Trade Center related projects, each jurisdiction is responsible for prioritising their use of funds for non-World Trade Center projects. To promote transparency in the World Trade Center projects, the OCME releases statistics from the projects monthly to the New York City government, although these reports can be difficult to locate in the public record.

Such an operation is subject to a host of specific considerations, given the commingled, highly fragmented, and thermally damaged remains. The World Trade Center deaths are considered both an 'open population' and a 'closed population' (Mundorff 2008). This means that some information regarding the victims' identities was available [i.e. the identities of World Trade Center employees and airplane passengers were known] and some information regarding the victim's identities was unavailable [i.e. the identities of the World Trade Center tourists or bystanders were unknown]. There were multiple mechanisms of commingling as well; commingling

occurred as a result of the impact and as a result of collection techniques (Mundorff 2008). The force of the impact, the extreme temperatures created by the aviation fuel, and the collapse of the building severely complicated the subsequent collection and identification process (Mackinnon & Mundorff 2007). In addition, the initial collection of remains by untrained personnel complicated the process—the FDNY bagged fragmented, unattached remains together. It took several weeks for a coordination grid system to be established, and in addition, the process of excavation, transport, and screening also disassociated elements (Mundorff 2008).

In a forensic scenario with both an open and closed population, it is important to be able to estimate the number of victims involved. In the World Trade Center scenario, the New York City government made the unprecedented decision to perform DNA tests on all recovered fragments (Mundorff 2008). This is unusual, as the price of DNA tests is generally prohibitive, the capacity of many DNA laboratories cannot accommodate incredibly large sample sizes, and it is considered better practice to test all samples before beginning the exclusion process if possible (Egaña et al 2008). However, this project posed one of the greatest forensic challenges in the history of United States, and then-mayor Rudy Giuliani directed the OCME to adopt the policy to test every fragment recovered (Ritter 2007).

As Dr. Adams of the OCME writes in his volume [along with Byrd] *Recovery, Analysis, and Identification of Commingled Human Remains* (2008), it is possible to use archaeological methods to estimate the number of individuals in a forensic context, and although these particular methods are not useful in the identification process for the World Trade Center, they became relevant for this analysis. Forensic anthropologists often use MNI [minimum number of individuals] to establish this estimate. This process often involves the siding of each example of a skeletal element in a sample and taking

the larger of the totals (Adams & Konigsberg 2008), i.e. 10 right femurs [upper leg bones] and 11 left femurs provide an MNI of 11. As Adams and Konigsberg (2008) explain, however, this only provides an estimate of the recovered individuals, not necessarily of the total individuals, and in a highly fragmented context, this process may be even less effective. They go on to suggest the use of the MLNI estimate [Most Likely Number of Individuals], yet this is only effective when at least half of the remains have been recovered and if skeletal preservation is good. Thus, the across the board DNA testing policy in the context of the World Trade Center is a colossal effort, but the only truly useful method in this context. However, estimations of the MNI became a useful tool for this analysis, albeit for a more conceptual purpose.

4.1.3 *Considerations of OCME Data*

As part of the agreement between the OCME and myself, I sent my original analysis of the OCME data [to which I had immediate access] in order to ensure that the information included in this thesis was accurate and factual. Their response, while it included valuable clarifications, also demonstrated the importance of access within this type of research and the value of contextualisation. There were several fundamental differences in how Dr. Adams and I understood the World Trade Center operation. For example, I had approached the OCME data as a trajectory, emphasising the new identifications and linked identifications that had already occurred and the contemporary implications that could emerge from them. Whereas Dr. Adams emphasizes that the project's completion relies upon the identification of all fragments and therefore inherently compensates for whatever disparities that may emerge in identifications until this point. Indeed, within this understanding, changing procedures to accommodate for disparities between new and linked identifications now is

unnecessary as these will be accommodated for by the projects' larger structure—and it is unclear if these disparities could be accounted for at all.

This communication regarding the data analysis I performed independently of the OCME revealed differing etic and emic understandings of the OCME operation, the inside perspective and my external perspective—which was invaluable. In order to delve into these dynamics, the frameworks of my original analysis are included, with the clarifications provided by Dr. Adams.

The original analysis included data provided in two reports that were released three years apart, in 2015 and 2018 [see Appendix 3]. These reports are those to which I had access at the time of my analysis, as additional reports are available but are difficult to locate without inside guidance. The OCME has since offered more reports—although the broader conclusion of this analysis has already been confirmed by Dr. Adams. Some of the data in the reports are self-explanatory and confirmed, e.g. an increase of two in the identified individual total indicates two new identifications [see fig. 2]. Some of these data required extrapolation, e.g. changes in the modality/modalities totals. From examining the ratio of identified fragments to identified individuals from 2015 to 2018, it appeared that there is some disparity between new identifications of individuals and new identifications of fragments [see fig.3]. This indicated that there may be a disparity between new identifications and linked identifications. Without specific numbers regarding rates of linked identifications, the original analysis needed to establish an upper boundary, a lower boundary, a likely average ratio of new identifications to linked identifications for that period, and a likely average number of fragments per person. These boundaries were created using the concepts of minimum, maximum, and a 'most likely number of individuals'—in an abstracted sense without the use of skeletal material. The upper

boundary [maximum number of individuals identified] was established as 233, with 2 new identifications and 231 linked identifications, as the total number of identified fragments for that period is 233 [see fig.3]. This boundary assumes that every identified fragment represents a single individual. The lower boundary [minimum number of individuals identified] was established using the modalities data, which indicates a minimum of 3 linked identifications in this period [see fig.4]. These boundaries were imperfect; for example, the modality data does not directly reflect the number of individuals identified, only the modalities by which fragments are identified, so it was likely that the number of linked identifications was higher than the lower boundary indicated—meaning that the number of linked identifications for this period are not explicitly visible in the data.

| Identified Victims 2015 | Identified Victims 2018 | Total Change |
|----------------------------------|----------------------------------|---------------------|
| 1,637 | 1,639 | +2 |
| Identified Fragments 2015 | Identified Fragments 2018 | Total Change |
| 1,4254 | 1,4487 | +233 |

Figure 26: *Identifications between 2015-2018*

| % Victims Identified: Victims Unidentified 2015 | % Victims Identified: Victims Unidentified 2018 |
|--|--|
| 60 : 40 | 60 : 40 |
| % Fragments Identified: Fragments Unidentified 2015 | % Fragments Identified: Fragments Unidentified 2018 |
| 65 : 35 | 66 : 34 |

Figure 27: *% of Identified Individuals : Unidentified Individuals*. Note that the % of identified fragments increased but the % of identified victims did not increase.

| Single Modality Identifications 2015 | Single Modality Identifications 2018 | Total Change |
|---|---|---------------------|
| (DNA) 889 | (DNA) 891 | +2 |
| (Dental X Ray) 47 | (Dental X Ray) 46 | -1 |
| (Fingerprints) 33 | (Fingerprints) 33 | 0 |
| (Photo) 9 | (Photo) 9 | 0 |
| (Remains Viewed) 15 | (Remains Viewed) 15 | 0 |
| (Personal Effects) 7 | (Personal Effects) 6 | -1 |
| (Other) 3 | (Other) 3 | 0 |
| (Total) 1003 | (Total) 1003 | 0 |
| 2+ Modality Identifications 2015 | 2+ Modality Identifications 2018 | Total Change |
| (DNA) 579 | (DNA) 582 | +3* |
| (Dental X-Ray) 484 | (Dental X-Ray) 485 | +1 |
| (Fingerprints) 273 | (Fingerprints) 273 | 0 |
| (Photo) 16 | (Photo) 16 | 0 |
| (Remains Viewed) 2 | (Remains Viewed) 2 | 0 |
| (Body X-Ray) 3 | (Body X-Ray) 3 | 0 |
| (Personal Effects) 71 | (Personal Effects) 72 | +1 |
| (Tattoos) 6 | (Tattoos) 6 | 0 |
| (Other) 46 | (Other) 46 | 0 |
| (Total) 634 | (Total) 636 | +2* |

Figure 28: *Modality Changes 2015-2018*. *Note that there is an increase of 3 in the DNA category but only an overall increase of 2. This indicates that at least one individual had already been identified by multiple modalities [excluding DNA] before 2018 and has now been further identified by DNA analysis. It is important to note that modality data does not directly represent individuals.

To establish a most likely number of individuals identified, a likely average number of fragments per person was calculated. As some individuals have been identified without fragment DNA analysis, this calculation needed to include DNA modality data [see fig. 5]. The data indicated 1,639 total victims had been identified and 14,487 total fragments had been identified. Out of the 1,639 total victims, 891 were identified using only DNA analysis and a further 582 were identified by multiple modalities including DNA analysis. This indicates that 1,473 individuals were identified using DNA analysis. The average number of identified remains for individuals identified with DNA analysis is then, approximately, 9.84 [9 when rounded down]—although there was no way to calculate the standard deviation for these data at the time. When

this average number of fragments per individual is applied to the 233 identified fragments of the 2015-2018 period, the most likely number of individuals identified is ~25—2 new identifications and ~23 linked identifications. This average indicates that fragments are ~10x more likely to belong to a linked identification than a new identification.

| Total Identifications w/DNA | Total Identified Fragments | Average # of Fragments/person |
|------------------------------------|-----------------------------------|---|
| 1,473 | 14,487 | 9.84 |
| Total New Identifications | | Total Estimated Re-Identifications |
| 2 | | ~23 |

Figure 29: *Average # Fragments: Individual*. Note this is an estimated average, only 3 re-identifications are explicitly observable in the data.

However, this most likely number of individuals identified is also problematic, as calculating such an average is based upon an assumption that the sample of retrieved fragments is equally representative of all victims, meaning that each victim has a similar number of fragments within the overall sample. This is very unlikely in a context such as the World Trade Center operation—which was confirmed by Dr. Adams. This unequal representation can be attributed to many factors. It is possible, for example, that the bodies that produced testable fragments produced many testable fragments, whereas other bodies produced fewer testable fragments. It is also possible that the preservation of fragments, or the damage fragments sustained, are not equal—which could be correlated to placement or cause of death during the attack. As observed by (Mundorff 2008), many remains were pulverised by the impact and could not be recovered at all. This may even be related to demographic considerations. If, for example, males and females are sexually dimorphic with females tending towards smaller stature within a population [~15% smaller (Larsen 2003)], then perhaps there are fewer female bone fragments to find and test—although Dr. Adams does not believe this to be a contributing factor, this is a relatively small dimorphic relationship (Larsen 2003), and

understandings of dimorphism are complicated by gender identity as well (Kirchengast 2015). However, sex-based DNA testing disparities have been observed in Guatemala identification efforts that go beyond the ratio of males to females represented (Johnston & Stephenson 2016), so it is worth consideration.

Thus, it was difficult to properly estimate an average number of fragments per person with the available data, as the sample was unlikely to be representative. Considering this, the upper and lower boundaries became more relevant to the original analysis—although both remained relatively unlikely to occur. The lower boundary of 2:3 new identifications to linked identifications suggests that only 5 individuals were represented by the 233 fragments identified in that period, and the upper boundary of 2:231 new identifications to linked identifications indicates that linked identifications occur more than 100x more than new identifications. These were both unlikely scenarios and the actual ratio fell in between these boundaries. However, these possibilities as determined in the original analysis indicated that there is a disparity between new identifications and linked identifications. This was confirmed by Dr. Adams who explained that new identifications are less common than linked identifications at this point in time.

During our conversations about my observations regarding the data for this period¹⁰, Dr. Adams confirmed that the lower boundary was not relevant to the data as the total ratio of new identifications to linked identifications was 2:130. This was again contextualised in the broader understanding of the World Trade Center identification project as an on-going effort, where every fragment will be identified in the long term. Dr. Adams also emphasised that there is no process for choosing fragments for testing—

¹⁰ This conversation occurred between December 2019 and January 2020 before thesis submission

as all fragments have been tested and will be subject to retesting where possible. Yet, there must be a system for choosing the fragments that will be retested next, which becomes important when analysing the operation as a trajectory of identifications. As it stands, there are three possible explanations for the disparity between new identifications and linked identifications. First, the procedure for choosing the next fragment for testing—whether systematic, i.e. in ascending case number order, largest/easily testable fragments first etc., or random, i.e. whichever fragments are most accessible at the time—is generating more linked identifications. Second, technological limitations are preventing new identifications. Third, the fragments that have been tested at this point are representative of the larger sample of retrieved remains [*not* the total victim population] and this disparity will exist until the end of the project regardless of any procedural or technological alterations.

If the first, perhaps it is not of great concern to the OCME, as the project will not be completed until each fragment is identified. As the project continues, the new identifications that are possible will be made eventually. Indeed, Dr. Adams believes that the procedures do not need to be changed. If the second or third, previously identified victims are either overly represented in the sample or their associated fragments are more easily tested and I will argue that this may have consequences for families in the reclamation, interment, and memorialisation process. There is some evidence for the second and third possibilities, as the testing and retesting process has generated the identification of 60% of the total victims and identification of 66% of the total fragments—and considering the nature of the violence, this explanation gains traction.

Beyond unequal damage of remains and testing limitations, it is prudent to consider the possible impact of the practicalities of conducting an identification effort of

this magnitude. For example, it is also possible that individuals without biological family to contribute a DNA sample, or for whom the OCME cannot locate a DNA sample, will be impossible to identify through this programme. Familial DNA samples in commingled contexts present certain limitations as well; often multiple family members are required to submit a DNA sample for a reliable identification (Yazedjian & Kešetović 2008)—and this only works when there is a genealogical link, which is sometimes assumed to exist but does not (Fowler & Thompson 2015). The disparity may even correlate to the cataloging process, as bones fragments that are collected in a similar area/timeframe might be tested in a similar timeframe. This may increase linked identifications over a specific period as there is some evidence that spatial analysis of remains *in situ* may improve reassociations, as closest, ordered, unarticulated remains are most likely to belong to the same individual than any other remains in the site (Tuller et al. 2008). Yet, this assumption also led to inappropriate commingling of World Trade Center remains described by Mundorff (2008). According to Steadman et al. (2008), this problem can be navigated by placing remains that may be associated in separate body bags and labeling them to inform the morgue personnel of the potential association. However, Reinecke and Hochrein (2008) warn that the recovery of remains may be inappropriately pressured by supervisors who wrongly believe the distributions of the remains are random. Dr. Adams has confirmed that fragments that are not articulated in the World Trade Center context are each given their own case numbers, regardless of spatial association.

Considering the stage of the identification process—all fragments have been tested and the still unidentified fragments are being retested—a likely impact on the process is technological limitation. As the most easily identifiable fragments have been tested successfully, and the OCME must now contend with the difficult-to-identify

fragments through retesting efforts, this working sample is essentially selected based upon testing limitations. Within the first weeks of the DNA testing effort, it became clear that a large proportion of the fragments would provide only partial DNA profiles using the original protocols [STR analysis]. This led the OCME to reexamine these samples and create new strategies for extracting DNA, which improved outcomes. With further developments in DNA sampling and testing protocols [mini-STR test panels, mitochondrial DNA sequencing, and 70-loci SNPs panels], the limited DNA available from the fragmented remains were more successfully identified (Mundorff et al. 2008). Therefore, the World Trade Center example has necessitated the development of new DNA technologies in the past in order to progress with the testing and Dr. Adams has confirmed that this is definitely still a relevant consideration today.

The goals of this identification project have profoundly impacted its methods and structure. The decision to test every fragment discovered, made by Mayor Giuliani in the aftermath of the attack, was a prioritisation of specific methodologies and structures (Ritter 2007). As Ritter explains, this decision emphasises the goal of identifying all fragments instead of only identifying all individuals. This makes the operation more costly in both time and money. Yet, if the emphasis of the operation is on identification of all individuals, then the investigation may stop before all fragmented remains are returned to families. Ritter's discussion of these decision-making processes reveals the prioritisations that must be made at the outset of an enormous forensic response. Giuliani prioritised the identification of every fragment, not necessarily of every individual—although these goals are not mutually exclusive. It is possible, however, that this priority is reflected within the OCME outcomes and can explain at least some of the discrepancy between new identifications and linked identifications over the 2015-2018 period, as it may not be the goal of this project to newly identify as many victims as

efficiently as possible, but rather identify as many fragments as possible without a specific emphasis on new identifications, as all possible identifications will be made in the long term.

In Rosenblatt's (2015) discussion of exhumations of mass graves from the Spanish Civil War, he observes that prioritisation of certain forensic goals over others determined the manner in which graves were excavated. If the overall goal of Spanish exhumations is to determine the extent of the violence, then it would be better to exhume as many graves as possible. However, if the overall goal is to identify individuals and allow their families to receive reparations, then it would be better to exhume smaller graves with better documentation first (Rosenblatt 2015). Additionally, Mikellide (2017) observes that the goals set at the start of the forensic investigations in Kosovo and Cyprus impacted their overall success—a large investment in Kosovo declined over time and a modest investment in Cyprus grew over time. Although these forensic anthropological contexts are distinct from the World Trade Center context, perhaps an analogous dynamic is reflected in the OCME identification effort, for an examination of all recovered fragments is perhaps in some ways better suited to analysing the extent of the violence, rather than emphasising the new identifications of victims—even if this is not the explicit goal of the OCME project. As we have seen, new identifications in the OCME project occur less frequently, but as all fragments will be tested eventually rectifying this disparity now is not necessarily a priority—and perhaps it cannot be made a priority due to limitations of technology.

We can observe this prioritisation of methods, but it is also clear that prioritisation of victims occurred in the 9/11 example from the outset. In an emergency situation, as Dr. Adams explained, the search and rescue efforts of first responders must take priority over the forensic collection of human remains. The damage to the remains

that might occur for the sake of search and rescue efforts is considered acceptable, even if it might prevent identification of the remains at a later date. This thesis will not attempt to argue that this policy is ineffective or unjust. It does demonstrate, however, that there are practical considerations when attributing priority among groups of victims during and after political violence. The tremendous funding support for the OCME's colossal DNA project that Dr. Adams described, which has yielded two new identifications over this three-year period, demonstrates the heavy emphasis of DNA testing as a response to the 9/11 attacks even if new identifications are limited. This emphasis must be understood in the context of the OCME data, which implies that most of the fragments collected can only be attributed to a limited set of victims.

It is possible that the process of returning the remains to loved ones also presents a prioritisation of some living victims over others, although Dr. Adams disagrees with this conclusion. The repository for unidentifiable or uncollected remains of the 9/11 attack does not appeal to all the loved ones of the deceased. In fact, the repository system has been highly inflammatory, inspiring pickets outside the 9/11 memorial museum (Swaine 2014). Families were concerned that they had not been included in the decision to house the unidentified and uncollected remains of victims in the basement of the National September 11 Memorial and Museum (Toom 2015). They were nervous that tourists would pay the entrance fee to ogle their loved ones' bodies, albeit through an adjoining wall. Dr. Adams has contradicted this observation, reporting that his experiences with families and the repository have been largely positive—more than 200 family visits per year with almost entirely positive feedback—and that many families choose the repository for their own reasons. He also explained that the families of the victims had been communicated with during the City Hall discussions surrounding the formation of the repository and that the repository is separate from the

museum¹¹. Regardless of its accessibility restrictions and the separate curatorial oversight, however, it is understandable where the discomfort of some of the families reported by Toom (2015) comes from. An internet search returned this result from the museum's website: 'Visit the Museum: Save 40 percent or more off NYC's 5 top attractions' (911memorial.org). Even if the repository is not officially part of the museum, its outside wall is visible from within the museum, and the museum is identifying itself as a NYC top 5 attraction. Considering that the remains in the 9/11 repository are those that have not yet been identified or were not or could not be collected by family for private burial, in one sense the repository represents the most underserved of the 9/11 identification efforts. This is inevitably exacerbated by the state laws surrounding official turnover of human remains to families, as this must be done through qualified funeral home services. It is important to consider how many families choose not to be notified about the discovery of additional remains because of the mounting costs of the reclamation process.

Returning to the analysis of the OCME datasets, the sample of fragmented human remains is not equally representative of all the victims. Therefore, some individuals are represented more than others in the number of fragments within the sample. While these overrepresented individuals are the most served by the forensic methodology, it exposes the families of these individuals to their own set of emotional and financial considerations, as these individuals will need to be reclaimed or left to the repository more often than the underrepresented individuals. The implications of this will be discussed further in the following chapter.

¹¹ During my discussions with OCME staff regarding previous drafts of this chapter, they appeared to disagree with observations made by other academics in published literature. While I wish to respect these disagreements, I believed it crucial to include the body of research regarding the repository and the families that feel underrepresented by it.

The anthropology and politics of the repository have been addressed by other scholars. As Colwell-Chanthaphonh and Greenwald (2011) describe, the remains stored in the repository have been subjected to a second victimisation. They argue that the prevention of families from participating in the fate of their loved ones' remains is intrinsically a circumvention of needs. This is not the only aspect of the World Trade Center identification project that has deeply frustrated some of the family members of the victims. Toom (2015) describes the World Trade Center identification process as profoundly political and explains that the families have no legal standing in regard to the treatment of remains. An organisation called 'World Trade Center Families for Proper Burial' brought a lawsuit against New York contending that the disposal of debris at Fresh Kills, a former landfill, would be grossly inappropriate as the debris almost certainly contained the pulverised remains of victims. As they could not prove that any further fragments above a certain size existed within the debris, and therefore could not be tested, the court ruled against them (Toom 2015). In some ways, the decision to dispose of the World Trade Center debris, which likely contained untestable, pulverised remains, at Fresh Kills is reminiscent of *Tres Equis* of Guatemala City. The unidentifiable remains are left to share a resting place with refuse, in one instance through the limitations of a justice system and the other through the limitations of current DNA testing methods.

Dr. Adams emphasised that the opposition to the repository and the Fresh Kills debris storage is concentrated within a limited number of families. It is possible that the individuals upset by these decisions are the most vocal about their feelings. It is not uncommon, however, for identification efforts to appeal to some communities or individuals and not to others. For example, in Wagner's (2008) analysis, many women were left feeling that their needs were not being met by the DNA identification

programme in Bosnia and Herzegovina. The identification process, the attributions of victimhood that emerge within it, and the prioritisation of its outcomes may not always represent merely what is practical from a scientific standpoint nor what is empowering to the living—even if a small subsection of the living. If this is the case, then it is crucial to examine other factors that might be impacting this process, especially in terms of the function of these processes within the political, socioeconomic, and academic matrix.

4.2 Maintenance of Political Narratives after Political Violence: New York City and Guatemala

5.2.1 Socio-Political Attributions of Victimhood in the 9/11 and Guatemala Examples

Attributions of victimhood in the September 11th context play a central role in the discussions of trauma related to the terror attacks. In conversations with New Yorkers regarding the attacks, the focus seems to revolve around physical proximity to the World Trade Center at the time of the attacks. Indeed, I observed New Yorkers creating a hierarchy of suffering and victimhood with other New Yorkers who were present on the day. For example, a contact who was also living in New York City at the time described her experience from many miles away and out of sightline. Her memories of that day centre upon the confusion she witnessed from teachers and parents, the frantic dismissal from school, and the ash on her doorstep she would discover later in the day. Upon hearing this, my initial reaction was sympathetic but I found myself instinctively comparing my own experiences with hers, as I was also in New York City that day. I was far closer to the World Trade Center and could see the attacks and aftermath. Along with the harried dismissal from school and the confusion of my own teachers, I was forced to walk miles through the falling ash that my friend merely saw on her doorstep, as my parents were trapped in Manhattan and New Jersey.

In fact, in the past I have plotted on a map my exact location during the attacks in order to calculate my proximity. In spite of these experiences, however, I know that someone who was even closer to the World Trade Center at the time would likely have a similar reaction to my story, and someone who was actually in the World Trade Center would have a similar reaction to that person's story, and so on and so forth.

Thus, physical proximity becomes proxy for victimhood. Levels of suffering in the September 11th context is measured in feet and inches: the closer to the point of the violence, the more traumatic the experience. This may even be reflected in the forensic anthropological data—the closer the individual to the centre of the impact, the less likely they are to be identified through OCME efforts. This dynamic is present in this context because the violence actually had an epicentre. In a context such as Guatemala, where the civil war waged for decades across the country, there is no singular epicentre. And yet, the epicentre paradigm does not effectively represent the lived experiences of survivors of trauma. Physical proximity and emotional proximity go hand-in-hand. A survivor who loses a spouse but is a thousand miles away at the time, for example, may suffer more or for longer than someone who was in New York City at the time. A first responder who entered the World Trade Centre but was outside of Manhattan at the time of the attacks will have a fundamentally different experience than someone who was in Manhattan at the time of the attacks and then left. Considering the long-term health effects on first responders [which will be discussed in more depth below], that suffering will look fundamentally different than that of someone who saw it but was not within dangerous proximity. All of this seeks to illustrate that victimhood is an identity that is defined by intersectional forces. There cannot be an appropriate definitive category of victimhood, as each individual's experience before, during, and after the violence will impact their level of trauma.

And yet, every conversation I have had about September 11th, with New Yorkers and non-New Yorkers alike, begins with 'I remember exactly where I was when it happened.' In an interpersonal context, this description of physical place orients the participants in a mutual understanding of the moment and its aftermath. In a transitional justice context, however, there are significant ramifications of understanding victimhood in this way.

The bluntness of a categorising mechanism for victimhood cannot effectively take into account the numerous intersecting factors that will determine an individual's experience with trauma. In Wagner's (2008) example, delineations of victimhood that emerged from hierarchical understandings of trauma manifest themselves in quality of life (i.e. renovated housing). In the Stoll example, these delineations of victimhood compel us to both corroborate victim testimony and then aggressively discount the same victims when corroboration is impossible (Nelson 2009, Sanford 2003). Arguably, this seemingly predominant understanding of victimhood may have even compelled Menchú to describe traumatic events as though she was physically there, as it would have more of an impact on those who could make a difference. Regardless, it is clear that without a nuanced, intersectional understanding of victimhood and our attributions of victimhood, there are observable consequences for victims of political violence that do not correspond with our understandings of trauma.

In a forensic anthropological context, victimhood is an integral facet of the process of apportioning resources. In the Guatemala example, we have seen that attributions of victimhood, and the political value of these attributions, has defined the parameters of the FAFG's remit. Instead of working as a forensic anthropological organisation that simply attempts to identify the unidentified dead in Guatemala, their work is seemingly restricted to victims of violence that fit into specific categories. There

are a number of arguments that could be made in support of such restrictions. Indeed, victims of war crimes will need specialised forensic anthropological attention, as explored in a previous chapter. Yet, this policy leaves an entire demographic of victim without access to forensic services, if we define 'victim' as a deceased person with a manner of death apart from 'natural' [e.g. accident, suicide, homicide, or undetermined]. As it currently stands, the excavations that have been performed in the *Tres Equis* section of *Cementerio La Verbena* are only of those who perished during the internal conflict itself, leaving other victims without forensic intervention. This may be linked to the political motivations of national and international governments, but these motivations are supported by non-holistic understandings of victimhood.

In the 9/11 example, there is a fundamentally different approach to the identification of human skeletal remains, although there are similarities. As an isolated, singular event the 9/11 terror attacks do not have the same systematic socioeconomic implications that persisted after the conflict as in the Guatemala example. Therefore, there are no potentially relevant demographics that are currently being underserved by the OCME in the same way. However, there may be socioeconomic factors that impact the participation of certain demographics in the forensic anthropological process [although this will be examined in the following chapter]. What is relevant to this discussion is the political motivations that influence the apportioning of resources, the attributions of victimhood by outside parties, and the narratives that surround these attributions of victimhood.

In fact, the most obvious and recent example of differentiation of victimhood is the apportioning of funds to victims through the Victim Compensation Fund, especially to the first responders who worked onsite at the World Trade Center. In a highly publicised political battle, the first responders who have not yet succumbed to the

injuries and illnesses sustained during the attacks teetered on the edge of medical disenfranchisement, as previous funding agreements were about to expire (Goldmacher 2019). The delays in this process garnered public ire and left many wondering what the motivations could be to sever medical funding for first responders (Kim 2019). Having had some first-hand knowledge of the extensive and generously funded forensic anthropological identification efforts for the deceased victims of the attacks, this juxtaposition appeared motivated by attributions of victimhood that furthered political gain.

4.2.2 Political Narratives: NYC

During an interview with an employee of the Forensic Anthropology Department at the OCME, the contact recounted the opportunity to show several visiting forensic scientists their facilities and explain the 9/11 identification process. The contact explained that these visitors all displayed some level of shock, either in the form of 'that's awesome' or 'you guys are out of your minds.' Indeed, the OCME seems to be in a unique position to offer such extensive efforts toward the identification of 9/11 victims. Dr. Adams emphasised the tremendous support the OCME has had from local government funding, and as the employee explained, the OCME never has to worry that another organisation will encroach on their 'turf.' This fear is touched upon by Thompson (2015) who observes that competition can be fierce between forensic anthropologists working freelance or in larger forensic anthropological organisations. The OCME is protected by its permanency as an organisation and feels empowered to pursue the research needed. It is likely that this attitude contributed to their openness to me. I did not pose a threat to their stability, nor could I poach cases from their docket. The contact explained how unusual this is in forensic anthropology, that many forensic

anthropologists live hand-to-mouth in an increasingly competitive workplace. This was not the first time the economic plight of forensic anthropology had presented itself during my research, but it did encourage me to look beyond funding of the organisation as a whole and consider funding of the anthropologists themselves as well. This will be examined in the following chapter.

The OCME has a fundamentally different existence than the FAFG and other similar forensic anthropological organisations. It is clear that they receive tremendous political, monetary, and community support for their work on 9/11 identifications. While the OCME and the FAFG have different considerations, they are situated in different political realities. The FAFG's work seeks justice against those that are still in power, in a system of impunity. The narrative that the FAFG promotes with its work is one that points to contemporary systems of political power with an accusatory finger. Although an official ceasefire was reached and the overt political violence stopped, Guatemala has still faced tremendous obstacles such as ubiquitous gang violence, poverty, and political corruption. Their investigations literally unearth stories of governmental violence, and as discussed in previous chapters, governments will often only enable investigations that situate violence in the past.

The OCME acts as a governmental entity, in this case, identifying decedents killed through acts of political violence on the part of foreign nationals. But, of course, there is another layer to this dynamic. As discussed in the introductory chapters, in any act of humanitarian intervention, and arguably in any act of transitional justice, there are underlying motivations and outcomes that may go unaccounted for upon first inspection (Audrey Finneman 1996, Moore 1998,). These acts of terror on American soil dominated the national security dialogue and were used to justify military engagement in other countries. It was the narrative that emerged in 9/11's wake that was used to

validate policy and warfare that otherwise would have received enormous pushback, i.e. the Patriot Act, the wars in Afghanistan and Iraq, increased border security etc. (Jones 2011, Toros 2017). While there may be unaccounted factors that could have influenced these political decisions, the bottom line is that the American government gained power from this narrative that emerged after the 9/11 attacks.

From this perspective, it is clear that the OCME works in a perfectly opposite context than the FAFG. The continuous and mammoth effort to identify victims of political violence—which inspires shock and awe among outside forensic scientists—maintains a narrative that benefits the government as opposed to vilifying it. The FAFG and OCME function differently because of their contexts, but more broadly speaking it is because they are beholden to political influence.

The New York City government funds the OCME, yet there have been other forms of monetary aid given in the 9/11 response. The United States' federal government provided many billions of dollars for the response to the 9/11 attacks across the country and an estimated 20 billion to New York City (United States General Accounting Office 2003). The federal government also contributed funding to the Victim Compensation Fund, an organisation dedicated to covering the healthcare costs of the injured and the supporting the families of the deceased (VCF.gov). This funding, however, has faced several controversies since its implementation. Stories of widespread abuse of funds at the individual level emerged, raising concerns over supervision (Committee of Homeland Security). Additionally, the Victim Compensation Fund has faced enormous federal pushback over the years, and the federal government has allowed funding to lapse on multiple occasions (Hernandez 2010). In 2019, federal hearings concerning the funding of the Victim Compensation Fund revealed that first responders who worked the World Trade Center attacks are facing long-term health

problems related to this work on 9/11. As retired officer Tom Frey reports in an interview, his deteriorating health had him teetering on the edge of bankruptcy even with the support of the Victim Compensation Fund (Frey & Pawlowski 2019). This offers an important perspective into the values and priorities of political entities after 9/11. The OCME continues to receive tremendous support for the identification of victims today, yet the injured first responders do not receive financial support—or at least this support is hard won.

This differentiation of support can be understood through the narratives surrounding victimhood, memorialisation, and international relationships after 9/11. It has been argued that the narratives surrounding 9/11 have been instrumental in supporting a new era of internationalism in United States (Hazan 2010) and in supporting the international conflicts and domestic surveillance that followed the attacks (Jones 2011, Toros 2017). As Clarke (2004) describes, the 9/11 attacks occupy both an apolitical and hyper-political space. American individuals unified around it, although in different ways—i.e. the largest anti-war demonstration in New York or in hyper-nationalistic attitudes (Susser 2004). The attribution of victimhood in this scenario wields enormous influence, as Americans from all walks of life were invested in the outcome of this violence. The deceased victims of the World Trade Center demonstrated in no uncertain terms the danger civilians were facing, or at least could face, in the global status quo. The forensic identifications of these victims solidify this danger on a continuous scale, from the moment of the attacks until today, while also demonstrating the governmental investment in response mechanisms.

The Victim Compensation Fund, however, currently maintains a separate narrative. As it stands, the Victim Compensation Fund supports first responders and those who have sustained long-term injury or illness from the World Trade Center

attacks. In the public hearings, it was the first responders who were reporting the financial hardships that their injuries and illnesses were presenting. The first responders and the deceased victim present different conceptions of victimhood within the 9/11 narrative, however. The first responder, by definition, chose to face the violence and danger head-on, and in this case survived. These first responders, while still objectively victims as was consistently argued in these hearings, did not support the same narrative of victimhood as the deceased victims who perished in the attacks themselves. The first responders represented heroics in this face of danger, while the deceased amplified the extent of this danger—which is argued extensively to have supported the development of a new historical-political moment (DeGenova 2011, Hazan 2010, Jones 2011, Toros 2017). We may also harken back to discussion of the *Sociopolitics of Migrant Death and Repatriation: Perspectives from Forensic Science* (Latham & O’Daniel 2017), a consistent theme throughout which is how deceased migrants are considered to be both the victims and perpetrators of their own demise. Perhaps the same perspective holds true for the first responders of the 9/11 attacks, that their injury and illness emerged from their choice to enter the site—regardless of intention or job description—whereas the deceased victims they entered to rescue had no such choice.

It is possible, therefore, that the tremendous support received by the OCME in regard to funding is a reflection of the political narratives that such identifications support. While this itself is worthy of reflection as a forensic anthropologist, it is important to consider whether the forensic anthropological operations are empowering and accessible to the communities it seeks to serve, and whether such operations are in part a function of political maneuvering.

4.2.3 Political Narratives: Guatemala

Let us now consider the political dynamics of FAFG funding. My Guatemala contact revealed that the FAFG refused her their services because their laboratory prioritised the disappeared from the civil war itself, and that this was a condition of their funding. During the course of this research, I reached out to UNDP, the Soros Foundation, USAID, and a number of other funding agencies that have supported the FAFG. None of these organisations responded to my requests for information. It should be noted that the ICMP [in The Hague] did respond, but explained that their grants programme would not provide funding directly to forensic organisations. The Netherlands, which was initially incredibly supportive of the FAFG, has withdrawn all support in Guatemala as a whole. They closed their embassy in 2011, reducing FAFG funding and thereby the number of DNA tests performed (Public Action Research/Ministry of Foreign Affairs of the Netherlands 2016).

My Guatemala contact had expressed dismay that Europeans and Americans do not understand the priorities of Guatemalans and have enforced their ideals onto Guatemalans in the past. While I could not confirm her prison warden story, it does tap into a longstanding problem of Western ethnocentrism in international aid. The real question is why had this happened? Was it simply that the funding organisations had not been reflexive enough, or that they had not considered the reality for Guatemalans? It is certainly possible, but it is necessary to consider an additional, political explanation.

The countries that were at the forefront of FAFG funding were the same countries that were heavily involved in brokering the ceasefire agreements in the first instance. Sweden, the Netherlands, and the United States of America, alongside several other countries, acted through the United Nations and arranged the ceasefire and the investigation into the war crimes committed during the conflict. It would make sense,

moving forward, that these countries would remain involved, yet we must consider the political implications for the narratives that emerge from this involvement. For these organisations [UNDP Sweden, USAID, the Netherlands] to embrace the idea that the violence had continued—and by extension that their funding stipulations did not consider the bigger picture of Guatemalan life—they would have to admit that their ceasefire had been unsuccessful. This in turn would call into question the effectiveness of the United Nations, and of the countries themselves, as international peace-brokers. They would, therefore, have a vested interest in maintaining the narrative that the civil war had truly ended in 1996 with the ceasefire agreement.

These dynamics, however, have been shown from the outset to be incredibly nuanced. It is likely that the motivations behind the funding for the FAFG laboratory—and even the OCME—are influenced by a combination of considerations. Without access to the individuals who actually make these decisions, or who understand the intricacy of funding policy, it is impossible to formulate a firm conclusion as to which of these influences are most powerful. It is reasonable to claim that such a framework of influence exists, and that these are likely the central contributing factors, but without additional research any further analysis it is merely supposition.

The 9/11 attacks on the World Trade Center offer two important perspectives. The first, as discussed in chapter two, is that 9/11 marked a fundamental shift within international relationships and the United States' relationship with internationalism (Hazan 2010). The World Trade Center example occurred in an inherently different context than Guatemala, propelled by the event itself. This offers an opportunity for comparison, as forensic anthropology as a response to political violence should reflect these paradigm shifts. Additionally, as an inherently reflexive project, it was logical to begin with the other contexts to which I had been exposed as a researcher. Forensic

anthropological circles are often small and overlapping, and I now firmly understood the immensely complicated nature of community gatekeeping. In this instance, however, I had an advantage. I had been running in these very circles for several years and would even consider myself to be a gatekeeper in some ways. If I were to apply my new understandings of forensic anthropology to my existing community, I could collect new data as a researcher—through my new emphasis on reflexivity—and as a member of the very community I was researching.

4.3 Reflections on Reflexivity, Descriptivism, and Prescriptivism

When I approached the legal team of the Office of the OCME, after my time in Guatemala, I had several contacts within the OCME from my time at the American Museum of Natural History and a longstanding connection with the head of their legal team. By all accounts, this made initial approvals for official interviews easier than my previous experience with the FAFG, although the OCME would not have approved a project that did not conform to their professional standards. In fact, a condition of this access was the approval of all materials that utilised the interview before they were submitted for publication. This was to ensure that the information was accurate.

While this could be considered entirely reasonable, as many contacts ask to see the completed work, this dynamic does speak to the issue of access in academic forensic research. The OCME would not approve a project that did not fit their professional values, yet my previous connections with them very likely assisted my application—even if it was only because I knew whom I should directly email—and as Dr. Adams explains, the OCME likes to be as transparent as possible about their identification efforts. Perhaps some of this is true of the FAFG as well; my initial attempts to contact them were unsuccessful, it was not until a supervisor, who had worked with them on a

separate project, followed up on my behalf that I received a reply. Knowledge of potential researchers themselves on the part of the organisation, therefore, may present a biasing influence in the research. This dynamic is also observable in my subsequent efforts to contact the FAFG with a request for an interview, which did not receive a reply as my supervisor had left both the university and the collaborative project with the FAFG. If this is consistent across the board, it presents a practical dilemma for the body of research surrounding forensic issues. Ease of access or ease of communication among members of the academic community, if influenced by one's existing network of colleagues, could influence access and exclude projects regardless of merit—and the OCME example demonstrates the value of access and communication in contextualising data. Even if all projects that are allowed to progress are deserving, if some are rejected only because the researcher is outside an established network, bodies of research will reflect the existing social and political boundaries within academe.

That being said, if academic communities or networks can be considered ethnographically, they may in turn be entitled to some level of self-protection akin to gatekeeping—and may even exhibit isolating behaviours towards those they perceive as outsiders. From a purely descriptivist standpoint, this would be a fairly logical and straightforward analogy. Academics are, after all, people. Groups of people with a unifying identity, such as academic achievement or interest, may rely on those concepts of shared identity to inform their decisions. From the reflexive, and even prescriptivist, perspective we can analyse how these networks of inclusivity and exclusivity could be affecting the research on which we rely to perform well. Rarely is the prescriptivist perspective appropriate in relativistic anthropological research, except perhaps within the realm of reflexive analysis—where we consider our own limitations as anthropological researchers, and the effects of our involvement in the community we

are observing. The intersection of these two concepts, the ethnographic study of an anthropological academic community, therefore, presents a complex theoretical puzzle. From a strictly relativist and descriptivist perspective, groups of anthropologists are inherently entitled to the same community dynamics as the groups they study. Yet, anthropologists may also be beholden to larger academic considerations, which would open them up to prescriptivist critique. These considerations include the reduction of bias, diversity of research [and researchers], and commitment to reliability. And if they *are* beholden to these ideals, it would be difficult to apply this to all academic communities. If this community extends past cultural boundaries [such as forensic anthropology conducted in New York versus Guatemala], this dynamic becomes significantly more complicated. This chapter, and thesis overall, attempts a nuanced approach to these issues, but it remains an important area of continuing pedagogical research across the academic disciplines.

Ease of communication and access are not the only differences to consider when the FAFG and OCME examples are juxtaposed. As explained above, I was not an outsider to the OCME. My identity, intentions, and academic rigour had been established well before I had made contact about this thesis. The FAFG had not met me, nor heard of me, before I had contacted them, and perhaps simply presenting a supervisor they did know was not enough to compensate for this lack of knowledge about me as a researcher. There existed between these OCME contacts and myself a level of trust that I would conduct fair, well-intentioned research. This trust was certainly informed through previous meetings and even friendships, but it may have also been informed by their knowledge of other aspects of my identity. I was of the same cultural background, a native New Yorker, and as such we were in an equal cultural power dynamic. This may not have been the case with the FAFG. Although they had the power to grant or deny

access for my project in Guatemala, I certainly had some power that was unaccounted for in our social dynamic. Perhaps the FAFG could not be sure that I would represent them fairly, or that I had approached them with good intentions. Even if well-intentioned, my work may have still reflected some paternalistic bias. It is fair to consider, although I hope my emphasis on reflexivity throughout this work would have compensated for any social biases I brought to the table.

4.4 Integration of Observations

The Guatemala and 9/11 examples present interesting and important intersections between attributions of victimhood, how these attributions support political narratives, and how these narratives impact how responses to political violence are funded—and perhaps even the methods and data used in forensic anthropological identifications. We can see from the available data that the OCME forensic anthropological operation has presented some disparities in rates of identification—although this is not the fault of the OCME, rather an opportunity to explore forensic anthropological methods. It is also possible that the very nature of the sample does not represent the victims equally. Additionally, the approach to returning, storing, and memorialising the 9/11 victims' remains may not fully take empowerment of some living communities, and the disparity between some demographics of victims and others, into account. The [contested] lack of inclusion of families in the decision to house remains in the repository is one example, but additionally the terms by which remains are returned to families might contribute socioeconomic delineations between victims.

The heavy emphasis on fragment identification, even when new identification rates are low, reveals the values of the government bodies funding these mechanisms

and may in turn reflect the values of their American constituents—who have been shown to be deeply impacted by these events and responses to them. The difficulty that other response mechanisms have had in obtaining funding further demonstrate these values, and with a functional understanding which merges political, socioeconomic, and academic factors, it is possible that these differing values are derived from the political benefit of contextualising past violence in the present and a narrative struggle between victim and perpetrator in first responders' own injuries. These are similar to the dynamics in Guatemala, but manifest differently due to the dissimilar nature of the forensic and political context.

4.5 Visualising the Matrix

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | X | | |
| Access | | | |
| Empowerment | | | |

Figure 30: *The Forensic Economies Matrix: OCME and Gov't*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | X | | |
| Access | | | |
| Empowerment | | | |

Figure 31: *The Forensic Economies Matrix: VCF and Gov't*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | | |
| Empowerment | X | | |

Figure 32: *The Forensic Economies Matrix: Disgruntled Families and the Memorial*

5. Though the Cracks: Examining Intersecting Influence in Forensic Anthropology

5.1 The Missing, Unidentified, and Those Who Love Them (MUL)

At the start of this research, a supervisor summarised my research aims as ‘identifying those who fall through the cracks of forensic identification.’ I have since found this a useful way to contextualise my observations, especially as this perspective contributes to a transformative justice model. This thesis has discussed the political, and some methodological, imperatives that have contributed to victims and families falling through the cracks, yet there remains room in this analysis to consider experiences on the individual level, and how these experiences fall into political, socioeconomic, and academic quandaries.

The first half of this chapter considers the socioeconomic influences on the missing, unidentified, and their loved ones within the forensic anthropological process; this demographic is abbreviated as ‘MUL’. These analyses include gender, gender identity, poverty, and ethnicity. It attempts to contextualise these experiences within functional paradigms, analysing how socioeconomic systems contribute to these experiences within forensic anthropological processes and in the circumstances that necessitated these endeavours.

The second part of this chapter focuses upon the experiences of forensic anthropological practitioners and the organisations that employ or enable them abbreviated as ‘EAF.’ It demonstrates how socioeconomic status is impacting forensic anthropologists by examining the testimonies of human osteologists who have experienced gender-specific limitations on their wellbeing—such as sexual harassment and assault while at work—the desperate economic straits of some forensic anthropologists, and the ramifications of this financial status quo on the discipline.

5.1.1 'Birth Pangs of a New Era': Gender-Based Violence During and After the Guatemalan Civil War¹²

The particular brutality the Guatemalan paramilitaries inflicted upon women during the civil war is well documented. As part of their scorched earth policy, death squads subjected indigenous women, and their children, to horrific torture and death. In Afflitto and Jesilow (2007), women survivors are described as holding a special place within the community. They were the keepers of stories and wielded influence coupled with a desire to participate creation of new narratives (Sanford 2003).

The continuing violence against women in Guatemala reflects their position of betwixt and between. They are at once a symbol of perseverance commanding reverence, and a target for violent crime often ignored and diminished by authorities (Sanford 2008, Sanford 2011). After the ceasefire in Guatemala, the women bore the burden of keeping memory alive—not just in the context of Afflitto and Jesilow (2007) and Sandford (2003), but also in the realm of forensic anthropology. Across Latin America, groups of survivors and the loved ones of the *desaparecidos* have banded together to press authorities to investigate allegations of state violence. These groups have pressured global and local governments to investigate victims of violence, often through excavation and identification, and to return remains to their families. What many of these groups share is their origin in the organising actions of women.

As Rosenblatt explains, '[s]ome of the most famous and influential organizations in the history of human rights activism' were formed at the hands of women as a response to forced disappearances (Rosenblatt 2015: 2). The *Abuelas de Plaza Mayo* [Grandmothers of Plaza Mayo] and the *Madres de Plaza Mayo* [Mothers of Plaza Mayo]

¹² 'Birth pangs of a new era' is a quote from an interview with a Guatemalan man featured in Wilkinson (2004: 64)

are organisations created by the mothers and grandmothers of missing children from the Argentinian conflict (Rosenblatt 2015). Many of these children were forcibly taken from their families and placed with military-affiliated families, sometimes literally cut from mothers' wombs in internment camps (Rosenblatt 2015). While state actors did not murder these children, the kidnapping of children was an act of state violence, and young parents in these camps were almost always killed (Rosenblatt 2015). In the Argentina example, these organisations were created and maintained by middle-aged women, as young people were more likely to be detained and middle-aged men were often the breadwinners for their families (Rosenblatt 2015). The socioeconomic identities of these women allowed them to become the backbone of Argentinian humanitarian activism.

In Guatemala, the socioeconomic identities of indigenous women influenced their social role within the 'post-conflict' context. Indigenous women—especially widows—often consider children symbolic of their future. Afflitto and Jesilow (2007) observes that remarriage within Guatemalan indigenous communities is rare, and widowhood can be described as a new state of being. Particularly during and after the Guatemalan conflict, war widows were often devoted to their husband's memory as a part of their personal identity. Their children with the fallen guerrilla fighters were emblematic of their husband's identity and represented the continuation of their fathers' identities.

Therefore, the specific violence committed against women and children during the Guatemala civil war fulfilled many goals. In a practical sense, the scorched earth violence was intended to intimidate and demoralise any guerrilla fighters and the fighters' families, while also acting as a method to coerce information from these families. But more than this, the violence against women and children was symbolic,

representing the destruction of their identity and of their future. As Korb (2015) argues, state violence, especially in the contexts of civil war, is demonstrative—within the bodies of the dead are messages for the living. Sanford (2008) argues that the message left in the corpses of murdered Guatemalan women was—and is—the explicit intent to subjugate and eradicate.

The surviving women of the Guatemalan civil war bear the weight of these identities, holding aloft their stories, and pushing for justice. Even during my fieldwork in Guatemala examining contemporary violence, this dynamic revealed itself. It was the daughter of the missing man who visited the hospitals and morgues, and who pressed the police to investigate her father's disappearance again and again. My contact, her sisters, her grandmother, assumed the burden of justice—she was the keeper of his story.

And yet, after such gender-based violence, forensic anthropological methods are only beginning to take this profoundly nuanced understanding of gender into account (Gowland & Thompson 2013). In an archaeological context, excavation and analysis of human remains in the field yields more male than females (Weiss 1972, Walker 1995). In a laboratory setting, this gap is smaller (Thomas et al. 2016), although more indeterminate classifications are given. The dynamic of this disparity is not fully understood. For instance, there may be more males in mass grave contexts (archaeological or otherwise) because more males participate in violence. It could also be that female skeletal remains are generally more gracile and smaller in stature within a population, making them more susceptible to decomposition or taphonomic processes. Or this is a pervasive stereotype that human osteologists have incorrectly relied upon (Walker 1995). Or it could be that forensic anthropologists are more likely to categorise female skeletons as indeterminate or male than they are to miscategorise

male skeletons. DNA analysis could alleviate some of this problem, yet in a commingled gravesite after years of degradation, DNA extraction and analysis are not always possible (Garcia et al. 2009). Johnston and Stephenson (2016) have also demonstrated that DNA testing success is influenced by sex in Guatemala—with women at a statistically significant disadvantage. The FAFG has not made statistical reports of their identifications readily available. An examination into these statistics would offer valuable insight into how a forensic project does or does not compensate for these potential problems.

My contact within the OCME observed that, in the employee's experience, misidentification of biological sex was far less likely to occur than the misidentification of other categorisations—such as ancestry. This is not to say, however, that it is impossible or that the contexts in which the OCME employee works are equivalent to the context of the Guatemalan civil war. Mass interment contexts, where remains are commingled, may influence determinations of biological sex. As Nakhaeizadeh *et al.* (2014) observe, identifications of biological sex can be influenced by cognitive bias based upon forensic anthropologist expectation. This can be mitigated by DNA testing, so this aspect of gender influence may only represent a small part of the forensic identification process. Yet, larger systemic problems emerge when considering other aspects of gender-specific barriers to identification in Guatemala, include systematic violence and impunity (Sanford 2008, Sanford 2010).

5.1.2 Transwomen and Sex Workers in Contemporary Guatemalan Investigations

During our trip to the *Ministerio Público*, my contact explained another way that the status quo was failing Guatemalan women. As my contact and I waited outside the office for the new investigator to see us, she pointed out a large sign standing at the

entrance to a different cluster of offices next to where we were seated. She explained that it was the violence against women unit, a division specifically created, as its name suggests, to tackle crimes committed against women. This seemed like a victory to some extent—the government was at least admitting there was a problem with contemporary violence against women. Yet my contact did not seem to agree, and revealed that this unit did not acknowledge the existence of transwomen. With this policy, she wondered how they could possibly tackle violence against women.

This was not necessarily surprising, as Guatemala has a well-documented history of anti-LGBTQ discrimination. Minority groups, such as the LGBTQ community, have been subjected to high levels of discrimination and violence, which is thought to be under-reported. 72% of LGBT individuals have reported restrictions on their rights to health, work, and education (OutRight 2012). Transwomen in particular have reported ubiquitous housing discrimination and 29% of transwomen respondents identified the police as the primary cause of discrimination towards them (OutRight 2012). The police have even been implicated in acts of violence against transwomen in Guatemala, including murder (Marks 2006).

Considering this, it made sense that in this context the exclusion of transwomen would permeate Guatemala's legal institutions. What my contact said next, however, raised a series of important forensic questions. She said that if they were to find a murdered transwoman, they would misgender her on official records. Again, it is important to remember the context in which this is occurring. Transphobia is likely to be a contributing factor, but there are other issues at play. If violence against transgender people is not recorded as violence against transgender people, there is no way to analyse the crimes committed against transgender people. This fits neatly into the previous analysis of the *Tres Equis* cemetery—obfuscation of numbers and nature of

the crime limits our ability to understand crime in Guatemala. But, additionally, it presents a deep-seated quandary for forensic anthropologists and their methodology as a skeleton will only indicate [and only to a subjective extent] the biological sex of the deceased, not his or her gender identity. Not only does the Guatemalan legal system allow transwomen to fall through their investigative cracks, forensic anthropology would do so as well, not necessarily through the bias of the forensic anthropologist, but through the limitations in the methods themselves.

To complicate the issue further, forensic anthropologists work within legal systems and utilise legal definitions. The legal definition of the terms 'male/female' will entirely depend on the system in which the forensic anthropologist is working. If there is no legal definition of 'transgender', or no legal distinction between biological sex and gender identity, then the forensic anthropologist will be compelled to use the terms available to them. This will inexorably exclude demographics from complete forensic analysis based upon gender identity and maintain social boundaries within the application of forensic science.

These boundaries not only exclude transgender people from the forensic process, but also present their families and loved ones with particularly difficult barriers to identification. Should a transgender person remain unidentified and receive a pauper's burial in *Tres Equis*, even the menial information included in the burial ledgers would be useless, as it would likely misgender the unidentified person. The families will then have to navigate a legal system that does not recognise the identity of the missing person and may very well be left wondering, like my contact looking for her father, how to effectively move forward in this system if they are too intimidated to reveal their missing loved one is transgender.

The exclusion of gender identity in a forensic context may present additional problems. My contact in the OCME observed that human remains can be difficult to correctly identify if the police rely too heavily upon social identifiers—such as race. The loved ones of a transgender person or the wider community may not identify that person with their sex at birth, even if the police do—which may put families at odds with the police investigations, even if they know to search for biological sex at birth on official records. If buried as an unidentified body, and unless other identifying characteristics are present, a transgender person will not even have the [limited] benefit of the information held in *Tres Equis* if a forensic exhumation should occur. It is also possible that a transgender person would not have been identifiable as trans to the general public, limiting the investigation should the police only consider a victim's biological sex. While family members and close friends may know of their loved one's gender identity, the community at large may not. The exclusion of a victim's gender identity, therefore, would prevent a full investigation into that person's death from a practical standpoint. Limited investigations such as these would inevitably lead to a disproportionate number of transgender people left unidentified. And as this dynamic limits the knowledge that can be gleaned from official reporting, it is impossible to obtain reliable information or the statistics behind such a problem.

The potential reluctance of the police to fully investigate a crime involving marginalised demographics should also be considered. To misgender an individual in a forensic context would make it difficult to properly investigate or identify a victim, and it is possible that this is the intention. Not only do such policies obfuscate the numbers and prevent researchers from obtaining complete information about the issue, but they also maintain bias within the forensic institutions.

Sanford (2011) recounts the story of a young cis woman, Claudina Isabel, murdered in Guatemala City. When the police discovered her body, and observed that the victim had her navel pierced, they determined that she was a sex worker. This determination led the police to lose valuable time and compromise the crime scene, because her identity as a sex worker indicated to them that no one would care if they mishandled the investigation or if they did not investigate at all. To the police, dead young women only matter if they adhered to a strict set of social rules, attributing victimhood to some groups of women and not to others. These attributions may be made solely on the presence of a navel piercing, as the young woman in this scenario was not, in fact, a sex worker. There was an enormous uproar when information about the police malpractice in this case emerged. Those who spoke out against them, such as her family, were intimidated and terrorised by the police. For example, the police came to the woman's funeral and took forensic evidence [nail clippings, clothing] at the service that they could have easily done before the body was released for burial. This devastated her family and friends (Sanford 2011). It appears, however, that the uproar was focused on the incorrect identification of the young woman as a sex worker, not the police's treatment of victims who are sex workers.

It appears, then, that forensic investigations [anthropological or otherwise] in Guatemala revolve around the extent to which people care about the victim, and this is determined by the extent to which victimhood can be ascribed to an individual. If there is no advocate for the victim, whether this advocate comes in the form of a daughter pressuring the police to investigate her father's disappearance or a parent whose child was murdered and left in the street by police, the investigators will not move the case forward, let alone attempt to solve it—especially if the advocate cannot pay, which will be discussed below. The extent to which people care or advocate for victims, however,

will depend on the cultural mores and expectations of the community—even if we consider the functional benefits of such systems for those in power. How then does anthropology tackle such a problem? The function of forensic anthropology is to assist in the investigation of a crime, and if that crime was committed against an outcast it should not matter from an academic perspective. If forensic systems and methods marginalise specific demographics, then as scientists, forensic anthropologists should object. And yet, if that marginalisation has emerged from the cultural expectations of one group, then relativism demands that we consider these expectations without moral judgement.

5.1.3 Gender-Based Considerations in the World Trade Center Operation

As seen in the analysis of the previous chapter, there are many avenues of further research within the OCME identification efforts. Of the public record datasets, only two were readily accessible and the data contained in these statistics give a general overview of their efforts. There are data that are not included in the reports but can be made available by the OCME that would offer insights into demographic inconsistencies, such as gender, that might be present in the identification effort. Yet, from what was available at the time of this research, it is unclear what dynamics might be at play at this time.

The forensic anthropological field analyses that would identify biological sex in a context such as Guatemala, are not relevant in a highly fragmented, commingled, and thermally damaged context such as the World Trade Center. The more subjective methods of sexing, like cranial or pelvic morphology, require at least some skeletal aspects to be undamaged upon recovery. The OCME is currently working with extremely damaged skeletal remains. The DNA testing, however, should limit any

erroneous sex identifications performed in the field, as well as limit any disparities emerging from socioeconomic differences that may present themselves in an investigation—i.e. transwomen and sex workers in Guatemala—although this is not guaranteed, i.e. sex based disparities in DNA identification (Johnston & Stephenson 2016).

According to CDC reports, the demographics in the World Trade Center on 9/11 were highly skewed towards men with 2,094 male victims to 621 female victims, with non-Hispanic white victims representing the largest demographic at 76% of the victims. In many ways, the victim demographics of the World Trade Center mirrored the socioeconomic strata in corporate America at the start of the new millennium (Bertrand & Hallock 2001). Therefore, the gender influence in this context is distinct, with men representing the most intensely impacted during the attacks. This is not to say that more women died in the Guatemalan civil war than men, but rather that women are reported to have faced an intensity of torture and violence that men who were tortured and killed in Guatemala may have not. Further data from the OCME could elucidate this aspect of their forensic process for World Trade Center identifications, including how many men are identified in comparison to women and if this rate of identification is proportional.

5.2 De Los Pobres: Economic Considerations for the MUL

5.2.1 Economic Dynamics in the Guatemalan Forensic Process

The Guatemalan conflict may be attributed to many interwoven factors. A major contributor to the conflict that can be considered on its own, however, was the systemic socioeconomic inequality that still affects the country today. Poverty was such a prominent aspect of the conflict that 'De Los Pobres' [of the Poor] was taken as the

name of a resistance movement during the conflict—seeking to represent the needs of the poor in a post-colonial, militarised country (Macallister 2010). While socioeconomic inequality stood as dominating force in the war, these inequalities were never resolved and poverty and violence remains at crisis levels in Guatemala (Smith & Offit 2010)—and these delineations between the rich and poor are represented in contemporary systems of identifying the dead in Guatemala today.

Socioeconomic status defines one's relationship with these forensic systems in two ways. First, a person's physical insecurity is fundamentally interconnected with their livelihood insecurity (McIlwaine & Moser 2003). The nature of the gang violence in Guatemala puts certain demographics at more risk than others, as those with money can protect themselves by paying off police officers to handle the problem—as one Guatemalan contact revealed—or by paying off the gang members themselves.

Furthermore, wealth will determine how effectively the police will investigate the crime. As demonstrated in my primary contact's case, the investigation into her father's disappearance was dependent on her active involvement with investigators. The onus was repeatedly placed upon her to move the investigation forward. This required her presence in Guatemala City, taking her away from her work in Lake Atitlan. When she pursued DNA analysis, she was told that her only option was a private laboratory and that she would have to pay thousands of US dollars out of pocket for the test. However, unless the *Ministerio Publico* begins a systematic DNA collection policy and creates a database of DNA samples from unidentified bodies, there will be no samples with which to compare my contact's DNA.

For my Guatemala informant, the forensic tests were clearly out of her financial reach, but more insidiously, the investigation itself was financially out of reach. By the time I had arrived in Lake Atitlan, she could not easily afford the bus fare into the

Guatemala City. She was open about this with me and requested funds to make the trip to the *Ministerio Público* that I had requested. This meant that the investigation had ceased in the intervening years. In this system, socioeconomics becomes a dominant influence in the administering of forensic science. Not only are the poor more likely to become victims of violence, they are less likely to be given access to forensic services, leaving their cases cold. This is not a unique dynamic within forensic cases, Rojas-Perez (2015) discusses the systemic nature of this problem in a Peruvian case—plaintiffs in one trial could not afford the 10-hour bus trip to attend the hearing, impacting which narratives entered the public discourse.

Thus, the relationship between poverty and violence becomes cyclical. Poverty leads to greater exposure to violent crime, the investigations into which require money, which then pushes families of victims further into poverty or forcing them to abandon justice. The impunity that inherently follows enables further crime. This cyclical disadvantage for the poor represents an advantage for the upper echelons of Guatemalan society, creating a system of impunity that protects corrupt wrongdoings while retaining protection from crime with wealth.

The influence of socioeconomic status is not only contained within these systems, it is also clearly evident in the attempt to study such systems. Here, socioeconomic and academic influences intertwine, using money, access, and empowerment to establish relationships between actors. When I arrived in Lake Atitlan, I had enough money to fund my research—although these were my personal resources. I was able to offer her the money to travel back to Guatemala City and re-establish a relationship with the investigators of the *Ministerio Público*. In exchange, however, she would take me with her and share her experiences with me during this time. This relationship was not actively set up in this way, but this was the outcome nonetheless. I

requested her help and asked if she would take me to the *Ministerio Publico*, she agreed and requested I fund the excursion as she could not afford to fund her own travel. Even had I not offered her money for the travel expenses, I still possessed assets that would benefit her. This thesis disseminates her story and its contributions to the research surrounding transitional justice may improve her circumstances as the daughter of a missing person. Her journey with me has made this thesis possible.

Within this framework, however, any quid-pro-quo relationship in research could be considered problematic—and perhaps the competitive, resource driven paradigm in academia is problematic. But in order to imbue this particular situation with nuance, it is necessary to consider the other dynamics of my relationship with my contact. While the fundamentals of the relationship were research based, we also bonded as friends during my stay and after. Our interviews together were important, but our other conversations—our casual conversations—also defined our relationship. It would be difficult to go through such an experience and not bond with those who experienced it with you, and I believe this gave me valuable anthropological insight into her feelings during our trip. It would also be fallacious, when arguing in support of a person's empowerment, to deny the existence of that person's agency previous to your involvement. Had she truly not wanted to visit Guatemala City again, and had she felt that my insistence that she could choose the extent of her participation in my research without any ramifications was insincere, her financial situation would have acted as a valid reason to refuse. She approached me and actively asked for travel reimbursement, I did not actively offer the reimbursement as a solution to her financial problem. Vanderstaay (2005) describes the intricately complicated dynamics of money within ethnography, as his payment to a young informant for his interview time led to a drug deal, a murder, and prison sentence for the informant. Yet, Vanderstaay argues that

broad and structured guidelines to accommodate these ethical questions cannot realistically exist, and we must simply learn from other ethnographers' experiences when possible (Vanderstaay 2005).

In this scenario, money literally changed hands to enable research. Perhaps this was not as explicit as paying someone to do an interview, which is generally frowned upon across disciplines, but money has still influenced the academic dynamic. Yet, proper reimbursement for involvement in academic research is expected and encouraged—i.e. paying translators. It is worth considering, then, if this is fundamentally different than an academic receiving a grant to perform fieldwork. Academics are beholden to expectations of original research and publications to maintain their careers, just as a contact might be beholden to a researcher. This dynamic between academics, researchers, and field forensic anthropologists will be discussed in detail in the following sections.

This dynamic cannot be completely resolved. There will always be some aspect of inequality when the goal of the research is to address the experience of marginalised groups, whatever the discipline, as researchers are inherently more empowered than the people they are researching in these specific contexts. But it may not necessarily mean that the research itself is problematic, especially if these inequalities are discussed in the analysis and each contact is considered with respect that is free of paternalism.

5.2.2 Economic Dynamics in the World Trade Center Forensic Process

The OCME example may be free of some of these influences, as it maintains a well-funded position within the local government. Yet, the socioeconomic circumstances of victim's families may influence their interactions with this forensic

organisation in an entirely different way. Without a full ethnography of the victim's families, it would be impossible to say if their interactions with the OCME were similar to those dealing with the *Ministerio Publico*. However, during my discussions with OCME employees, it became clear that every bone fragment related to the World Trade Center attack is tested and unidentified individuals outside the World Trade Center operation who are not identified have an official record, which includes DNA material for future testing. This already indicates a commitment to identification that is apparently absent in Guatemala, as the bodies buried in *Tres Equis* do not appear to be properly categorised by any official records. Of note in the OCME example, however, are the circumstances in which family members or loved ones must pay for services. The forensic process itself is free for the families but the OCME is legally obligated to release remains to funeral homes and not to the families themselves. These funeral homes charge a fee for their services. An OCME employee emphasised that they cannot recommend a particular funeral home but may provide a list to families from which to choose.

This may not seem like an unjustifiable burden; funeral homes are businesses and will charge for their services. The problem emerges in a context such as the World Trade Center attack, where the very nature of the violence has left the victims' remains highly fragmented. As each bone fragment is given a case number, and not all fragments are found together or within a similar timeframe, families may receive victims' remains in pieces over the course of years. In each instance, the remains can only be released to a funeral home and for a fee. Each fragment, if released to a funeral home, could be interred with the rest of the remains if the families can afford to do so. The alternative, as mentioned in the previous chapter, is to sign a document stating that the OCME

should not notify upon the discovery of additional remains. These unclaimed remains are then kept in the special repository in the 9/11 memorial.

It is clear that the fragments collected and identified by the OCME are predisposed to come from previously identified individuals during the period studied. This research cannot determine the reasons behind these discrepancies, but they do exist. With an overemphasis on the identification of remains attributed to previously identified individuals, the OCME identification efforts expose specific groups to the reclamation and interment process more frequently than others. The nature of the violence and of the forensic process here may burden families of the violence financially in ways other acts of violence would not. It must be asked then if the families of the victims were influenced by finances to fill out the form requesting the OCME to stop notifying them, or if they left the remains in the repository because they could not afford to claim them. When I asked the OCME employee about this dynamic the employee did not know but offered me the names of organisations that support 9/11 survivors and the families of victims through donations. The employee also explained that such organisations could offer monetary support in these situations. Of the webpages for these organisations that the employee offered, all were dead links—and with them, one can assume, the ability to help the struggling families in question is gone as well.

This presents an additional type of individual in the forensic anthropological process heretofore unconsidered in this thesis. At the outset, this thesis has examined the missing, unidentified, the anthropologists, and those who fund them. Now it is prudent to include the identified person in this analysis. In the World Trade Center example, it is the repeatedly identified person who is affected most by socioeconomic influence—or the families of the identified person. In this case, the more successfully an

individual is identified the harder the financial burden may be on the families. But perhaps this is too narrow an understanding of the situation.

In my conversations with the OCME employee, it was emphasised that all New York City residents are 'entitled' to a burial on Hart Island if they cannot afford one. Although, the employee observed, no families of the 9/11 victims have chosen this option, as the repository is available. I found this language compelling—a pauper's burial performed by incarcerated individuals [although the employee did not mention this aspect of the process in our interview] in New York City is considered an entitlement. This kind of burial seems not to carry the same cultural understandings and connotations as a pauper's burial in *La Verbena* in Guatemala, nor does the repository represent the same obfuscation of memory as *Tres Equis*. Indeed, the repository represents a different type of pain and struggle for some families that, as the last chapter examined, holds a politicised power. The interments for the unclaimed [both identified and not] are presented as rights of New York City residents, at least by some employees of the OCME that I spoke to during this research. To examine how the beneficiaries of these interments, or rather their families, view Hart Island or the repository is a compelling topic for further research—as we know some families struggle deeply with the existence and role of the repository (Colwell-Chanthaphonh & Greenwald 2011, Toom 2015).

The OCME employee offered a perspective on Hart Island and the repository that possesses a positive set of connotations. This may reflect the employee's individual perspective, but it may also reflect a more broadly held belief about the role of the repository and Hart Island. As Dr. Adams noted, they have more than 200 family visitations per year with largely positive feedback. If these are commonly held perspectives of those in charge of the identification process and for a proportion of the

families, then this could explain, at least in part, the discrepancy between the process of interment and memorialisation of the remains in the repository and the deeply emotional objections of some of the families. Assuming that many OCME employees believe the repository is a positive and respectful way to inter remains, they may not have anticipated a negative reaction to the repository on the part of some families.

The methodological overemphasis on reidentifications may be attributed to the nature of the violence in the World Trade Center example. The epicentre of the violence produced catastrophic conditions, environments where human remains are highly unlikely to survive (Mundorff 2008, Mackinnon & Mundorff 2007). Therefore, those closest to the epicentre may be more difficult to identify. The socioeconomic strata of corporate America were represented almost literally, but certainly symbolically, within the World Trade Center. While the price of rent for the original towers is difficult to find, rent rates for One World Trade is available, ranging from \$69.00 per square foot for lower floors to \$80.00 per square foot for higher floors (onewtc.com). If this held true for the original World Trade Center, and office spaces on higher floors cost more to occupy, the higher the office within the building, the higher in the broader economic strata as well. It is possible, therefore, that the more successful operations and their employees were subjected to more catastrophic environments. In some ways then, the socioeconomic status of the victims is inversely represented than in other forensic contexts—where the wealthier demographics are more poorly served by the forensic anthropological response.

The social and cultural approaches to claiming the dead for interment is as varied as there are cultures in the world—and Fournet (2015) argues that the treatment of human remains, and the living's interaction with them, are intrinsically connected to concepts of cultural and human identity. New York City presents a

particularly difficult context in which to anticipate such approaches to reclaiming the dead. As an immensely globalised city, the traditions, desires, and needs of each family claiming remains may vary enormously. The OCME attempts, to the best of its ability, to honour these varying needs (OCME). It has been noted, however, that to at least some of the families of World Trade Center victims, to claim and inter remains is an integral part of the grieving process. In one example, Dr. Adams explained in our interview, the family of a victim requested and was granted the vial that was used during the DNA that identified the victim. The vial no longer contained any material, as it was destroyed during testing, but it represented the only remains found of this individual. The vial was buried in lieu of remains. In this case, the need to memorialise victims through the burial of remains was so profound that microscopic remnants of the remains, which may not have actually existed in the vial, were enough to constitute an individual. Such a profound need may never be fulfilled the repository for some families, nor perhaps would it allow some families to willingly choose never to be notified again.

This is not to say that there is no support for families of the deceased. The Victim Compensation Fund, discussed in the previous chapter, was established by the federal government in the aftermath of the attack to compensate victims or the families of the deceased. In order to receive this compensation, applicants were forbidden from pursuing legal action against the airlines involved in the hijacking (Hadfield 2008, Tinari et al. 2006), which limited the victims' avenues to justice. In order to receive this compensation for the death of a family member, applicants had to complete the process by December 2003 (oig.justice.gov), well before the start of the 2006 excavation. According to Victim Compensation Fund reports, there were 2,963 death claims filed [representing 98% of families, according to these reports] and 2,880 were granted compensation [this number includes victims from the other areas than the World Trade

Center]. Harder to find is the eligibility criteria for the death compensation, why some cases were denied, if there were limitations on how the money could be spent, and the average amount granted for each death compensation. Although the final report of the Special Master indicates that compensation was based upon income, and that reimbursement for burials would be considered on a 'case by case basis' (Exhibit C p. 6, SecurityPolicyLaw.sry.edu 2012). Thus, the VCF and the OCME operation are intertwined, as the fund could potentially reimburse families for the burial of loved ones—although it is not clear what the eligibility requirements or limitations might be in these scenarios.

The webpage only contains information regarding eligibility for current VCF applications, which does not include death compensation, and internet archives only go back as far as 2017¹³. But at the very least, the compensation given to loved ones of the deceased was offered on the condition that no legal action against the airlines was pursued, and Tinari (2006) observes that the administrators of the VCF were influenced in their award decisions by outside factors other than the facts presented at VCF hearings. This is a clear comingling of political and economic influences within the official response to political violence. And if this compensation was one of the limited avenues for families to achieve economic stability, the systematic nature of the socio-political in the lives of the individual begins to emerge.

5.3 The Excavators, Anthropologists, and Those Who Fund Them (EAF)

The other side of this socioeconomic coin in the forensic identification process is the experience of those conducting the investigations. With a reflexive emphasis, it is

¹³ This was determined using the Wayback Machine (archive.org)

necessary to consider our own interactions with gender, economics, and ethnicity during our work. This section will examine personal experiences with these influences and the stories from colleagues in the forensic anthropological and human osteological fields, abbreviated as EAF.

5.3.1 Machismo to #MeToo: Gender Considerations for the EAF

We have spoken largely about the limitations of access and empowerment within communities of survivors and victims of political violence, especially as it relates to gender, socioeconomic status, and political narratives. Yet there is a crucial facet of this dynamic in the experiences of the forensic anthropologists themselves, which demonstrates the integration of academic influence and social barriers. Gender-specific barriers present themselves for the forensic anthropologists and other individuals that are involved in the forensic process.

During my fieldwork in Guatemala, I had the opportunity to sit down with an archaeologist who often works with archaeological human remains, to talk about his experiences and the factors that drove his choice to leave behind the world of contemporary crime reporting. We met during my time in Antigua and bonded over our similar experiences working with human remains. He agreed to an interview to discuss how our experiences have been different, and how some of those experiences might be interwoven with social concepts such as gender. As a local *Guatemalteco*, this archaeologist had been alive during the Guatemalan civil war. He described his fear as a child when people from his neighbourhood would disappear, either fleeing the violence or forcibly.

As an adult he entered the world of television reporting, often covering the violent crime that is a common occurrence in Guatemala. He described how it was easy

at first to feel desensitised to the death and the presence of bodies, which were often included in the background of the television report. He remembers eating pizza with his colleagues next to one of these bodies that had not been moved yet, and that it did not faze them. Yet, this was not to last. It became harder for him to disassociate the corpses from their identity as once-living human beings, and he began to feel deep sadness, anxiety, and isolation because of this work.

From here, however, he was in a conundrum. He described this feeling of isolation as functional—that he and his colleagues would intentionally isolate their feelings of stress and sadness because just to admit they had these feelings, let alone to discuss them, would be shameful. He explained that this sense of shame emanates from what he called ‘machismo culture’, an idea in Guatemala [and elsewhere in Latin America] that men must be masculine to be respected, and that masculinity must always exclude anything that could be construed as weakness—including emotions such as anxiety or sadness. Feeling incapable of expressing his distress to his colleagues, and knowing that there would be little to no support for him if he did disclose his feelings, he decided to leave the world of television reporting entirely. He said that even now when he works with archaeological remains, this is often distressing for him.

This lack of emotional support for those who work with human remains is also present elsewhere in Latin American forensic anthropology. As one colleague noted, a team of forensic anthropologists in Colombia felt that there was little recognition of the emotional labour involved in their work. Indeed, Orlate-Sierra (2019) reflects on her ethnography of Colombian forensic anthropologists and describes the invisibility of both their efforts as forensic anthropologists and their emotional efforts as human actors in exhuming victims of violence. This is reminiscent of the experiences of other forensic anthropologists, especially in mass casualty scenarios. Sledzik and Mundorff

(2016) describe the psychological difficulty that forensic scientists face, especially if they emotionally connect to the remains. They report that the presence of personal effects, child victims, and the 'grotesqueness' of the scene are stressors (Sledzik & Mundorff 2016:490). In such cases, the ability to engage in comradery with colleagues and the emotional support received in their personal life, e.g. a spouse, were deeply helpful (Sledzik & Mundorff 2016).

Machismo culture in Guatemala presents the men who work with human remains, and by extension their colleagues, with an unsustainable work environment. These cultural expectations of masculinity isolate human osteologists in need of support, and if such expectations force them to leave the field entirely, this will bias the research as well.

Gender related barriers for women in forensic anthropology have presented themselves as well. Accounts of sexual harassment, assault, and discrimination on the basis of gender and gender identity emerged from every level of academia (Brondo & Bennett 2012, Gialopsos 2017). Within the last several years, physical anthropology has been convulsed by multiple major accusations of professional misconduct specific to women (Gibbons & Culotta 2016, Balter 2016), revealing the extent to which gender, socioeconomics, and academic research have commingled and influenced the experiences of women in human osteological research.

It has been demonstrated here that gatekeeping within the academic world, especially in forensics, limits the type of research that is carried out and the demographic of researcher who is allowed to participate. The role that gender plays in this process must not be overlooked in this analysis. Women in academia have revealed the consequences of reporting discriminatory behaviour and harassment, including the derailment of career opportunities and education completion (Bessand 1998, Gialopsos

2017), and gender and racial disparities still exist within anthropology [1/10 of full professors are women (Brondo & Bennett 2012)]. While I cannot necessarily attribute my experiences with the FAFG to my gender—although my nationality and role as a student may have been factors—my brief time in this discipline has exposed me to deeply unsettling reports of gender-based discrimination [and even violence], and has exposed me to gender-specific assault as well, within forensic anthropology and biological anthropology as a whole. According to Passalacqua & Pilloud (2018) in their book *Ethics and Professionalism in Forensic Anthropology*, 64% of scientists reported sexual harassment when conducting fieldwork, with women three times more likely to experience harassment. For women, the most likely perpetrator of this harassment is the supervisor, whereas for men it is more likely to be a colleague (Passalacqua & Pilloud 2018).

This trend was immediately observable during my fieldwork in Guatemala, as I was groped by a stranger on the street during this research. In that moment I had to decide whether to confront this stranger—which I may have done in my home country—to file a report with the police, or to ignore the violation and continue my fieldwork. I believed that confronting the man as he walked away would compromise my safety, and that approaching the police in Guatemala would expose me to uncomfortable questioning or that the police would not [or could not] properly investigate the situation. Therefore, I chose to take no action in order to continue my research with as little interruption as possible. Even during my relatively short experience in Guatemala conducting this research, I fell prey to gender-based assault. And this story is hardly unique.

In her doctoral thesis, which included ethnography research on child combatants in Colombia, Higgs (2018) describes how gender-based violence impacted her research,

Sexual harassment was a regular occurrence throughout my fieldwork and made it a highly uncomfortable experience. My physical appearance drew attention everywhere I went...I faced persistent leering and disparaging remarks...At times I felt reluctant to leave my room, as I knew wherever I wanted to go was likely to be an uncomfortable journey. On several occasions the harassment became physical and I was grabbed inappropriately by one of the boys in Don Bosco...I regularly made complaints to directors at Don Bosco and while they listened, they took no action...On one occasion, one of the educators, the young men who were in charge of the boys, said, 'what do you expect?' after I complained about the harassment...This then presented another problem for me as I was then accused of being *creada* or 'stuck up'. I also realised that they probably assumed that I considered myself better than them. Coming from a 'developed' country, the unspoken global hierarchies that dictate value depending on race were at play...Sexual harassment has been a problem for a number of female researchers. Henrike Donner (2012), for example, noted that sexual harassment was a regular occurrence that affected her fieldwork in India. She found it difficult to recruit female research assistants, as women were concerned about travelling on public transport or interacting with unknown men...I was therefore limited in how I was able to recruit participants and from where I could recruit them." (Higgs 2018: 76-78)

The impact of this sexual harassment, while deeply troubling on an individual level, clearly also affects the collection of data and the participation of women in ethnographic fieldwork in general. And this is not an isolated problem. As Hanson and Richards (2019) explain,

'it is no accident that a heavy silence hangs around experiences of sexual harassment and violence in the field. Such silence is actively produced in the way we train students and evaluate our peers' work. In some cases, mentors and peers inadvertently promote disembodied narratives as the standard for

ethnographic writing, communicating to those around them that the body—and thus experiences of harassment and sexual violence—have no place in academic writing. In other cases, researchers are actively warned that talking about these interactions could put their work in question and their careers in danger (Hanson & Richards 2009).

The issue of gender-based violence is not tangential to academic research, especially in the field, it is fundamental to it and worth deep consideration. Two additional women working within the field human osteology allowed me to include their experiences gender-based violence in this research. Their identities have been kept anonymous.

Two additional women working within the field allowed me to include their experiences. Their identities have been kept anonymous.

The first, who will be referred to as Anthropologist 1, is an associate professor working in human skeletal analysis at a prestigious university and has performed contract work with local police departments. The second, who will be referred to as Anthropologist 2, is a permanent member of the curatorial staff of a well-known museum and oversees the human skeletal laboratory.

Anthropologist 1 recounted her past experiences working with the police. Should skeletonised remains be found within this department's jurisdiction, she would be contacted and asked to participate in the investigation. As part of this participation, she would construct a biological profile of the remains and confirm whether the remains were historical or forensic—i.e. if the death and disposal happened recently enough to open a criminal investigation. Anthropologist 1's professional relationship with the department was strained from the outset, as they could not offer her compensation for

her work outside of travel costs and accommodation. However, Anthropologist 1 felt that she should not [or could not] refuse to participate or negotiate her pay as other forensic anthropologists would have taken on this opportunity if she did not. She was also concerned with her academic standing as a human osteologist, knowing that if she was the police contact for forensic anthropology cases, this would improve her chances of promotion and expand her research record. Even with this feeble monetary arrangement between Anthropologist 1 and the police, her travel compensation did not include travel to and from the train station, ultimately forcing her to pay out of pocket to participate in the investigations.

During one such investigation, Anthropologist 1 had an untenable encounter with the manager of the forensic team. To contextualise, this manager was a man with a reputation amongst the women forensic investigators. In an earlier incident, Anthropologist 1 was warned by another woman on the team to never enter an elevator alone with this man. It seemed to be an open secret that the manager of this team had a penchant for sexually harassing his colleagues. At the time of the encounter, Anthropologist 1 had been put up in a hotel along with her manager by the police department near the crime scene. Before work had ended for the day, the manager said to Anthropologist 1 that if she really wanted to succeed here, or be kept on the team at all, she would have to save the department money by staying in his bed instead.

Anthropologist 1 described feeling intimidated and embarrassed, and she genuinely wondered if she would be expelled from the team if she did not comply with her manager's wishes. She explained that this was the reason why she ended her relationship with the police and never participated in another investigation. To maintain her dignity and safety, Anthropologist 1 had to harm her professional self-interest to leave a hostile forensic anthropological work environment.

Anthropologist 2 has run a human skeletal laboratory in a major museum for a number of years, overseeing the visiting researchers, interns, and tour groups of the museum. While a senior member of the curatorial team of the Anthropology Department, she still reports to the head curator of the department. As part of her position as skeletal laboratory curator, she is expected to attend a certain number of academic conferences to represent the laboratory, the museum, and to expand her academic networks. She has always enjoyed this aspect of her work, and excitedly speaks about them whenever they are approaching.

After the previous head curator of the department had retired, the museum hired a new biological anthropologist to manage the department. This man became Anthropologist 2's direct manager. During the hiring process, rumours circulated that this new appointee had been accused of sexual misconduct with his students while on fieldwork at a well-known archaeological site. Anthropologist 2 told me that it was impossible that human resources for the museum could not have known about these accusations and that she 'never in a million years would have trusted a man with his reputation.' Yet the museum hired him regardless.

While Anthropologist 2 was at a conference abroad, a professional trip meant to improve her academic standing, the new head of the department sexually assaulted her in his hotel room. After the presentations for the day had ended, Anthropologist 2 and her colleagues went out for dinner and drinks to celebrate. The drinking continued for several hours before Anthropologist 2 was incapacitated and decided to go home. At this point she was unable to find her hotel and while she and a group of friends discussed what to do, her manager apparently [according to the group of friends] offered to take her back to his room. She does not remember this interaction; the next

thing she remembers is that she is on his bed and his hands are up her skirt and fondling her. She shoves him off and tries to leave the hotel, getting lost and agitated.

The next day Anthropologist 2 describes feeling violated and conflicted. She knew she could not have consented to what happened the night before but she was unsure how the local authorities would handle the situation as she had been drinking—similar to my own experience in Guatemala. Nervous and alone, she did not say anything. Upon her return to the museum, she was still unsure of how to proceed, afraid that reporting the incident would reflect negatively on her professionally or that her manager would seek retribution. She found this new work environment so traumatising, however, that after several months she approached human resources. They told her that since she knew about and did not report her manager's behaviour, she would be held responsible for any sexual harassment allegations occurring between the time of her assault and her report. As a solution, they offered her a new line manager. It was at this point that she told me the story.

It was not until the next year at another conference that Anthropologist 2 decided to inform the rest of the biological anthropology community of her manager's behaviour, warning women to not go anywhere alone with him after the presentations—much like Anthropologist 1's colleague had warned her. News of this travelled quickly through the ranks of anthropologists, and not long thereafter an article about her experience was published in a prestigious science magazine. The fallout of this was far-reaching. The museum opened an official investigation, compelled by the angry voices of anthropologists across the country. Several months later, the author of the article published a follow-up, detailing the vitriolic responses he had received from the manager's supporters. And after a tumultuous year, the museum has replaced him with a notable, female anthropologist. This particular case is mentioned in the

discussion of ethics and professionalism in forensic anthropology by Passalacqua & Pilloud (2018).

These stories represent the many influences that act together to restrict the access and empowerment of women anthropologists. Both Anthropologist 1 and Anthropologist 2 sought to develop their academic positions, either by pursuing applied biological anthropology or anthropological research. Both were faced with dangerous situations at the hands of their managers, and both feared the repercussions of reporting the incidents on their careers. Anthropologist 1 was originally compelled by her career considerations to perform unpaid [or even negatively paid, as she covered some travel costs] labour for the police department, indicating that the pursuit of academic careers and research might compel academics to harm themselves economically. But in addition to this, her manager compromised her academic wellbeing and her general wellbeing because she is a woman. Anthropologist 2 was assaulted while at a professional conference by her manager and was subsequently threatened by the museum when she reported it to them. She was then forced to continue to work across the hallway from her assailant, causing significant distress. When women anthropologists cannot conduct research or earn money because of danger to their physical person, academic livelihood, or both, they are not fully participating in the discipline and therefore the body of research will reflect this bias. And as Dauer (2014) observes, anthropologists play a crucial role in accurately describing gender-based violence, but also in the prevention of such violence within the community. Regardless of how many women enter forensic anthropology, this will remain a problem until the expectations of acceptable conduct within the discipline and during fieldwork change.

5.3.2 *Publish or Perish: Economic Considerations for the EAF*

As discussed above, the socioeconomic status of a forensic anthropologist may work with other influences to prevent them from fully participating in academe—namely gender. But there are more straightforward examples of how monetary considerations for the anthropologists themselves transform the discipline. Just as money prevents the poor from pursuing justice for a loved one, money also dictates where and for how long a forensic anthropologist may work. Should the anthropologist have a tenured position at a university, they may be capable of working for only travel costs and accommodation alone—or even pay out of pocket to do this work, such as Anthropologist 1. There is an academic incentive for such anthropologists to do this, and the understanding that there will always be a forensic anthropologist willing to take this deal if you do not. Thompson (2015) explains that freelance forensic anthropologists may not be able to challenge larger forensic organisations in the UK, leading to competitive personal and professional relationships—as will be confirmed in the Guatemala example. The consequence of this is that there is little opportunity for non-academic forensic anthropologists, forensic anthropologists without additional income, or other freelance forensic anthropologists to find and keep permanent positions. These expectations effectively deflate the market for professional forensic anthropologists, at least on a freelance basis.

In forensic contexts across the world, the excavators working on forensic projects may not be forensic anthropologists *per se* but will have experience or a similar qualifications—such as local employees of forensic anthropology organisations who excavate and retrieve remains but do not have university qualifications or the archaeologists working on the World Trade Center project. This has double-edged implications. On one hand, it would be better if those who have pursued academic

qualifications in forensic anthropology were given better opportunities in a relatively small job market, but on the other, those who do pursue these academic qualifications are privileged in ways excavators without these qualifications may not be—through socioeconomic status, nationality, ethnicity etc., all of which are currently implicated in systematic difficulties in applying and matriculating into postgraduate programmes (Passalacqua & Pilloud 2018). To prioritise academic degrees over real-world experience would bias the discipline based on these sociological boundaries. A forensic anthropologist and colleague related an example to me that he found particularly frustrating. When a managerial position for a forensic excavation opened, the position was given to a foreign PhD graduate with the correct certifications but very little field experience. Upon arrival to the site, the excavators who had been working there for many years, but had no degrees, were far more competent at locating gravesites and efficiently excavating them—and had to teach their own manager how to do the job for which they had been passed over. According to my colleague, this decision was influenced by international forensic organisations that wanted to lend the project a sense of legitimacy by employing a PhD from a prestigious university.

This is not to say that this PhD graduate did not deserve the position, but rather to illustrate that these dynamics are systemic. To receive money for a project it must have legitimacy in the eyes of those with the resources to fund it. If that legitimacy is thought to mean a PhD graduate over a seasoned excavator, and if the academic process in forensic science is biased based upon on gender, socioeconomics, ethnicity, nationality etc., then only a specific demographic is empowered by this status quo.

5.3.3 *The Forensic Field School*

Within this system, many forensic anthropologists pursue fixed-term contract work as it becomes available, traveling to the opportunities wherever they may be. As my OCME contact explained, this can create a highly insecure and competitive work environment. But as more students enter their anthropological studies, some forensic anthropologists have carved out different niches in this system to survive.

The concept of the 'field school' is an integral part of anthropological study, as it allows students to obtain real world experience in research and applied methodology while under expert supervision. Yet, they pose unexpected challenges. As Lathem and Strand (2017) observe, the exhumations of deceased migrants on the US-Mexico border have received more attention and funding than the corresponding laboratory work. They cite the presence of students on a 'field course' whose families and friends have bolstered donations, and the volunteered time of other excavators, as major factors in the funding discrepancy. At first glance, the IFIFT run by Nicholas does not necessarily seem to be inherently problematic. It allows students to go abroad, learn forensic anthropological methods in an authentic scenario, and return to their studies with [hopefully] no harm to their health and a new appreciation for other cultures. Yet, the prices of these field schools betray their other function, to financially support the forensic anthropologist who runs the school. This shows that some forensic anthropologists are making a profit from undergraduate students—and not necessarily anthropology students—coming into a country like Guatemala, excavating a mass grave of murder victims as enthusiastic amateurs, and then writing about their experiences on social media.

This raises several academic and ethical questions that should be considered carefully. In this scenario, the students are given an opportunity to learn forensic

anthropological methods, but this inherently means that the victims they are excavating are not receiving even the basic standard of forensic investigation. The students participating in these schools do not require any official qualification to participate—although they must submit an application demonstrating that they are fit to participate—and any mistakes they may make could be irreversible from a forensic standpoint. For the students that do not study anthropology and have no intention of pursuing forensic science, a forensic field school will not realistically offer any professional development—and even if it did, should the victims of genocide be used for such purposes? To a cynical eye, the forensic field school presents an opportunity for dark tourism under the guise of academia. It allows the paying student to briefly experience the life of a crime scene investigator without the academic rigour and cultural understanding necessary to perform the job well, and in the process potentially compromise the integrity of a crime scene. In some ways, this reflects the worries of the families that object to the World Trade Center repository. A tourist can pay the entrance fee and stand outside of the repository to pay their respects—or to participate a morbid ‘public spectacle’ alongside private grief (Kandell 2014).

Another important connecting thread through this forensic field school and the World Trade Center example is the impact of untrained personnel on a forensic investigation or identification operation. Mundorff (2008) describes the utmost importance of adequate training for the recovery team in a forensic context, especially in a commingled, mass interment. Much of the comingling in the World Trade Center scenario occurred through recovery processes, as fragments were bagged together at random. Some recovery teams pieced bodies together from fragments that were near each other—in one case placing them inside an FDNY jacket that had been found in the general proximity (Mundorff 2008). These recovery errors, alongside the clerical errors

that accompanied them, caused numerous problems as the identification process continued. Some of these errors were identified after the remains had been released to families and, therefore, could not be investigated further (Mundorff 2008). In the United States more generally, forensic anthropologists have been concerned that changing admissibility laws [the Daubert case] would exclude forensic anthropologist testimony deemed to be too subjective (Thompson 2015). As Lesciotto (2015) explains, however, while this concern never manifested through actual exclusions of forensic anthropological evidence, it may have spurred a trend in forensic anthropological research towards more objective analyses. It is clear that within forensic anthropology, as it is practiced in the United States, appropriate qualifications are compulsory for successful identification and prosecution. A forensic field school such as the IFIFT could not guarantee this level of expert excavation and analysis.

Of course, this dynamic is not influenced by socioeconomics of the forensic anthropologists and their students alone. Such a context is arguably laid upon a foundation of political corruption and colonial history, and the contemporary pressure-cooker of academia presents little choice for budding anthropologists and seasoned anthropologists alike. Only in a system moulded by colonialism and corruption could such a field school exist. Which demographics of the dead lend themselves most to the training of undergraduate students in forensic methods? Especially undergraduates who may not currently study anthropology at all, or who will not pursue forensic science in the future—students that, during this training, may ruin the integrity of the gravesites they practice upon?

The victims of state violence, the perpetrators of which have never been held accountable, in a country rampant with political corruption and judicial impunity, seems the obvious choice. Firstly, there is no realistic advocate for these victims. The

forensic anthropologists of Guatemala are clearly allowed to function under limited terms, terms that—this thesis argues—represent the interests of political narratives. Secondly, the forensic field school offers the appearance of accountability, when in fact there is none. The extent to which skeletal remains were identified and returned when the IFIFT was operational is unclear, as was its ability to perform DNA and skeletal analysis to a legal standard. Should a case the IFIFT students worked on reach the courts, their involvement would undoubtedly hinder the prosecution, as they were unqualified during the excavation. Therefore, the existence of such a school could easily be utilised as proof of proactivity in the identification of victims, while simultaneously acting a blockade to effective prosecution—inevitably keeping those responsible for the violence in power. This trend is also observable in the excavations of graves from the Spanish Civil War, where investigations have shifted priority from establishing guilt to identification (Thompson 2015). The IFIFT may have, tenuously, identified victims but could not participate—and may have even hampered—the establishment of guilt.

Finally, the families of the unidentified dead or of the still-missing victims are compelled to accept help from unqualified sources, as legitimate forensic efforts are constrained by time, money, and politics. The importance of finding and reinterring missing loved ones in Guatemala has been demonstrated time and again, and considering the limited help available in these efforts, the families of the disappeared could easily turn to an unqualified option. Evidence of this dynamic can also be observed in the civilian-led forensic excavations in Mexico, where in the absence of qualified forensic excavators and assistance from the government, the loved ones of the missing took excavations into their own hands. Schwartz-Marin and Cruz-Santiago (2018) explain that these civilian-led forensic processes even include the creation and maintenance of DNA databases. The FAFG has been involved in both the efforts of the

IFIFT and the civilian-led excavations in Mexico. Still other anthropologists have observed that a lack of expert support has compelled families to exhume mass graves in other contexts. In Iraq, desperate communities dug for remains with farm equipment, and even their hands, damaging and comingling remains (Stover et al. 2003). A field school such as the IFIFT in Guatemala could not function in a context where criminal prosecution was prioritised.

Ignorance of the implications of forensic field schools, or justification of which, may be explained through the paradigms manufactured in a post-colonial context. Students may attend with both the intention of academic self-betterment and the intention of helping those they excavate. But the act of excavation on the part of an unpaid amateur does not truly benefit those who are excavated nor their families. It also removes jobs for actual forensic anthropologists and local excavators, especially those who are local. The perception that a student's academic development should take precedence over local empowerment, regardless of the potential harm [and especially if the foreigner's intention is to help], was forged in colonial understandings of ethnicity and ability. In this mindset, it is not injustice if you're merely there to help. This trend is clear in the myriad of social research regarding paternalistic attitudes in multilateral aid across the board (Bloom 2018, Lester 2002, Murithi 2007). These problems may also be exacerbated by the increasing popularity and media coverage of forensic anthropology, which have already been observed to influence how forensic anthropology is portrayed and practiced (Hunter & Cox 2005).

It may be argued, however, that the presence of the field school enables excavations and employment that would not exist otherwise. Funding for forensic excavations is limited, and the process of applying for it is competitive. Students, albeit amateurs, bring in money to perform excavations that would not have been funded

otherwise. But this relationship is not truly quid-pro-quo if the excavation prevents prosecution of perpetrators, or if remains are not be properly excavated and identified due to the unqualified excavator. It is a flawed but potentially necessary deal in the current reality of forensic anthropology after political violence.

As a researcher, I was not entirely free from this sticky pattern. I enrolled in the field school in order to analyse its workings, to discover how their efforts were or were not helpful to the families it was seeking to assist—at least through the lens of sensorial anthropology. However, I also enrolled in the field school because it was a [theoretically] guaranteed way to ensure access to the data I required for this thesis. At the time I enrolled, I had a qualification in human skeletal analysis, so I was unlikely to contribute to the amateur-based problem. Yet, these were simply ways I justified my participation in the field school—I was merely there to help.

This attitude was again reflected in my interactions with the FAFG. I believed that, as I was there to help, the FAFG would consider putting my needs before their own needs. Their needs in this context may have been directly compromised by my research questions, which could have easily been a contributing factor in their decision not to participate. It was not until I became deeply reflexive about my motivations for this research that this aspect of our interactions became clear to me. If we are to hold organisations accountable for their ethnocentricity, we must also hold ourselves as individuals accountable for our own.

The existence of the forensic field school must be considered within these political understandings, but it also must be analysed within the niche it was created to fill. The highly competitive forensic job market, coupled with the academic necessity of a developing research record, has lead forensic anthropologists to exploit the niches in the discipline wherever they can—whether by performing unpaid work to maintain

connections, taking a series of limited-contract opportunities, or even starting a forensic field school. Students, understanding they must have experience and recommendations to begin their careers or pursue postgraduate studies, will pay the fees to participate in an excavation. Or, as in my case, a student may require access to data in order to complete their degree, and a field school offers guaranteed access—for a price. Having participated in an archaeological field school excavating Roman remains during my undergraduate career, I had some idea of the ethical and practical problems inherent in student excavation of graves. The existence of a forensic field school, therefore, was nearly as compelling a pedagogical question to me as my original research questions. In an archaeological context at least, the Romans did not have desperate families observing from the graveside, nor were we impinging on due legal processes. In a forensic field school, both would be true.

The consequences, therefore, of running such a school are enormous for all involved. The families may finally receive forensic anthropological help but lose legal avenues to justice, students may gain a new skill set for their resumes but compromise the crime scene in the process, the forensic anthropologist will be able to support himself or herself but must take responsibility for amateurs during an excavation. The school may only be allowed to function if it fulfils the needs of the government, and as discussed in previous sections, there may not be the necessary emotional support for those participating in the excavation of these mass graves.

5.3.4 Where is Nicholas?

This thesis was introduced by a retelling of my experience with the director of the IFIFT, cut short in many ways to establish the parameters of the current project. It is now necessary to return to this opening story, not to examine how the project morphed

into its current form, but rather to examine what it tells us about forensic anthropology and the people who practice it. Nicholas, the director of the IFIFT, disappeared under unclear circumstances. The details of his disappearance emerged as this research was concluding. It was entirely possible until that point, however, that his disappearance was as described in the unexpected email I received from the Facebook account of the field school—that he owed many people money and fled his debts. But it was also possible that his disappearance was not as described and rather reflected the continuing corruption and violence in Guatemala. Either possibility was a condemning statement on contemporary forensic efforts in Guatemala. Either Nicholas' financial situation forced him to disappear, or someone who did not like what he was doing forced him to disappear. In either scenario, the wellbeing of forensic anthropologists is at significant risk, with financial considerations coercing them into insecurity, financial or otherwise.

The state of affairs in Nicholas' disappearance during the majority of this research left little indication of the circumstances that led up to it. I had paid him a large sum of money for his supervision, my accommodation, and facilitation of my research. I had been in contact with him up until the months before the course was to start. At this time, then president of Guatemala [Molina] was deposed and brought up on criminal charges. Participants of the programme received an email suggesting that the course be postponed until such a time that the civil unrest following the president's downfall had quieted. This seemed a prudent decision to me, as I did not want to put my own safety in jeopardy, but also because I felt potential contacts may feel more empowered to speak openly with me if the stability of the country were more secure. We awaited more information from Nicholas, but before we heard from him again, we received the mysterious Facebook message from the field school's account. After the message was

sent, the Facebook page was deleted along with the original message. But before it was deleted, I saved the message to my personal files:

Hola, Nicholas no es una persona de confianza, vino a Guatemala a estafar a mucha gente. Nisiquiera tuvo la molestia de pagar el alquiler donde tenian la oficina de la organizacion. No pago el sitio web, ni el mantenimiento ni el desarrollo ni el diseno. Esta pagina se va a borrar dentro de 10 dias aproximadamente. Saludos.

This roughly translates to:

Hello, Nicholas is not a person of confidence, he came to Guatemala to cheat a lot of people. He did not even bother paying the rent where they had the organization's office. I do not pay for the website, nor the maintenance nor the development nor the design. This page will be deleted within 10 days approximately. Goodbye.

I responded by asking for more information but I received none. This was the last communication from the IFIFT.

Without additional context, and considering my limited Spanish capabilities, this message seemed odd and incomplete. Who was the person sending this message? Who had Nicholas cheated? Was this his intention in starting the IFIFT, to scam people? Until this point, the IFIFT had received significant positive press. The idea that the entire project had been a scam and yet managed to confound the media seemed far-fetched. There is also evidence online that the field school had run successfully in previous

years, such as videos, crowd-source funding pages, and dedicated blog posts (see EmpathyAndEqualityMatters.blogspot.com, ExperiencesInAnthropology.blogspot.com). It appears that the IFIFT was not created as a scam, as the message indicates. This did not rule out that Nicholas had debts, however, and should those debts have been called in, it is possible that he had no choice but to shut down the school. But if this were truly the case, why did he not inform the students who had enrolled and paid? Perhaps he believed this would open himself up to legal ramifications and it would be better to disappear. This possibility seemed likely to me at the time, as an employee of the FAFG had said Nicholas had burned bridges with them some time ago, and yet continued to advertise a connection with them on the IFIFT website. This employee did not clarify how he had burned these bridges, why, or if the problem had to do with money. Nor did it seem they were interested in following up on the disappearance unless their reputation was involved.

It has been three years since this message was sent, and in these three years there has been no additional communication from any IFIFT employees. At the outset, it seemed clear that the problem had been economic in nature, as opposed to violent. It was not until I had been immersed in Guatemala, had spoken to those who had involvement with the police, or had visited the *Tres Equis* cemetery that I began to understand the extent of impunity and corruption in contemporary Guatemala. The FAFG has international support, their efforts are protected by the ceasefire agreements, and yet they may still be beholden to political actors. The IFIFT does not appear to have had the same protection, and perhaps this vulnerability had been a factor in its dissolution. After my frustration and anger at the situation had subsided, I had to acknowledge the possibility that Nicholas' disappearance could have been the result of something more sinister than unwillingness to pay back debts.

All of the information that was available in this case supported the possibility that he fled his unpaid debts, yet it did not indicate that the other possibility is unlikely. The message I received did align with the FAFG's previous relationship with Nicholas, but the lack of additional information or context at the time made the message appear suspicious. Therefore, it was impossible to definitively say which possibility was true. Regardless, this situation clearly demonstrates the dire position in which some forensic anthropologists find themselves.

In the final months of this research, I reached out to Nicholas' former colleague at a university where he had once been based. I did not anticipate a reply; however, they did get in touch and agreed to let me use some information provided in this thesis. It is now confirmed that Nicholas had indeed fled his debts. While it is unclear if he had malicious intentions, he did steal money. The colleague described how difficult and distressing it was to speak about Nicholas' behaviour, even years later. The colleague reported that they had held an intervention when it came to light that Nicholas had lied to forensic anthropological organisations regarding his university affiliations, revealing that Nicholas had even endangered students. After this, Nicholas was said to have severed connections with his colleagues and disappeared. They had not seen him since—until I had reached out.

Not long before the colleague had shared this information with me, and many years after the colleague had last seen him, the colleague came across Nicholas by chance. He is alive and well, but the colleague seemed reticent to approach him. Thus, in the final moments of this research, the status of Nicholas was confirmed. He is alive and had fled his debts, having apparently misrepresented himself to forensic organisations and severed all connections with former colleagues.

We can analyse Nicholas' behaviour as an individual or as a symptom of a broader problem. But at least in terms of forensic anthropology in Guatemala, his actions deeply impacted the forensic anthropological work there and the education and projects of the IFIFT participants. There is some evidence, discussed below, that these dynamics—as Nelson (2009) might categorise as 'duplicitous'—extend beyond the borders of the IFIFT and into other Guatemalan forensic anthropological organisations. It is important, therefore, to consider the possibility that the financial and academic needs of the current forensic anthropological world contributed to Nicholas' behaviour.

Considering the above, the ramifications of socioeconomic influence on forensic anthropologists are deep-seated and ubiquitous. A highly competitive job market, gender bias, ethnocentrism, paternalism, and financial insecurity have created a climate of uncertainty for those carrying out forensic work across the board. In contexts such as Guatemala, these uncertainties are reflective of an on-going struggle against political influence and a highly competitive system of funding and empowerment. Forensic anthropologists are compelled, not only in Guatemala, to exploit the niches they can to persist and perform forensic work, leaving many financially and physically vulnerable.

5.3.5 A Culture of Professional Sabotage?

These socioeconomic considerations inevitably go beyond the individual forensic anthropologist and reach those who oversee these forensic anthropological projects. As discussed in previous chapters, political narratives influence the nature of the project tremendously—but this is not lost on the forensic anthropologists involved in such projects. It is clear that forensic anthropologists have participated in professional sabotage in Guatemala to some extent, whether through the circulation of unsubstantiated rumours, or if the rumours are true, through the manipulation of the

funding organisations that secure the project's future. During this research it was indicated to me by a person close to the FAFG, that a rumour exists about its director *Gabriel*¹⁴. The rumour claims that in order to receive more funding for the FAFG's projects, Gabriel demonstrated the continuing importance of the FAFG's work by telling his major contributors that he received a number of threatening phone calls. If the rumour is to be believed, Gabriel faked these phone calls and the person who left these threatening messages was truly his own brother.

This thesis does not make any judgement on the validity of such rumours. To do so would be irresponsible without further evidence. The fact, however, that such rumours exist illuminates the desperate relationship between forensic anthropology and the money required to carry these projects out. Either the rumour is a lie, or it is true, but the outcome is one and the same. The process of obtaining funds for a forensic anthropological project is ruthless.

If we consider the rumour to be false, a forensic anthropologist, or somebody close to a forensic anthropologist, created a story that would hurt the reputation of Gabriel and the FAFG. If the false rumour were to be believed, it would dissolve trust between him and his contributors and ultimately limit future money the FAFG might receive for their projects. In a worst-case scenario, Gabriel could lose his position as director of the FAFG, hurting his career prospects and academic standing and the FAFG could shutter its operations. This harkens back to the issue of functionality—who would benefit from this rumour if it were a lie? What purpose does such a rumour serve? There are any number of local and international forensic projects that compete with the FAFG for money. If this money could not be given to the FAFG because Gabriel was

¹⁴ This is a pseudonym to provide anonymity.

accused of fraud, it could be redistributed elsewhere to different projects. It may also benefit a disgruntled individual participating in FAFG endeavours who believes Gabriel has acted wrongly in some way and would like to see him taken out of power. It may even be possible that the rumour was started by someone outside of the FAFG who would have left Gabriel threatening phone calls but thought that this would be a more subtle method of sabotage or intimidation—although as corruption is blatant and almost obtuse in Guatemala this possibility seems unlikely. It is even possible that an individual with no real intention of maleficence could have circulated such a rumour—yet the outcome would be the same even without the intention.

Regardless of the intention or identity of the rumour's creator, this story would hit Gabriel in a profound vulnerability—the FAFG's funding. In an environment where these excavations operate on the benefaction of foreign governmental and academic funding bodies, to prevent such projects from receiving further funding is a lethal blow. In this case, a rumour as such this could salt the earth for both the FAFG and Gabriel, leaving them at the mercy of donors who may feel deeply betrayed. With this in mind, the tenuous reality for those participating in forensic work reveals itself. Not only are the forensic anthropologists beholden to a limited job market and economic insecurity, their overseers are entirely reliant on a system that facilitates professional antagonism.

We should also, on the other hand, consider the implications if such a rumour were to be true. While this purported behaviour would certainly be inflammatory, more importantly it would indicate a desperate need for further monetary support for the FAFG's projects—a need so profound that it could drive a director of operations to break the trust of the organisations that ensure the project's existence. In light of this, such a risk could not be made frivolously. The fallout of this decision, when or if it is discovered, could be a career death-knell for Gabriel and even of the FAFG itself. It is

possible that greed or personal interest could motivate such deception, perhaps to benefit his own financial wellbeing. It is also conceivable that Gabriel had no intention of maleficence himself and that this would merely be the equivalent of cushioning a CV for a job application in the forensic world. Should that be true, however, it would still indicate a dishonest status quo in the process of obtaining money for forensic projects that should be dissected.

It is not the onus of this project to determine which of the possible explanations are true in this situation. Gabriel may or may not have acted in this way. It is the existence of this rumour, and the implications of its existence, that is of consequence to this research. Whatever the truth, this rumour represents a culture of professional hostility within forensic anthropology. As forensic projects remain reliant on outside funding, and as this funding remains limited, competition for resources devolves into underhanded academic posturing, creating a dynamic of corrupt dishonesty in a discipline intended to hold people to account.

What then can be said about the state of such a discipline?

In the Guatemala example, we are presented with two cases that demonstrate the hostile socioeconomic climate of forensic anthropology. The circumstances surrounding the forensic anthropologist in charge of the IFIFT and the director of the forensic anthropological organisation FAFG, indicate the tremendous impact that the contemporary frameworks of project funding have on anthropologist wellbeing. Nicholas either fled his unpaid debts or was [thought to have been] forcibly disappeared, Gabriel either lied about receiving threatening phone calls or another anthropologist has spread this rumour to hurt his career and the FAFG. Irrespective of

the truths, these options indicate that the forensic anthropologists in Guatemala function in a system of unaccountability that is driven by the need for funding. These needs then bias the research based upon the socioeconomics of those able to practice forensic anthropology under these conditions. These needs may have also led to families of the disappeared turning to unqualified labour in the form of students working with the IFIFT. Whatever the case, the omnipresent financial burdens of these forensic anthropological organisations have manifested in lies, retaliation, and disappearance.

5.4 Through the Cracks

The socioeconomic barriers in forensic anthropology on the part of all those involved must be considered in order to accommodate for the systematic influences on the discipline. Within a forensic investigation, especially a forensic anthropological investigation, biological sex, gender identity, and the broader cultural context in which these concepts integrate, may disproportionately impact some groups over others—particularly in how victimhood is ascribed to these groups. To contribute to a transformative model, these influences should be accounted for in the forensic anthropological work. In Guatemala, transwomen and sex workers are exposed to barriers to justice, both sociological and methodological, that other demographics are not, and women in general have been burdened with both the weight of propelling investigations forward and experiencing specific, intense forms of violence.

In the World Trade Center example, the nature of the context subjected other demographics to higher levels of violence and difficulties in identification. Men represented a significantly higher proportion of the victims of the attacks. This may also reflect other aspects of socioeconomic dynamics, as more successful businesses—and

the employees of these business—were situated at higher levels of the World Trade Center and were, therefore, closer to the epicenter of the violence and more likely to have been exposed to catastrophic damage.

Economic considerations in Guatemala cyclically disadvantage poor demographics within the contemporary investigative and identification process. Poor families are both more likely to become the victims of gang violence and less likely to receive a proper investigation. This may be due to obvious causes, such as police bribery—as disclosed by one Guatemala contact—or more insidious causes such as not being able to take time off work or afford the bus fare to fully participate in the investigation. In the World Trade Center investigation, the families of the repeatedly identified victims are exposed to more costs, and as there is a bias within the sample towards reidentifications, this process may continue for years. With the closure of support groups for victims, and the changing role of the Victim Compensation Fund, this reidentification process may influence the number of families that choose to not be notified of identifications in the future.

The forensic anthropologists, and those who excavate and run the forensic anthropological investigations, are also impacted by gender-specific influences and economic considerations. In Guatemala, and elsewhere in Latin America, machismo culture has prevented a number of human osteologists and forensic anthropologists from fully participating in investigations, as this is compromising to their mental health. Even foreign researchers within Guatemala may experience gender-specific problems, as they may be faced with threats of assault with little or no recourse. In other, Western, contexts female forensic anthropologists and human osteologists are exposed to gender-specific violence and harassment that have impacted their careers.

Forensic anthropologists in Guatemala have also demonstrated the economic factors at play that can negatively impact the forensic anthropological process. The invention of the forensic field school in Guatemala raises many ethical questions surrounding the use of amateurs to identify victims of war crimes. It is possible that only in a context of impunity and government culpability could a forensic field school such as the IFIFT exist. It also demonstrates the dire financial straits that forensic anthropologists may find themselves in, as Nicholas had indeed fled his debts. The currently unsubstantiated rumours circulating regarding the FAFG and threatening phone calls, represent a culture of professional sabotage in forensic anthropology in Guatemala.

Thus, it is necessary to consider all of these intersecting socioeconomic influences to determine the extent of their effects on forensic anthropology as a discipline. In doing this, it contributes to transformative frameworks.

5.5 Visualising the Matrix

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | X | |
| Empowerment | | X | X |

Figure 33: *The Forensic Economies Matrix: Transwomen and Sex Workers in Guatemala*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | | | |
| Empowerment | | | X |

Figure 34: *The Forensic Economies Matrix: Women in the Field*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | X | X |
| Access | | | |
| Empowerment | | | |

Figure 35: *The Forensic Economies Matrix: Nicholas and the IFIFT*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | X |
| Access | | | |
| Empowerment | | | |

Figure 36: *The Forensic Economies Matrix: Gabriel and the Rumour*

| | Political | Socioeconomic | Academic |
|-------------|-----------|---------------|----------|
| Money | | | |
| Access | x | | |
| Empowerment | x | X | |

Figure 37: *The Forensic Economies Matrix: Families and the IFIFT*

6. Unearthing New Approaches in the Intersectional Paradigm: Conclusion

6.1 Forensic Anthropology: Prescriptivist and Descriptivist Understandings

6.1.1 Is Forensic Anthropology Forensics or Anthropology?

A fundamental theoretical problem that this research presents may be reduced to a simple question: is forensic anthropology primarily anthropology or primarily forensic science? Of course, a simple question such as this does not necessarily have a simple answer. Each chapter of this thesis tackles a different aspect of this question and the multitude of external influences that complicate its answer.

Chapters One, apart from providing the context in which this research was formulated, examine the contexts in which forensic anthropology may be applied, its methodological framework, and the extent of what can be learned about biological and social identity during the excavation of a cemetery. International and local government entities, as well as NGOs, form relationships in post-violence contexts—and these relationships will define how and when forensic anthropologists or their methods will be dispatched and for whom—attributing identities of victimhood to affected individuals and groups and prioritising outcomes based upon these attributions. Within the discipline itself, forensic anthropology is influenced by social paradigms in its methodology, and forensic anthropologists never work within a socio-political vacuum.

Chapter Two provides a heuristic theoretical framework that can be applied in the examination of these paradigms and contribute to the holistic approach necessary for a transformative justice model. It outlines the ways in which social anthropology and forensic anthropology may be utilised together and argues forensic anthropology need not remain isolated from theoretical and social anthropological understandings. It is argued in Chapter Two that, when studying forensic anthropological efforts, we may

consider such efforts as part of an institution or system that inherently possesses a function. We may even utilise the organic analogy and consider reconciliation efforts after violence as organ systems within a body, intrinsically connected and fulfilling the body's needs. When considered in this way, it is not necessary to analyse disparate observations as isolated incidents, but rather it encourages the observer to consider the larger, interconnected perspective. Chapter Two introduces the Forensic Economies Matrix as a means of analysing Forensic Anthropology within an intersectional, functionalist perspective.

Chapter Three uses the Guatemala case study to provide evidence that reconciliation efforts that utilise forensic anthropology do, indeed, function within socio-political and academic systems. It illustrates the lived experiences of locals and of the families of the disappeared, and uses their testimony to elucidate the function, dysfunction, and the function of that dysfunction, within current identification efforts. It also, however, demonstrates that forensic anthropology is a discipline practiced across cultural boundaries and is, therefore, further complicated by considerations of relativism, ethnocentrism, and colonialism. Because of this, the study of forensic anthropology across cultural boundaries necessitates a consideration of prescriptivist vs. descriptivist modes of analysis. This is further examined in Chapter Four.

Chapter Four juxtaposes the Guatemala example and with the World Trade Center example, attempting to demonstrate the political relationships that exist within all forensic anthropological endeavours after political violence. It does not attempt to argue that one instance of violence was more catastrophic, or one response was more efficient, but rather encourages all forensic anthropologists to consider the political relationships that are inevitably influencing their projects. It also seeks to demonstrate through analysis of numerical data that even within the methodological frameworks of

forensic anthropology, specific demographics of victims are underserved, and the responses to these inequalities of access may disempower living communities. This chapter is also heuristic in nature, adopting a prescriptivist analysis that may not always be appropriate across cultures. These socioeconomic considerations within academic research, and how they may interact with political considerations, are discussed here but are examined in more depth in the following chapter.

Chapter Five explores the socioeconomic contexts in which forensic anthropology takes place, expanding the discussion of social considerations within academia and forensic science that was introduced in the previous chapter. This chapter delves into intersectional problems on the part of both forensic anthropologists and those they seek to serve. These include gender considerations [for women, men, and transgender individuals], economic realities [for forensic anthropologists, forensic organisations, families of the disappeared, and the disappeared themselves], and finally, the relationship between ethnicity and empowerment in forensic contexts.

This final chapter provides a concluding analysis of the dynamics presented above, arguing that both descriptive and prescriptive perspectives are useful and necessary when considering implementation of forensic anthropological projects in a transformative model. It concludes that forensic anthropology benefits from its academic, anthropological background, although this must be tempered by considerations of relativism and reflexivity in its practical application. When approached with this nuanced understanding, forensic anthropological projects can improve access, outreach, and empowerment by using the intersectional, functionalist paradigm encapsulated by the Forensic Economies Matrix.

6.1.2 Nuanced Understandings of a Nuanced Field

This thesis seeks to illustrate the multifaceted understanding with which we should approach forensic anthropology, whether examining it as a discipline or in its practical application. Even though forensic anthropology is often applied in contexts well outside of academe, it need not be isolated from its anthropological roots and may still utilise academic paradigms to improve methodology and application. Biological and social identity are intrinsically interwoven (Gowland & Thompson 2013), and theoretical analysis of forensic anthropological work may offer opportunities for improvement in methods and outreach. When a forensic anthropologist prioritise this understanding of forensic science, they are then emphasising the anthropological identity of their field—a prescriptivist perspective, as this embraces forensic anthropology as a discipline that can and should be improved. Passalacqua & Pilloud (2018) argue that the push to create a code of ethics and professionalism in forensic anthropology has emerged from a desire to advance the discipline, embracing the assertion that a more diverse and empowering environment will improve the field overall. This attitude may not always be appropriate, however, as we must also consider who determines the appropriate or ‘ideal’ ways in which forensic anthropology is practiced—especially if these reflect Euro-American assumptions (Thompson 2015).

In such a context, forensic anthropologists must consider themselves primarily as anthropologists instead of forensic practitioners and apply concepts such as reflexivity and relativism in their work. In this context, these forensic anthropologists are compelled to consider the intercultural nature of forensic anthropology and accept that some forensic anthropologists will not prioritise the same aspects of the work in the same way, or even at all, and thus adopt a descriptivist position as well.

The forensic anthropologist who prioritises the methodology and application as situated outside of academe—for example, forensic anthropologists who work entirely in the field with little emphasis on reflexivity or relativism—are still forensic anthropologists. Their emphasis on application foregrounds the forensic identity of the discipline and assigns less importance to the anthropological identity. Therefore, these forensic anthropologists may adopt a descriptivist perspective—de-emphasising the reflexive and relativistic perspective of theoretical analyses. When this is the case, the forensic anthropologist must maintain the descriptivist perspective for their theoretically-minded peers, since applying a prescriptivist understanding to their peer's work would create a contradictory standard for evaluating the discipline.

It is easy to become entangled within this binary. An anthropologically oriented forensic anthropologist must adopt a prescriptivist perspective for themselves and a descriptivist perspective for others, creating a contradictory standard for themselves. A forensically oriented forensic anthropologist may adopt a descriptivist perspective of themselves, but then avoid adopting a prescriptivist perspective for others as that would create a contradictory standard for others. This conundrum indicates that a binary solution is unfeasible and that anthropologists must invariably navigate a truly interdisciplinary field.

The complexity of these problems eliminates the possibility of finding a simple solution to intersectional questions. The most useful standpoint in the face of these problems is one of nuance. Each forensic anthropological challenge provides an opportunity to examine the larger context, examine how the issues presented fit within the larger context, and then determine where on this spectrum of anthropology and forensic science this problem must fall. This nuanced approach inevitably leads to a

myriad of different answers to the same questions but promotes greater opportunity for discussion and for disagreement.

But in forensic anthropology, nuance poses its own risks. The danger is becoming so enamoured with nuance that it makes reaching a conclusion difficult or impossible. As Barnard (2000) says, theory without application is pointless. If the objective of analysis is to create an ethnographic work, then action based upon its results is not necessary. But if the objective of this type of analysis is to improve the efficiency and outreach of forensic anthropological projects, then action is necessary. The complexity and interconnectedness of the systemic problems faced by forensic anthropology after political violence imbue the anthropologist's conclusion and subsequent actions with vital importance. The nuanced nature of these influences makes it difficult to reach a conclusion, but also utterly necessary.

With this in mind, tools such as the Forensic Economies Matrix become heuristic devices that are not only as useful instruments in the analysis of forensic anthropological efforts [or any reconciliation effort], but also can be a guide toward nuanced action. When implementing new policy, commencing a project, or developing research questions, forensic anthropologists can utilise the Forensic Economies Matrix to ensure potential knock-on effects are accounted for, they have considered an intersectional model, and that their own potential biases are reflected upon.

6.2 Prospective Solutions

The Guatemala and World Trade Center examples offer insight into two forensic anthropological initiatives, specifically, how these initiatives may reflect socio-political dynamics. If the research goal necessitates accommodation for dynamics that may prevent access or subvert the identification process, there is a path forward. Models

such as the Forensic Economies Matrix are useful for understanding and categorising the factors that bear upon the execution of these projects, and subsequently in addressing and ameliorating them where appropriate and feasible. Its application may be useful at multiple levels—serving forensic anthropologists, administrators of forensic anthropological organisations, and benefactors to forensic anthropological projects. By utilising the Forensic Economies Matrix, it is possible to account for the motivations that drive decisions, and more importantly, can inform efforts to equalise access and empowerment within these projects.

6.2.1 The Forensic Economies Matrix for Practitioners

Project Development

When the Forensic Economies Matrix is utilised by the forensic anthropologist during project development, it is most relevant to consider the academic motivations that define the particular project. By considering the funding sources, the remit of the project, whom the project will serve [and whom it will not], and whom the project empowers [or whom it disempowers], negative knock-on effects that may occur for the forensic anthropologist or the families of the deceased will be reduced. It is vital to practice reflexivity at the outset of such a project, to weigh professional interests [i.e. the desire to publish] against the actual needs of the people the project intends to help, and to respect the power of socio-political influence on the forensic anthropologist and on the research. For example, I did not appropriately consider the socio-political dynamics between the FAFG and myself. Specifically, I as a researcher had made assumptions about their empowerment as an organisation and my role as a foreign volunteer, assumptions that were reasonable on their face, but were insufficiently nuanced.

It is also essential to consider the social context in which the project will take place, and the social context surrounding the forensic anthropologist. Some useful questions to be asked during development are: How am I as the forensic anthropologist empowered, limited, or disempowered? How are my subjects empowered or disempowered by such factors as gender, poverty/wealth or ethnicity, in the context in which I am working? These questions can bring to light outside influences affecting the project as well as the forensic anthropologist that can impact the study and/or the study's participants.

Finally, it is crucial to examine the totality of benefits and needs connected to the project, its design, and the narratives that the project may enable. The forensic anthropologist must be cognizant of any limitations these needs—whether they are needs of funding bodies, the families of the disappeared or deceased, or other actors within the project—may present for the anthropologists' work or capacity to disseminate their findings. In the Guatemala and World Trade Center examples, these needs manifested themselves largely as political agendas, but they may not necessarily be limited to broad political ideas. The needs of individual actors working within governmental bodies [or non-governmental entities such as NGOs] may be just as influential in the successful execution of the project.

Ongoing and Forensic-Oriented Projects

The Forensic Economies Matrix may be useful beyond the development stage of forensic anthropological projects, as it can enable forensic anthropologists to utilise reflexivity for the duration of their work. It may be difficult to accommodate for any insights the Forensic Economies Matrix provides, as the project may be well underway and its methods and outreach already established. However, it is still beneficial to name

these influences in hindsight and accommodate for them where possible. The Forensic Economies Matrix can also offer insight into non-research related projects, where academic interests may prove to be less relevant and political or funding considerations are paramount.

The fundamental question to ask here is: Who is enabling this forensic anthropological work? Once this question is considered, it is possible to delve into the dynamics of these relationships. There may be multiple actors that are responsible for a forensic anthropologist's access to a site, money for their work, and their overall safety. It is useful to analyse how these actors benefit from the work, how they may limit the work, and how these needs might interconnect in a larger context. It is important to acknowledge that these limitations may be either intentional or unintentional, and the ability of the forensic anthropologist to confront the implementers of the limitations will vary by situation. For this reason, it may be beneficial for the benefactors of forensic anthropological projects to use the Forensic Economies Matrix while deliberating on which projects to support and how.

In the Guatemala example, access to forensic anthropological services was linked to and appears to be dependent on politically defined contexts of violence. Disappearances occurring as a result of the 'armed conflict' triggered entitlement to FAFG services. Disappearances arising out of 'contemporary violence' did not. These fell under the jurisdiction of the *Ministerio Público*, and involved little or no access to forensic anthropological services. As this thesis argues, these methods of categorizing and channeling both victims and investigative procedures emerged from a political effort to situate Guatemala's violence in the past, and the dysfunctional nature of the *Ministerio Público* is a direct result of a government intent upon obfuscating the true state of contemporary violence. If this is so, and the forensic anthropologists of the

FAFG know it, they may not feel empowered to act, as taking action could have devastating effects on their organisation. Other forensic anthropologists might encounter similar circumstances and pressures in their own specific contexts. Therefore, the utility of the Forensic Economies Matrix may become hampered by disempowerment. Their political situation notwithstanding, within the work of the FAFG, some social considerations [such as poverty] are accounted for in their services. So even when one particular aspect of the Forensic Economies Matrix cannot be practically applied, it is still possible to consider other aspects of it in structuring and implementing a project.

When examining social influences within an ongoing project, there is some benefit to using the same analysis in project development. When analysing an ongoing project, there will be tangible data available to reference, rather than merely theoretical discussion about potential outcomes. It is possible to ascertain which demographics are identified in higher numbers, or with greater ease, and whether this difference is statistically significant. An analysis of families or survivors that examines their ability to participate, is also feasible, and may indicate how effective a project's outreach is and demonstrate where the opportunities for improvement lie.

6.2.2 The Forensic Economies Matrix for Contributors

The Forensic Economies Matrix is also applicable to participants in forensic anthropological projects who are not forensic anthropologists—namely the monetary contributors. The use of the Forensic Economies Matrix by benefactors would ameliorate some of the problems discussed above, namely the disempowerment of some forensic anthropologists conducting investigations. While it is not necessarily intentional, limitations placed on forensic anthropologists by funding bodies have been

shown in this thesis to impede their work. If the Forensic Economies Matrix is utilised by these funding bodies during their deliberations, some of these problems may be mitigated before a forensic anthropologist experiences them.

Like the Forensic Economies Matrix for forensic anthropologists, the Forensic Economies Matrix for contributors requires the participants to consider holistically the intersecting influences on the project and on their role in the project. As the funding will determine the remit of these forensic anthropological initiatives, it is imperative to consider who is given access to services, who is empowered or disempowered, and the narratives that the project will support or undermine.

This effort should be undertaken employing reflexivity and relativism, analysing the ways in which the benefactors themselves may benefit from the project and any underlying bias that could influence their decision making. This process will also speak to the social influences that may affect the project, as possible ethnocentric or paternalistic perspectives on the part of the contributors will be identified—and hopefully addressed. Through this process, contributors will be better equipped to understand the larger context of the work they enable and compensate for potential outcomes that do not correspond with their values. If contributors follow this model, the result will be that not only will some of the observed issues in this thesis be prevented, but forensic anthropologists will be better empowered to approach funding bodies with their first-hand experiences if an issue does emerge.

Within this reflexive analysis, benefactors should also consider their own expertise in the subject. The composition of funding bodies' boards could not be determined during the course of this research; therefore, it is impossible to give specific feedback on the decision-making process in regard to expertise. Nonetheless, it is still advisable for any decision-making body to consider the experiences and qualifications

of those involved. In order to gain a holistic understanding of the context within which the project will be functioning, it is vital that the benefactors consider the limitations of their own knowledge and reference with rigour the knowledge of those with direct experience. If this becomes standard practice, forensic anthropologists and other academics with relevant experiences will be additionally empowered to approach these funding bodies and offer their informed perspectives.

The Forensic Economies Matrix acts as a means of analysis and as a heuristic tool to improve the quality and accessibility of forensic anthropology. Forensic anthropologists and the contributors to forensic anthropological projects can utilise the Forensic Economies Matrix to empower one another, as well as the communities that they seek to serve. In so doing, practitioners and contributors will not only provide better outcomes, but diversify the research output that will influence other scholars in the field. While it is still important to consider cross-cultural influences within the practical application of forensic anthropology, contributors remain free to utilise reflexive and relativistic attitudes in their decision-making process.

6.2.3 Concluding Thoughts on the Forensic Economies Matrix

The Economies Matrix is a practical, tangible manifestation of the intersectional, functionalist paradigm. These ideas are not new, but they have not previously been applied in this context in this fashion. Intersecting influences in institutions have long been observed by Black Feminist scholars, especially in contexts such as anti-discrimination law (Carastathis 2014). The focus on function, in terms of how these influences relate to empowerment and accessibility in forensic systems, is relatively novel, although scholars have begun to critically analyse such systems in the 'Mapping' model. One use of the Forensic Economies Matrix is to inform ethnography, another

important function is its ability to inspire change that empowers more people. This second function is born from the Intersectionality paradigm's emphasis on activism, as it is understood in the Black Feminist model¹⁵.

Activism in anthropology is a murky proposition, caught in the 'descriptivist vs. prescriptivist' conundrum. When the Economies Matrix is used as a heuristic device, then the Intersectionality influences within the model are appropriately identified and accounted for. In a relativist model, prescriptivism may contribute to oppression of our subjects—in such cases the Economies Matrix can act in direct defiance of Intersectionality's premise. So, while it is within the framework of the Intersectionality model to pursue social justice activism, to apply this activism in all areas without nuanced consideration of the context may, in fact, lead to the further oppression of subjects.

6.3 Concluding Observations

6.3.1 Research Aims, Research Questions, and their Fulfilment

This thesis set out with the goal of examining the effectiveness of forensic anthropological excavations in Guatemala at providing closure through visual relationships between the living and the dead. The aim of this original project was to provide useful information to forensic anthropologists on the value of establishing empathy through sensorial participation in the excavation and identification process. These original aims and research questions could not be examined as access to excavations was prevented by the disappearance of Nicholas and the decision of the FAFG.

¹⁵ The roots of intersectionality are cemented in civil rights work.

During this process, contact was made with the daughter of a disappeared man. She reported that she had been denied access to FAFG services, as the timeframe of her father's disappearance fell into the jurisdiction of the *Ministerio Publico*. She was also told that the FAFG laboratory could only be used for non-internal conflict cases after all the missing persons from the internal conflict had been identified. The decision of the FAFG to not participate in the original project, while not necessarily remarkable on its own, took on new significance when paired with the testimony of the missing man's daughter.

This thesis turned to an exploration of inequalities of access and empowerment in forensic anthropology as its main focal points. Its research aim became to provide forensic anthropologists with information on how their projects may address these inequalities and to provide theoretical frameworks with which to analyse this empowerment/disempowerment in forensic anthropological projects and contribute to transformative justice models through holism.

Throughout the course of this research, various barriers to access and empowerment in the forensic anthropological process presented themselves. During analysis of these barriers, it became clear that many of these barriers intersected with and compounded one another. It also became clear that these barriers manifested in observable consequences that seemed to fulfil specific purposes. The Forensic Economies Matrix was used to clarify the barriers to access and empowerment, to analyse the barriers' origins, and to discern the barriers' purposes. The Forensic Economies Matrix considered political agenda, socioeconomic dynamics, and academic motivations, especially the ways in which these concepts utilise money, access, and empowerment to influence forensic anthropological investigations and attributions of victimhood.

This model was used to analyse ethnographic data collected in Guatemala and New York City, focusing specifically on forensic anthropological investigations after political violence. These two examples revealed the numerous ways in which these influences can manifest in the development, outcome, and outreach of a forensic anthropological project. By doing this, it also provided a method of reflexive analysis that can be utilised by forensic anthropologists and benefactors to improve forensic anthropological projects where appropriate.

Based upon the observations accumulated during this research, the Forensic Economies Matrix is an effective method to conceptualise and visualise these intersecting influences on the forensic anthropological endeavor, regardless of context. Forensic anthropologists across the board would benefit from implementing this form of reflexive analysis and from pursuing a holistic, transformative model.

6.3.2 Data Collection

Ethnographic data was collected in Guatemala through participant observation and semi-structured interviews. Contacts were made by living in Guatemala and allowing relationships to occur organically. This allowed for the lived experiences of locals in Guatemala to emerge naturally and allowed for appropriate research questions to reveal themselves in due course. The daughter of the missing man discussed above agreed to be interviewed on multiple occasions and facilitated a trip to the *Ministerio Publico* and the *Cementerio La Verbena*. This allowed the process of the investigations outside of the FAFG's remit to be observed on a first-hand basis. Other *Guatemaltecos* relayed their perspectives on the internal conflict and on the reconciliation process in informal interview contexts.

A connection with a Guatemalan man who had worked in forensic contexts and archaeological contexts was established. He shared his experiences in a formal interview that opened the conversation on access and empowerment of the forensic anthropologists themselves and other participants in forensic initiatives. From here, the data collection moved to reflexive analysis and interviews with forensic anthropologists in New York City. One formal, structured interview was conducted with the head of the Forensic Anthropology Department and semi-structured interviews were conducted with an additional employee. These interviews focused upon the topics and themes that were observable in the Guatemala example, and therefore offered a new angle through which to consider political, social, and academic influence.

6.3.3 Summary of Analyses

The data collected through this ethnographic research was analysed through the use of the Forensic Economies Matrix, which in turn reflects an intersectional, functionalist paradigm. Observations from the field, coupled with the structured, semi-structured formal, and informal interviews, were analysed as parts of a larger system. This system included the forensic anthropological organisations, the forensic anthropologists, the governments and funding bodies enabling the forensic anthropological work, and the subjects of this work. These were determined to function together in a network of relationships that benefit some individuals or groups over others, often by attributing victimhood to some groups and not to others or prioritising aid based upon these attributions. These benefits were observed through the analysis of the consequences that emerge from them.

Guatemala Politics

In Guatemala, the free DNA services of the FAFG [a donor funded non-governmental agency] seem to be restricted specifically to the cases of the disappeared persons from the internal conflict. Other disappearances fall within the jurisdiction of the *Ministerio Publico*, and the FAFG reportedly cannot use their DNA laboratory for any non-internal conflict related disappearances until all the victims from the internal conflict are identified. This was not confirmed by the FAFG, which was not available to participate in this research. The *Ministerio Publico*, in at least one instance, failed to provide basic investigative services, requiring the family of a disappeared person to shoulder most of the investigative burden—which was impossible to maintain as this required money they did not possess. When directed to the *Tres Equis* section of *Cementerio La Verbena*, the daughter was forced to stop her search as there were no reliable records to reference. The presence of skeletonised human remains, on the surface level of the cemetery and emerging from the soil in areas not designated for graves, indicates that there are many more unidentified individuals buried in *Tres Equis* than can be estimated—reflecting the mass interment contexts of the civil war graves. The unmaintained and unpoliced nature of the cemetery indicates that these are individuals intended to be forgotten.

In the face of contemporary violence, governmental corruption, and entrenched poverty, scholars have observed that the internal conflict never truly ceased (Bellino 2015, Sanford 2008, Smith & Offit 2010). Preventing the FAFG from participating in contemporary investigations supports the narrative that the political violence is situated in the past. The dysfunctional state of the *Tres Equis* cemetery maintains this narrative, as it is impossible to know how many Guatemalans fall victim to contemporary violence and are interred there. The FAFG is also reported to be limited

in investigating contemporary cases by the remit imposed by external funding bodies. According to the daughter of the missing man, the international aid that provided the money for the DNA laboratory's construction required the laboratory to be used solely for victims of the internal conflict. This, again, could not be confirmed because the FAFG was not available to participate in this research. These international aid providers were some of the same governments that were deeply involved in the Guatemalan peace process—many of which have developed specific trade deals with Guatemala after the fact. This thesis argues that either the international funding bodies do not have a holistic, relativistic perception of Guatemala and of the conflict, or they do understand contemporary circumstances and benefit from the maintenance of narratives that situate the violence in Guatemala's past before international intervention and the ceasefire agreement.

New York Politics

The New York City example is arguably also influenced by political dynamics, but the consequences manifested themselves differently. In Guatemala, governmental agencies benefit from limiting forensic anthropological investigations. In New York City, the opposite is true. The extensive funding and support for the OCME's World Trade Center identification efforts reflect the continuing political benefit of maintaining the 9/11 narrative of imminent threat to national security. There is an extensive body of research that delves into the relationship between U.S. political agenda and the narratives surrounding the 9/11 terrorist attacks (Jones 2011, Toros 2017). Using the Forensic Economies Matrix model, we understand that the funding that enables forensic anthropological work serves a purpose. The purpose demonstrated in the continuing monumental support for the OCME identifications of 9/11 victims is to situate past

violence in the present. This understanding is supported by acknowledging the difficulty that other organisations involved in the 9/11 fallout have faced in ensuring continuation of their funds and seeing that their projects support a different political narrative.

The Victim Compensation Fund, which was infamously in the throes of funding turmoil while negotiating with the U.S. Congress during this research (Goldmacher 2019, Kim 2019), provides the current medical care expenses for the first responders present at the time of the World Trade Center attacks. The Forensic Economies Matrix model indicates that the conflict over this funding, as opposed to funding for the identification efforts, demonstrates a difference in the political narratives that two organisations present. The OCME operation focuses upon the immediate casualties of the political violence, effectively bringing the past violence into the present—although this is not explicitly their goal. These efforts keep the memories of terror raw while simultaneously emphasising the mortal consequences of lax national security policy. The VCF, conversely, emphasises the longitudinal causalities of first responders on the scene in the face of terror. This thesis argues that fear in the face of threat is more easily capitalised by political actors than bravery in the face of threat, and that it is this difference that determines the ease with which some organisations are funded and the difficulties that other organisations face.

Social Influences for the Missing, Unidentified, and the Families

Even in the face of these political influences, these funding decisions do not occur in a vacuum. Established social systems exist that influence the project outside of the relationships between governmental organisations, funding bodies, and forensic investigators. In the Guatemala example, women as a demographic have been subjected

to particular forms of extreme violence. This includes indigenous women who were tortured and killed during the war (Sanford 2003, Sanford 2008), and contemporary Guatemalan women who are facing similar levels of violence today (Sanford 2011). Yet, from the research surrounding investigations of violence against women, it is clear that social concepts of woman-victimhood are strictly bound to social understandings of woman-purity and worth. The murders of women who are considered to be impure [i.e. sex workers in the Sanford (2008) example] are not considered worthy of proper police investigation. From the testimony of the primary Guatemala contact, transwomen are not legally considered women and are therefore not included in the remit of the specialised unit for violence against women. Should a transgender person be buried in *Tres Equis*, therefore, only their legal gender would be included on the report. The extent to which this further complicates the investigative process is unclear, but omission of important identifying information can only make any future identification effort more difficult—leaving transgender individuals at a disadvantage.

Within methodological frameworks of forensic anthropology, women and transgender individuals are also at a disadvantage. Without DNA analysis, biological sex is given on a scale of feminine and masculine based on the morphology of specific bone features (Gowland & Thompson 2013). This is deeply reliant on practitioner experience, is susceptible to cognitive bias (Nakhaeizadeh et al. 2014), may reflect a mosaic of traits (Gowland & Thompson 2013), and has been shown to skew some in-field analyses towards male-heavy identifications (Walker 1995, Weiss 1972). Additionally, the morphology of bone features does not reflect the lived experience of gender (Gowland & Thompson 2013), therefore, no forensic anthropological standards currently exist to identify trans-identity through skeletal analysis. The presence of clothing and personal

items, as is common in forensic anthropological contexts in Guatemala, may ameliorate or exacerbate these underlying issues.

In a context such as the World Trade Center, the demography of the victims is male-heavy. It is possible that this ratio of men to women is reflective of gender-based inequality within the American corporate structures of the new millennium (Bertrand & Hallock 2001). The human remains that were excavated from the debris were decontextualised, highly fragmented, commingled, and subjected to thermal damage. It is impossible to determine how gender and biological sex have played a role in the identification of these remains with the data that is in the public record. However, it is a deeply relevant issue that can and should be examined in further research.

Socioeconomic factors also bias the forensic investigative process. In the Guatemala example, families are expected to shoulder most of the investigation themselves. This includes frequent and emotionally taxing trips to the morgues, hospitals, and pauper's cemeteries. In cases where the families live far away from these locations, it can prove to be logistically impossible to make the necessary trips. And, as previously discussed, once an unidentified body is buried, there is no further recourse to identification for the victims who perished after the official ceasefire agreement. There also appears to be no emotional or financial support readily available for the families going through this process. This excludes people from disenfranchised and poor demographics, who are already at higher risk of experiencing violence, from properly partaking in the forensic investigative process.

The FAFG provides their services for low-income families searching for loved ones who disappeared during the war itself. The FAFG is well-respected and can provide reliable forensic evidence. However, some families turned to the IFIFT for the forensic excavation and identification of loved ones. It is possible that the work of the

IFIFT was enabled by families' desperation for information, even though a forensic field school could not provide a truly professional level of forensic identification.

In the World Trade Center example, some of these problems are mitigated. There is ample funding for the OCME's dedicated DNA laboratory and their identification efforts. However, the state of the remains found in the aftermath of the attacks leads to specific economic considerations for the families of the identified. The human remains are highly fragmented; therefore, an identified person may be returned to their family multiple times. As the data indicates for the 2015-2018, individuals that have been identified are more than 60 times more likely to be identified again than a previously unidentified individual is to be identified for the first time. This may be related to a methodological bias, a technological limitation, or simply the nature of the violence. Regardless, New York State law dictates that the remains cannot be released directly to the families as they must be released to a funeral home. As these funeral homes charge costs for their services, the family of a World Trade Center victim may be required to open the grave and inter their loved one multiple times. It is unclear with public data how often this occurs, or if a family's decision to not be informed upon the discovery of additional fragments correlates to the financial burden that the additional discoveries present. The OCME compensates for these potential problems through the repository for uncollected remains, which may be visited by the families of the missing. Although some family members of the missing have visceral, negative reactions to the repository (Colwell-Chanthaphonh & Greenwald 2011, Toom 2015).

Social Influences on the Excavators, Anthropologists, and Funders

These social dynamics extend to the practitioners of forensic anthropological work, including excavators, forensic anthropologists, administrators, and financial

backers. In the Guatemala example, a man who worked as a crime reporter—often providing at-the-scene reporting—felt that the Machismo culture in Guatemala did not allow him to process his feelings of anxiety and despair. Even in his subsequent work as an archaeologist working with human remains, he found that his emotional responses to the dead remain powerful and distressing. This was also reflected in the work of Colombian forensic anthropologists and forensic practitioners in mass fatality scenarios. Men forensic practitioners, therefore, may not be empowered to conduct forensic anthropological work through this restriction on their perceived masculinity. It is a question that merits further research.

Women involved in the forensic anthropological process are also exposed to gender-specific problems. This thesis offers two examples of women human osteologists who have experienced harassment and assault at the hands of their supervisors. Both felt that their jobs and reputations as human osteologists were at stake, and as the market for this type of work is restricted, they both felt disempowered to act—although one did eventually share her story publicly. Women working within anthropology have started to share their stories, hoping to inspire a cultural shift in the institutions in which they work (Gibbons & Culotta 2016). It is clear that women and men face practical barriers to empowerment within forensic anthropology as a discipline based upon social concepts of gender and gender-roles.

In some cases, these considerations merge with economic influences. As mentioned above, the harassed and assaulted anthropologists felt that they could not act, as their economic stability was at risk. This sense of economic instability is reflected in other choices often made by forensic anthropologists working today. In one example provided in this thesis, a forensic anthropologist felt compelled to work for the police for free—even paying for some travel out of pocket. This anthropologist described the

fear that another anthropologist would step in and do the work for free if she did not, harming her relationship and reputation with the police. Other forensic anthropologists, such as Nicholas, started field schools for university students—regardless of some of the larger implications of such work. Nicholas still could not escape his financial situation and fled his debts to Canada. Still other forensic anthropologists are subjected to rumours about their involvement in fraud. The rumour that Gabriel has allegedly lied to his funders about the threatening phone calls made to his family, may be an attempt at professional sabotage or, if the allegation is true, may indicate the dire economic straits that forensic anthropologists can experience.

This economic reality for some forensic anthropologists does not even include the non-forensic anthropologist excavators who may work on these projects. This thesis presents an example in which a forensic anthropology graduate was hired to manage a team, which then had to train her, because their practical experience in the field was more useful than the forensic anthropologist's university education. The forensic anthropologist who relayed this story believed that the excavators on the project were passed over because they lacked university degrees. This inevitably presents the issue of university access and diversity in academe, as well as questions regarding the expertise and motivations of those who make these employment decisions.

This thesis argues that administrators and financial backers of forensic anthropological projects are not free of these influences either. The individuals involved in this aspect of the forensic anthropological project will help determine the economic realities of the excavators and anthropologists working on the identification efforts, and they may contribute to existing economic disparities by supporting some projects over others. This may be motivated by specific goals, i.e. the maintenance of some narratives over others, or it may be influenced by existing social paradigms. In a context such as

Guatemala, a country with a long history of colonialist control that disempowered local populations, it is important to consider the possibility that lingering ethnocentric attitudes, especially on the part of Western funding organisations, may impact the nature of funding agreements. There have been many instances of paternalism in humanitarian aid efforts across the world, particularly in contexts where predominantly Western organisations have participated in these efforts in a manner that ultimately disempowered people. This may have been an intentional, politically motivated decision, but it also may simply reflect an attitude of generalised paternalism towards the countries seeking international aid. In the case of Guatemala, where organisations such as the UNDP, USAID, and the government of the Netherlands have allegedly restricted the remit of the FAFG DNA initiatives, these organisations may have been influenced by ethnocentric or paternalistic attitudes. This question also merits further exploration.

6.4 Avenues for Further Research

There are many potential avenues for research stemming from the considerations discussed in this thesis. Any aspect of the Forensic Economies Matrix would be appropriate for further in-depth analysis, which could offer insight into particular facets of these intersecting dynamics. Additionally, although this thesis focuses on its usefulness in improving forensic anthropology, the applications of the Forensic Economies Matrix are not limited to forensic anthropological projects. These intersecting influences may be observable in any number of humanitarian initiatives where socio-political economies are present.

6.4.1 Ethnographic Studies

While this research diverged from its original ethnographic roots, there are two broad, ethnographic research categories that are obvious candidates for the application of the insights gained in this project, namely forensic anthropology in Guatemala and forensic anthropology within the OCME. Both are discussed in this thesis, yet many questions are raised by the data collected that could not be included in the remit of this project. Further research could explore the gaps in this research, by directly communicating with the FAFG and the *Ministerio Publico*. Additionally, further ethnographic research could investigate communities involved in the forensic anthropological process while using the heuristic model to tackle political, socioeconomic, and academic pressures that shape this process.

The lack of access to the FAFG, the *Ministerio Publico*, and the funding bodies that enable forensic anthropological work impacted the scope of this project— however, it did reveal important information about the reality of conducting this type of research. In the Guatemala example, there also remains the opportunity to examine communities of those with missing loved ones. In future research, communities of people with missing loved ones could be contacted and interviews or surveys could be systematically performed. There are Facebook groups dedicated to people with missing loved ones in Guatemala and for the friends and families of murdered individuals who did not receive proper police investigations. These groups may be willing to participate in an ethnographic study as many are rumoured to be quite outspoken against police corruption and have shown their desire to instigate change. To achieve this, however, the ethnographer must be able to efficiently communicate in Spanish and have strict safety policies in place. Here again, using the Economies Matrix as an analytic tool while

structuring this research will yield a more nuanced – and potentially more effective -- project.

Ethnographic research into communities of those with missing family members can also be conducted in the World Trade Center example. It is clear that the repository in the 9/11 Memorial for unidentified human skeletal remains, or the remains of those who could not be buried elsewhere, inspire a myriad of conflicting feelings amongst family members of the deceased (Colwell-Chanthaphonh & Greenwald 2011, Toom 2015). Yet, there has been no published effort to formally interview these family members or analyse their perspective on the repository, the identification process, or notification system. This would be an important project to undertake in order to understand the practical outcomes of forensic anthropological efforts on living family members of the deceased.

6.4.2 Quantitative Analyses

There is also a significant opportunity to employ quantitative analysis that would help elucidate some of the lingering questions this thesis presents. While it is clear on an individual basis that some demographics are underserved by the forensic process, this could be examined more thoroughly through quantitative analyses. OCME reports that include the number of tested and identified bone fragments do not include other important information that is revealed through DNA testing, including demographic information, the number of failed tests, the number of untestable fragments, and the number of fragments associated with each individual. If the biological sex of the identified persons were to be obtained and compared to the information currently provided in these reports, then this would create a straightforward dataset that could be used to discover distributions of successful identifications across demographics. The

OCME has now agreed to provide this data for further research. Additional numerical data regarding fragment testing would clarify the sample disparities observable in the provided datasets. This analysis could offer valuable insight into the ability of forensic anthropological methodology to accommodate for demographic differences in highly fragmented, commingled contexts.

Quantitative analysis may also be used when conducting ethnographic research into the communities involved in the forensic anthropological process. These communities may include groups of families with disappeared loved ones, or the forensic anthropologists themselves. If instances of discrimination and assault are systemic, then this dynamic should be observable in the broader context. Pointed research into diversity and empowerment in forensic anthropology may demonstrate the breadth of this problem, which is commonly discussed privately in anthropological circles¹⁶. Quantitative analysis of this dynamic would present a clearer understanding of the extent of discriminatory behaviour, which would then enable informed attempts to combat it.

6.5 Conclusion

In this final chapter, the Forensic Economies Matrix has been presented as both a theoretical paradigm for analysis of institutions in transitional justice or humanitarian projects and as a heuristic device that can be used to prevent knock-on effects in these types of projects. In order to determine when to use the Forensic Economies Matrix, a forensic anthropologist must consider the nuanced nature of the field as an interdisciplinary effort, consider the value of prescriptivist and descriptivist

¹⁶ This is a reference to my personal experiences discussing cases of sexual misconduct.

perspectives, and consider whether the use of the insight gained from the Forensic Economies Matrix would empower or disempower those involved in the project. This thesis argues that empowerment should be the goal of any forensic anthropological project, thus, the Forensic Economies Matrix should only be used in contexts where it would empower. In a heuristic context, these determinations are best made by the forensic anthropologists, administrators, and funding bodies that are working on the project. As forensic anthropology is practiced interculturally, it is generally preferable to promote relativistic, descriptive analysis of projects that take place outside of the forensic anthropologist's cultural context.

Yet, a fundamental theoretical question this thesis seeks to answer is whether forensic anthropology is primarily anthropology or primarily forensic science. It explores this dynamic by investigating the ways social anthropological paradigms can assist in the forensic anthropological process and providing an exploratory ethnographic analysis of forensic anthropological work as it is practiced in Guatemala and beyond. It is clear that descriptivist and prescriptivist understandings are important and useful when conducting these types of analyses in forensic anthropology. Therefore, this thesis argues that it is advantageous to adopt a nuanced understanding of forensic anthropology and embrace its role as an interdisciplinary effort.

Forensic anthropology is an applied field, yet it does not exist entirely outside the realm of academic anthropology. Forensic anthropology supports narratives, empowers and disempowers individuals and groups, is affected by political agenda, and is as beholden to academic pressures as any other academic discipline. Forensic anthropologists do not merely conduct objective, scientific analysis, but participate in converging relationships between political power, social paradigms, and academic expectations. It is possible to examine these relationships using social anthropological

understanding of institutions, to delve into the functioning of these systems, and to analyse the prioritisations of narratives that emerge from these systems, and the Forensic Economies Matrix provides a heuristic device that can assist in this analysis. This examination can help reveal the ways these institutional relationships between narratives, function, and implementation affect forensic anthropological work after political violence. In deepening our awareness and understanding of these interconnections, we as forensic anthropologists can improve our efforts to empower the living, identify the dead, and respect the victims of political violence—and ourselves.

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Appendices

These appendices contain information pertinent to this research that is currently unavailable from other sources, as well as supplemental information regarding the interviews and surveys. It also contains datasets for immediate reference that are otherwise difficult to access.

Appendix 1: IFIFT Document

IFIFT & FAFG

Multidisciplinary Field School: Forensic Investigations: The Internal Armed Conflict and Post-Conflict in Guatemala



IFIFT
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and Forensic Training



Guatemala, Central America



Guatemala has gone through several political, economic and social transitions over the last 60 years, prominently marked by violence and repression towards its citizens. The CIA backed military coup d'état in 1954 that saw democratically elected Jacobo Arbenz overthrown, marked the beginning of Guatemalan involvement in the crusade against Communism during the Cold War. In 1962 with the memory of the coup still fresh, unrest rose once again in Guatemala, and what followed was a 36-year armed conflict between armed forces and the guerilla movement. This armed conflict was characterized by counterinsurgency which left approximately 200,000 dead, more than 45,000 disappeared, 70,000 widows and over 1,500,000 displaced (REMHI 1998; CEH 1999).

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On December 29, 1996 the Peace Accord was signed and officially ended the long period of violence. Unfortunately, the early 1990s saw Guatemala enter a new era of violence, making the country one of the most violent in Central America.



The goal of this four week long IFIFT/FAFG field school is to provide the opportunity for students to participate in a 'real world' atmosphere of human rights work. Students will work alongside individuals actively involved in forensic archaeology, forensic anthropology, social anthropology, DNA sampling, and will also have the opportunity to speak with survivors of the armed conflict.

The International Field Initiatives and Forensic Training (IFIFT) is an organization that connects individuals and institutions with the purpose of collaborative field and research opportunities in an inter/multidisciplinary capacity; providing 'hands on' experience in human rights, and human development through a community focused approach.

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The Guatemalan Forensic Anthropology Foundation (*Fundación de Antropología Forense de Guatemala*, FAFG) is a non-governmental, autonomous, technical-scientific, not-for-profit organization that contributes to the strengthening of the justice system and to the respect for human rights through the investigation, documentation, dissemination, education and awareness raising regarding the historic violations of the right to life and the cases of non-clarified deaths. The FAFG also produces expert reports and conducts scientific investigations, applying both forensic and social sciences at a national and international level.

For Whom

All undergrad and graduate students in Anthropology, Geography, First Nations Studies, International Studies, Women's Studies, History, Economics, Psychology, and Political Science students among others interested in Indigenous issues, gender, human rights, solidarity and activism.

Language of the Field School

English

Translation of Spanish-English, will be provided by FAFG facilitators for all lectures, meetings and presentations when necessary.

COURSE OBJECTIVES

The goal of this field school is to work with participants in an applied capacity to impart how inter/multidisciplinary fields collaborate in the investigation of Human Rights violations, as well as in the process of the examination, recovery and analysis of mass graves.

CONTENT AND SCHEDULE

Prior to arrival in Guatemala participants will receive readings on the culture, politics and recent history of Guatemala, as well as information on the legacy of human rights violations in the country.

*Participants will have the weekends off; however IFIFT/FAFG will have organized activities for participants such as visiting volcanoes, Lake Atitlan, possible visit to the beach on the Pacific Coast.

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Week 1: November 4 - 8

During the first day participants will receive an introductory lecture on the various aspects to be considered in the forensic work related to Human Rights violations. This week, participants will meet with members of the families of the disappeared. Participants may also have meetings, and interviews with important actors from Human Rights organizations, including members of the FAFG.

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Week 2: November 11 - 15

This second week focuses on the use of forensic archaeology in the process of exhumation. Participants will participate in initiating investigations: locating, mapping and surveying burial sites; as well as documenting the exhumation process from beginning through to the end: packing artifacts, human remains, and learning how and the importance of maintaining the chain of custody.

Week 3: November 18 - 22

Participants will be working in the lab setting of the FAFG, examining the biological profile of the remains to determine sex, age, height, ancestral patterns and means and mode of trauma. Participants will be cleaning remains and artifacts found at exhumation or mass grave sites.

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Week 4: November 25 - 29

This week participants will see other means to identify human remains, receiving an introductory seminar into DNA analysis. Participants will learn how the FAFG approaches survivors, using their DNA information to compare with the thousands of remains that were victims of extrajudicial killings, and disappearances, and how this science can be used only on some of the victims.

This week participants will meet with the officials from the Canadian Embassy.

Being the final week, participants will have an opportunity for a debriefing on their experiences with members of the FAFG, and family member of the victims.

*The FAFG is a transparent organization, family members of victims of extrajudicial killings, and disappearances may be on location at exhumation sites and may visit the FAFG regularly.

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APPLICATION PROCESS, COSTS, DATES AND OTHER INFORMATION

The Application process for the field school consists of:

- completing the application form
- completing the WAIVER OF LIABILITY AND ASSUMPTION OF RISK
- submit the application form and waiver to the field school email address: csilyazunigam@gmail.com
- once applications have been reviewed, participants will be contacted via email one week after the application cut off date of August 19th, 2013.
- Once you have received notification of acceptance, and we receive your confirmation of acceptance a non-refundable deposit of \$500.00 USD is required to secure your position in the field school. Once you have sent your confirmation an account # will be sent to you where you can submit your deposit and consecutive payments.

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Costs - Field School

The cost for each participant is \$3900.00 USD (\$150.00 USD per day). To ensure your place on the field school a \$500.00 USD non refundable deposit is due by August 30th, 2013. A second payment of \$1700.00 USD is due September 16th, 2013, and the final payment of \$1700.00 USD is due October 14th, 2013.

Cost of the field school include:

Accommodations:

Participants will be staying in a house, and will share spacious rooms (3 or 4 to a room). There are bunk beds, and multiple shared washrooms. Bedding will be provided but it is recommended you bring your own towel, should you be particularly accustomed to a large and fluffy one! Toiletries are available in town, but again, if you are partial to certain exotic brands bring enough for the duration. When we go into the field, be prepared for the most basic of conditions. There will be laundry facilities at the house.

Meals:

Three meals per day are included for the entire duration of the field school

Transportation:

Transportation to and from the airport, as well as for any field trips or weekend excursions will be provided for the duration of the field school.

****AIRFARE AND TRAVEL INSURANCE IS NOT INCLUDED IN THE FIELDSCHOOL COST**

****It is mandatory that all participants purchase travel insurance, as the IFIFT/FAFG are not responsible for cancelled or changed flights due to inclement weather or instability in the country.**

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Experience of Facilitators

FAFG – the FAFG has been conducting exhumations in Guatemala for nearly twenty years. The members of the FAFG have worked internationally on cases of genocide, and extrajudicial killings in countries such as Kosovo, El Salvador, Bosnia, Iraq, Honduras among others. To date the FAFG has consolidated itself as the most renowned entity within the area of forensic anthropology, recognized in the governmental, non-governmental, national and international realms. The transparency of the FAFG along with their experience in the field enables them to work in collaboration with Indigenous communities.

Ideas for Funding and Course Credit

Sources of scholarships for this field school may be available through your university, graduate programs, Department of Education, and other local and national grants. Often university students have combined the field school as a special topics or independent study course with faculty members from their university. If you are interested in doing courses for credits with your university, you need to involve the facilitators of the field school with your studies.



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READ ABOUT THE EXPERIENCES OF PAST PARTICIPANTS:

The first IFIFT/FAFG collaborative field school was conducted July 1 to 26, 2013. Participants of this initial phase experienced the exhumation process, forensic analysis, the process of DNA collection, as well as the collection of testimonies of survivors of the armed conflict. This effort saw international students witnessing the process of investigation into human rights violations. Here you will read about the experiences of some students from England, Germany, Chile, United States, and Canada.

"I have been on other field schools in the past and have taken a lot of anthropology classes, but I have never learned this much in a single month. This field school is truly unique in that we could gain some hands-on experiences in more than one sub-field of anthropology. It was a very emotional experience, but worth every minute of it."

Elise Geissler, MA, Georgia State University



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"The field school provided a hands-on opportunity to experience the IFIFT/FAFG's multidisciplinary approach to uncovering truth, memory and justice in Guatemala. Learning from the expertise of the IFIFT/FAFG staff and the experiences of families of victims of the conflict, this invaluable opportunity exposed us to the many aspects of forensic investigations, and allowed us to begin to understand the complexity of human rights investigations in Guatemala."
 Tamara Hinan, PhD Candidate, The University of Western Ontario.



"The IFIFT/FAFG Multidisciplinary Field School: Forensic Investigations: The Internal Armed Conflict and Post-Conflict in Guatemala has been an incredibly transformative experience. The IFIFT/FAFG offers through expert instruction from active professionals by using operational human rights cases. From mass and individual grave exhumations to eyewitness interviews, forensic laboratory investigation to DNA analysis and case management strategy – the IFIFT/FAFG's distinctive multidisciplinary approach facilitates an insight that is available only

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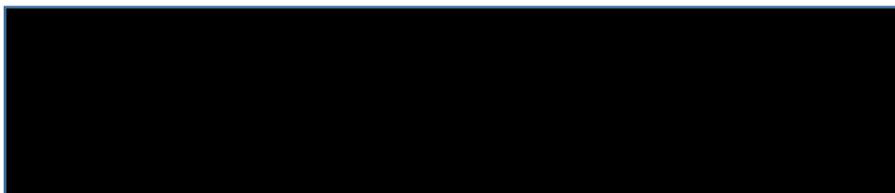
in Guatemala due to the country's unique history and the FAFG's contemporary solidarity. I consider myself very fortunate to have been able to participate; this field school has acted as a powerful academic asset while simultaneously providing a rare instruction on how forensic anthropology can bolster hope within individuals and populations by mending broken judicial systems."

Matthew Ryan Bond, B.Sc. Anthropology, Weber State University.



CONTACT INFORMATION

For questions, comments, or additional information please write to:



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Appendix 2: Interviews and Consent Briefs

OCME Interview [Phone Interview with Brad Adams, OCME]

Consent Brief:

My name is Sarah Rosen, I am a PhD candidate at Durham University in the United Kingdom. I am currently researching the political, social, and academic influences on forensic anthropological investigations. This interview will inform my chapter on forensic anthropological methods, namely after mass casualty events. I am interested in the practical problems forensic anthropologists face in this kind of context and how anthropologists compensate for these problems. As spokesperson for your organisation, your answers will not necessarily be kept anonymous. However, should you wish to be kept anonymous, I am obligated to honour this request. All notes will be kept in my possession without any identifying information, and any transcribed notes will be kept on the university's secure server. You may choose not to answer any question at any time without explanation. You may withdraw from this project at any time before it is submitted to the university in 2019, if you do so, your interview will be securely destroyed. Your data will be kept until the end of the project, at which time it will also be destroyed. We will proceed with this interview honouring any agreement between the legal team for your organisation and myself.

Structured Interview Questions:

What techniques were used to retrieve remains from the WTC?

Did the forensic anthropology team face any problems regarding retrieval methods or identification during the WTC efforts? (i.e. high fragmentation, poor preservation of dna, thermal damage, placement in rubble etc.)

How were these problems dealt with or compensated for?

How would you improve methods of retrieval in a mass casualty context?

Has media coverage ever caused problems for the retrieval and identification process?

Do identification efforts rely on DNA? If yes, how is this funded?

How are families informed of an identification?

How much of a person must be retrieved and identified before they are legally considered found? (i.e. one DNA tested fragment?)

How important to the families is having skeletal material of relatives returned?

Can remains be released to the family directly?

Do families pay for any aspect of the identification and release process?

Is there anything else you believe is relevant and would like to add?

FAFG Interview [Email interview, not fulfilled]

Consent Brief:

My name is Sarah Rosen, I am a PhD candidate at Durham University in the United Kingdom. I am currently researching the political, social, and academic influences on forensic anthropological investigations. This interview will inform my chapter on forensic anthropological methods, namely after mass casualty events. I am interested in the practical problems forensic anthropologists face in this kind of context and how

anthropologists compensate for these problems. As spokesperson for your organisation, your answers will not necessarily be kept anonymous. However, should you wish to be kept anonymous, I am obligated to honour this request. All notes will be kept in my possession without any identifying information, and any transcribed notes will be kept on the university's secure server. You may choose not to answer any question at any time without explanation. You may withdraw from this project at any time before it is submitted to the university in 2019, if you do so, your interview will be securely destroyed. Your data will be kept until the end of the project, at which time it will also be destroyed. We will proceed with this interview honouring any agreement between the legal team for your organisation and myself.

Structured Interview Questions:

To what extent is the FAFG involved in contemporary investigations in Guatemala?

Has there been, or are there plans for, an excavation of graves that are not considered part of the civil war?

Are there restrictions on your DNA services (i.e. it can only be used to investigate certain kinds of cases)

Is your DNA lab still the only certified lab in Guatemala?

Does the FAFG ever collaborate with investigations run by the Ministerio Publico?

Funding Surveys [Email Survey for UNDP Sweden, USAID, the Soros Foundation, the ICMP, the Sigrid Rausing Trust]

Consent Brief:

My name is Sarah Rosen, I am a PhD candidate in Forensic Anthropology at Durham University in the United Kingdom. I am currently researching how transitional justice

projects are funded for my doctoral dissertation. As a contributor to these types of projects, I am interested in your organisation's process for selecting grantees. As a spokesperson for your organisation, your answers may not necessarily be kept anonymous. However, should you wish to remain anonymous I am obligated to honour this request. You may choose not to answer any question without explanation. We will proceed honouring any agreement between your organisation or your organisation's legal team if applicable.

Survey:

How competitive is the application process for the organisation's funding?

What criteria does a project have to meet in order to receive funding?

Are projects ever given conditions in order to receive funding? (i.e. what the funding cannot be used for, what facilities must be used for etc.)?

How are these criteria and conditions chosen (if applicable)?

Where does the money for these projects come from?

What is the goal of your organisation by providing funding for these projects?

Does your organisation benefit (monetarily or otherwise) from the undertaking of these projects? If yes, how?

Does your organisation have an ethics committee? If yes, what standards do they use to make decisions?

From the perspective of the organisation, what is the most important contribution (monetarily or otherwise) that it has made thus far?

Are employees (management, directors, ethics committee members etc.) experienced in humanitarian law, forensic anthropology, or other relevant fields?

Ministerio Publico [Email Request for Information]

Consent Brief:

Mi nombre es Sarah Rosen, soy estudiante doctoral de antropología en la Universidad de Durham en Inglaterra. Estoy estudiando el proceso de identificación de cadáver y la devolución de los muertos a comunidades de donde provienen. Necesito información del Ministerio sobre identificación de cadáveres contemporáneos para mi investigación doctoral.

[My name is Sarah Rosen, I am a doctoral student of anthropology at the University of Durham in England. I am studying the process identifying the dead and the return of the dead to the communities where they come from. I need information from the Ministry about identification of contemporary bodies for my doctoral research.]

Information Requested:

¿Tienes un laboratorio de ADN?

Do you have a DNA laboratory?

Si no, ¿conservas ADN para pruebas futuras?

If no, do you save DNA for future tests?

¿Cuántas personas muertas han sido identificadas este año?

How many dead people have been identified this year?

¿Cuántas personas muertas no se han identificado este año?

How many dead people have not been identified this year?

¿Cuántas personas han desaparecido y no se han encontrado desde 1996?

How many people have disappeared and have not been found since 1996?

¿Cuántas personas han desaparecido y se han encontrado desde 1996?

How many people have disappeared and have been found since 1996?

¿Dónde están enterradas las personas no identificadas?

Where do you buried people who are not identified?

These consent briefs and questions were approved by the ethics committee convened by the Department of Anthropology at Durham University as this project evolved. This section does not address the informal interviews and unstructured interviews that took place during this research.

Appendix 3: OCME Reports (2015, 2018)

Office Of Chief Medical Examiner World Trade Center Operational Statistics

| | | | | |
|--------------------------------|----------|-------|-------------------------|-----------|
| Victims: | 2753 | | Remains Recovered: | 21906 |
| Victims Identified: | 1637 | } 60% | Remains Identified: | 14254 65% |
| *Victims Who Died Outside NYC: | 3 | | Remains Not Identified: | 7652 35% |
| Victims Not Identified: | 1113 40% | | | |

New York City Identification Breakdown

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----|-----|--------------|----|----|--------------|----|----|-------|---|----|----------------|----|----|------------------|---|----|-------|---|----|---|-------|-----|-----|--------------|-----|-----|--------------|-----|-----|-------|----|----|----------------|---|----|------------|---|----|------------------|----|-----|---------|---|----|-------|----|----|
| Total Identified: 1637 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Victims Identified By A Single Modality: 1003 | Victims Identified By Multiple Modalities: 634 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table style="width: 100%; border-collapse: collapse;"> <tr><td>D N A</td><td style="text-align: right;">889</td><td style="text-align: right;">89%</td></tr> <tr><td>Dental X-Ray</td><td style="text-align: right;">47</td><td style="text-align: right;">5%</td></tr> <tr><td>Fingerprints</td><td style="text-align: right;">33</td><td style="text-align: right;">3%</td></tr> <tr><td>Photo</td><td style="text-align: right;">9</td><td style="text-align: right;">1%</td></tr> <tr><td>Remains Viewed</td><td style="text-align: right;">15</td><td style="text-align: right;">1%</td></tr> <tr><td>Personal Effects</td><td style="text-align: right;">7</td><td style="text-align: right;">1%</td></tr> <tr><td>Other</td><td style="text-align: right;">3</td><td style="text-align: right;">0%</td></tr> </table> | D N A | 889 | 89% | Dental X-Ray | 47 | 5% | Fingerprints | 33 | 3% | Photo | 9 | 1% | Remains Viewed | 15 | 1% | Personal Effects | 7 | 1% | Other | 3 | 0% | <table style="width: 100%; border-collapse: collapse;"> <tr><td>D N A</td><td style="text-align: right;">579</td><td style="text-align: right;">91%</td></tr> <tr><td>Dental X-Ray</td><td style="text-align: right;">484</td><td style="text-align: right;">76%</td></tr> <tr><td>Fingerprints</td><td style="text-align: right;">273</td><td style="text-align: right;">43%</td></tr> <tr><td>Photo</td><td style="text-align: right;">16</td><td style="text-align: right;">3%</td></tr> <tr><td>Remains Viewed</td><td style="text-align: right;">2</td><td style="text-align: right;">0%</td></tr> <tr><td>Body X-Ray</td><td style="text-align: right;">3</td><td style="text-align: right;">0%</td></tr> <tr><td>Personal Effects</td><td style="text-align: right;">71</td><td style="text-align: right;">11%</td></tr> <tr><td>Tattoos</td><td style="text-align: right;">6</td><td style="text-align: right;">1%</td></tr> <tr><td>Other</td><td style="text-align: right;">46</td><td style="text-align: right;">7%</td></tr> </table> | D N A | 579 | 91% | Dental X-Ray | 484 | 76% | Fingerprints | 273 | 43% | Photo | 16 | 3% | Remains Viewed | 2 | 0% | Body X-Ray | 3 | 0% | Personal Effects | 71 | 11% | Tattoos | 6 | 1% | Other | 46 | 7% |
| D N A | 889 | 89% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dental X-Ray | 47 | 5% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fingerprints | 33 | 3% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Photo | 9 | 1% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remains Viewed | 15 | 1% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Personal Effects | 7 | 1% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other | 3 | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D N A | 579 | 91% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dental X-Ray | 484 | 76% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fingerprints | 273 | 43% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Photo | 16 | 3% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remains Viewed | 2 | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Body X-Ray | 3 | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Personal Effects | 71 | 11% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tattoos | 6 | 1% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other | 46 | 7% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Note: the total here exceeds 100% because modalities overlap; there are over 40 combinations of modalities in use.

Death Certification

| | |
|--|------|
| Total Reported Missing: | 2753 |
| New York City Death Certificates Issued: | 2750 |
| Non New York City Death Certificates Issued: | 3 |
| No Death Certificate Issued: | 0 |

New York City Death Certificate Breakdown

| | | |
|---|------|---|
| DX (Judicial Decree) Certificate Only: | 1113 | |
| DM (Physical Remains) Certificate Only: | 412 | } Total Physical Remains Certificates: 1637 |
| **DM After DX: | 1225 | |
| | 2750 | |

* Victims were transported to facilities outside of New York, where they later died of their injuries.

** The family obtained a DX certificate; later we identified remains and issued a physical remains certificate.

Office Of Chief Medical Examiner World Trade Center Operational Statistics

| | |
|----------------------------------|----------------------------------|
| Victims: 2753 | Remains Recovered: 21905 |
| Victims Identified: 1639 | Remains Identified: 14487 66% |
| *Victims Who Died Outside NYC: 3 | Remains Not Identified: 7418 34% |
| Victims Not Identified: 1111 40% | |

New York City Identification Breakdown

| | | | |
|---|--|------------------|---------|
| Total Identified: 1639 | | | |
| Victims Identified By A Single Modality: 1003 | Victims Identified By Multiple Modalities: 636 | | |
| D N A | 891 89% | D N A | 582 92% |
| Dental X-Ray | 46 5% | Dental X-Ray | 485 76% |
| Fingerprints | 33 3% | Fingerprints | 273 43% |
| Photo | 9 1% | Photo | 16 3% |
| Remains Viewed | 15 1% | Remains Viewed | 2 0% |
| Personal Effects | 6 1% | Body X-Ray | 3 0% |
| Other | 3 0% | Personal Effects | 72 11% |
| | | Tattoos | 6 1% |
| | | Other | 46 7% |

Note: the total here exceeds 100% because modalities overlap; there are over 40 combinations of modalities in use.

Death Certification

| | |
|--|------|
| Total Reported Missing: | 2753 |
| New York City Death Certificates Issued: | 2750 |
| Non New York City Death Certificates Issued: | 3 |
| No Death Certificate Issued: | 0 |

New York City Death Certificate Breakdown

| | | |
|---|------|---|
| DX (Judicial Decree) Certificate Only: | 1111 | |
| DM (Physical Remains) Certificate Only: | 412 | Total Physical Remains Certificates: 1639 |
| **DM After DX: | 1227 | |
| | 2750 | |

* Victims were transported to facilities outside of New York, where they later died of their injuries.

** The family obtained a DX certificate; later we identified remains and issued a physical remains certificate.