Ritualized Discourse in the Mesoamerican Codices

An Inquiry into Epigraphic Practice

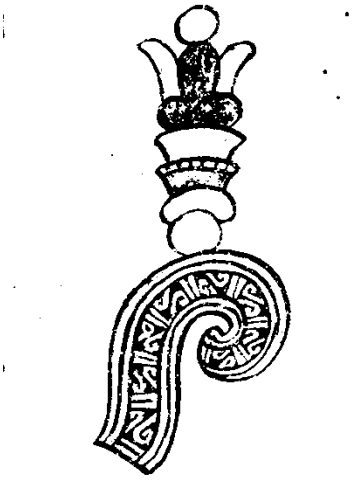

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Image: Black and white representation of the flower and song, Codex Borbonicus p. 2

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An Inquiry into Epigraphic Practice

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TABLE OF CONTENTS

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1 INTRODUCTION & POSTCOLONIAL THEORY

1.1 Introduction

Modern human life can be attributed to our ability to transmit complex information across time and space. While many inventions allow humans to do this, arguably the most effective and revolutionary of these was and continues to be writing. Writing is the tool with which the experiences, beliefs, thoughts, ideologies, and devotions of a single individual or collection of individuals can be transmitted outside of the immediate community and time period, transcending national and physical boundaries, allowing for the spread of information to peoples across the world. In many ways, writing is fundamentally essential to our understanding and experience of the universe.

Writing has only been invented three times across the world, and arguably only twice in isolation. The Sumerians of the Near East created their early logographic scripted based on their use of clay tokens, while the Chinese are thought to have gleaned their idea for a pictographic script from the Near East. These scripts and their descendent writing systems have never been lost to Western history, with many still widely in use. The final development of writing occurred in Mesoamerica, isolated from the rest of the world in an area far less globalized. While the Mayan script is often considered to be the only Mesoamerican writing, an investigation into Mesoamerican history reveals evidence of a long scribal tradition. From the Olmec to the Aztec, Mesoamerica is the home of far more than only it's most famous writing export. Despite the evidence of epigraphic tradition across Mesoamerica, many scholars refuse to accept that Maya writing was not the sole writing system in use.

The 16th century saw a change that would affect the entire world with the arrival of Columbus and the subsequent colonization of the Americas. This bloody and dramatic period in history still has lasting effects in the current era, including the continued subjugation of indigenous peoples across the Americas. Examining the period immediately preceding the Spanish invasion illustrates the complexity of these cultures and makes their destruction by the Spanish even more devastating. The PostClassic period saw many distinct cultures flourish, some

of whom were the Maya, Mixtec and Nahua. These three groups were culturally and linguistically different, but still shared many pan-Mesoamerican commonalities. One of these commonalities was writing, particularly in the form of screenfold manuscripts made of animal hide or native paper. While unity did exist among these cultures, the type of writing varies greatly. The Mayan writing system was logosyllabographic, combining phonetic and logographic elements within the same script. Since it's decipherment in the 1950s, Mayan writing has widely been accepted as "true" writing. Central Mexican and Mixtec writing is considered more pictographic, although both involve phonetic elements and refer to linguistic practice. The differences between these scripts has led some scholars to refuse to include these pictographic systems in the same field as more structured and phoneticized writing. Thus, the Maya codices have been traditionally been analyzed from a more epigraphic standpoint, while the Central Mexican and Mixtec codices have had a more art historical approach.

These writing systems existed contemporaneously, recording similar beliefs and practices from cultures which shared variations of the same ideology and ritual behaviors. The similarities between these cultures lends themselves to the idea that they also were similar in their use of writing, despite the obvious differences in script. The independent invention of Mesoamerican writing allowed it to grow in a manner drastically different than the writing of anywhere else in the world, which has in some ways led to a negative perception of indigenous American writing systems. Scholars who apply Western frameworks of understanding to these systems find that Mesoamerican writing does not fit into the hierarchical and evolutionary structure which works well in many areas of the world.

The philosopher Derrida believed that "writing is not a transparent window onto an established reality: writing in our society has certain structured properties which are employed in such a way as to provide an illusion of a real 'whole' world" (Street 1984, 101). Understanding a writing system within the context of the culture which produced it allows for a better reconstruction of how these people saw and created their "illusion" of the world. Rather than approaching writing as something which tells the true story of history, it must be approached as of one way of recording subjective cultural experience.

The question this thesis aims to answer is: how did Mesoamerican people understand their writing? What does their use of writing tell us about their cultures? More specifically, are there patterns in their use of writing and do these patterns exist cross culturally or are they culturally

specific? In order to investigate these questions, the PostClassic codices found in Mesoamerica have been compared on two axes. The codices were chosen for this study due to their presence in three distinct cultural groups, the Central Mexica, Maya, and Mixtec peoples, during the same period of time in close geographic proximity. By studying documents which already have so much in common, the differences exhibited between them can be better attributed to cultural differences rather than because of some other variable. To preface the following discussion of the case studies of this thesis, it is helpful to introduce them with the understanding that "beautifully executed speech and song are the only substances, with the possible exception of blood, that the human body can produce which are accessible to, and worthy before, divine beings" (Gossen 1986, 7). The elevated importance of ritual speech and ritual blood practice are tied by their association to the divine and thus provide alternative avenues for the exploration of ritualized linguistic and epigraphic practice within the codices.

The first axis of comparison is a quantitative approach centered on depictions of a cultural practice seen in all three groups: the ritual offering of blood. The manner in which the codices depict bloodletting has been compared in a quantitative and statistical manner through a number of variables in order to determine if all three cultures used writing to depict the practice in a similar way. The second axis of comparison is a qualitative approach centered on the linguistic practice of difrasismo, a linguistic phenomenon in which two concrete terms are combined in order to create an abstract concept. Difrasismo is documented archaeologically and ethnographically, and is seen in all of the cultural groups being studied. The difrasismo invoked and the manner of their use have been compared in order to understand whether the application of this linguistic practice shows similar patterning across cultures in Mesoamerica. Bloodletting and difrasismo were chosen specifically because of their intrinsic association with ritual, with which writing is also associated. Exploring the interactions between these ritual practices through the prism of writing allows for more than simply a comparison of writing to take place, but a true comparison of what these cultures may have viewed as the most important.

There have been many inadequate studies of Mesoamerican writing in the past which refuse to acknowledge the benefits of alternative systems of knowledge. These misunderstandings of Mesoamerican writing can be largely attributed to the fact that "contemporary outlooks concerning written language are built almost entirely upon understandings of the two writing systems developed in Africa (Egypt-Sumeria) and Asia

(China)" (Jimenez and Smith 2008, 28). Because of the privileging of these two categories as the norm, Mesoamerican writing has suffered a severe disadvantage in academia. The root of this problem derives from the view of "writing as an evolution in which the goal is to arrive at a system that represents language; and moreover, this system is separate from art. Such a division… did not exist for the Amerindians" (Jimenez and Smith 2008, 10). The implicit assumption that writing follows an evolutionary trajectory leads to further assumptions about the nature of writing: that the alphabet is the highest form; that semasiography is not writing; that all writing must be phonetic. However, great strides have been made recently by scholars such as M.E.R.G.N. Jansen and Katarzyna Mikulska Dąbrowska in understanding alternative forms of writing in Mesoamerica as writing systems in their own right. The subconscious belief in the inherent separation of writing and art as well as the assumption of an evolutionary development must be actively unlearned in the process of researching these writing systems in order to arrive at conclusions that do not simply mimic the understanding of writing prevalent in Western culture.

1.2 Colonialism

The colonialism of the American continents, beginning in 1492 and continuing until the present day, is one of the most disruptive and world changing events in the course of human history. In the span of a few centuries, two areas of the world which had been almost entirely separate for the majority of human history were brought together in a clash of cultures which would end in the subjugation of an entire continent of people. It is not for this thesis to discuss the motivations of the colonial Spanish or the indigenous resistance, although there is a time and place where that is necessary. However, a discussion of the colonial past is necessary to place Mesoamerican writing into its proper context and the context which was imposed upon it. Colonialism as a practice requires a fundamental disruption of the indigenous way of life. In the act of creating a new community and culture, there exists the need for "*unforming* or re-forming the communities that existed there already, and involved a wide range of practices including trade, plunder, negotiation, warfare, genocide, enslavement and rebellions" (Loomba 1998, 2). This thesis aims to operate in a postcolonial framework which acknowledges the negative impact of colonization on modern populations and which links this to the way archaeology has been

practiced in these areas. The use of the word postcolonial to describe studies which take into account colonialism has recently become popular. However, this term is fraught with theoretical consequences, as "post" implies an aftermath, both temporal and ideological, whereas many scholars of colonialism would argue that colonialism has not yet ended and that thus the word "post" is not entirely applicable. This mindset serves to reinforce the idea that colonialism is a thing of the past, rather than something which continues to enact real world consequences. There are also degrees of postcolonialism, such as how "a country may be both postcolonial (in the sense of being formally independent) and neo-colonial (in the sense of remaining economically and/or culturally dependent" (Loomba 1998, 7). Even in countries which are politically and economically independent from their oppressors, there still remain the residual effects of colonialism which continue to impact daily life. However, for lack of a better term I will continue to use postcolonial to refer to the theoretical framework which acknowledges the oppressive impact of colonialism and seeks to conduct academic research while keeping this in mind.

Because of the influence of colonialism on the study of epigraphy in the past, it is not only interesting but necessary to examine Mesoamerican writing outside of the confines imposed by colonialism. Indigenous authors Marco, Pena-Vargas and Ruggiero wrote that "indigenous peoples are up against a systematic war of forgetting. So as the Neo-Zapatistas insist: "As our ancestors resisted wars of conquest and of extermination, we have resisted" and will overcome "the wars of forgetting" for "we, the Indigenous, are the guardians of history." We are "the ones who guard and nurture the ancient word… The ones who respect history"" (Marcos, Pena-Vargas and Ruggiaero 2007, 45, 90, 120 in Helland 2012, 31). Archaeology is a political and social practice entrenched in its colonial roots which will never operate outside of the political sphere, and to cease to acknowledge the impact of colonialism is to side with the European oppressor. As an American, as a white person, as a descendent of colonial peoples I am in an unwarranted position of power over indigenous peoples in that it is not required that I mention their struggle. Articles, theses, and books are published every year by researchers from my demographic who make no connection to living communities, power relations, or the ongoing consequences of the colonial practice which brought our people to the United States. It must be remembered that research can never exist in a vacuum and that "knowledge is not innocent but profoundly connected with the operations of power" (Loomba 1998, 43). It must also be

remembered that the non-indigenous can never speak for indigenous populations or insert themselves into a movement where they are not wanted. The indigenous voice must always take precedence above that of the non-indigenous, and removing the non-indigenous from the forefront of the discussion functions both symbolically and practically.

Colonial discourse and postcolonial theory must be seen as "a new way of thinking in which cultural, intellectual, economic or political processes are seen to work together in the formation, perpetuation and dismantling of colonialism. It seeks to widen the scope of studies of colonialism by examining the intersection of ideas and institutions, knowledge and power" (Loomba 1998, 54). In this sense, as a new way of thinking, it is incredibly applicable to the academic study of an area which colonial practices rendered unrecognizable by its former inhabitants. As Spivak was once summarized, "all discourse is colonial discourse" (Gates 1991, 466). Archaeology and epigraphy are no exceptions to this statement.

1.3 Mesoamerica

The geographic and cultural area of this study is Mesoamerica, which stretches from western Mexico and Oaxaca to the Yucatan Peninsula and down to the northern area of Honduras. The origins of Mesoamerica as a cultural group can be traced back to the 12th century B.C., when the sociopolitical environment became more complex and social stratification began to develop (Rice 2009, 28). The Central Mexican codices are attributed to the Nahua peoples, the most famous of whom are the Aztec but which also includes many other speakers of the Nahuatl language such as the Mexica, Tezococan, and Tlaxcalan (de Alva 1992, 14). While much diversity existed between the Nahua, they were unified by their shared deities, religious practices, and understanding of the world around them (León-Portilla 1992, 206). The Maya codices were produced by the Maya people, the name given to a collection of smaller cultural groups which shared a similar language, religion, and culture. Occupying the Yucatan peninsula as well as areas of Belize and Guatemala, the Maya are known for their shared writing system and political organization. Finally, the Mixtec codices were created by the Mixtec people, known in their own language as the Ñuu Dzaui, or "People or Nation of the Rain" (Jansen & Pérez Jiménez 2010, 46). The term 'Mixtec' is actually derivative from the Nahuatl word *mix-teca*, which means "inhabitants of the land of clouds," and their Otomanguen language is currently

spoken by 450,000 people (Jansen and Broekhoven 2008, 1). These cultures exhibited a great amount of cultural connectivity despite maintaining their status as distinct cultural groups.

It is beneficial to conceptualize the indigenous peoples of the Americas as "spatially dispersed (though *not* separated), yet thematically fused, overlapping and indeed reciprocally reinforcing and mutually constitutive themes and struggles" (Helland 2012, 5). It is also important to recognize that communities of Nahua, Maya, and Mixtec people exist today which speak indigenous languages and continue traditional practice. Any study of these indigenous documents must thus be sensitive to and aware of the current issues and disadvantages facing the modern indigenous communities whose ancestors produced these objects of study.

From first glance it is clear that the codices are very similar. Likely derived from the same common source, "a genre of Olmec-style iconography… the earliest scripts maintained a tight integration of iconographic and written genres, with some practices continuing to be shared between them" (Justeson 1990, 126). The shared Mesoamerican fluidity of text and image provides a starting point and a purpose in comparing the scripts which have developed out of these early shared practices. Approaching this with a mindset which acknowledges the colonial experience allows for a study which is both academically valid and socially aware. Again, the use of postcolonialism here should be interpreted not as indicating the end of this experience but "more flexibly as the contestation of colonial domination and the legacies of colonialism" (Loomba 1998, 12).

1.4 Ritual & religion

The interconnectivity of writing and religion in Mesoamerica is of central importance in understanding either practice. Writing belonged to the realm of the sacred, with literacy often limited to elite members of society (Inomata 2001, 332). The codices themselves, whether of a primarily religious or historical nature, discuss religious beliefs, contain scenes of ritual, and were used in religious practice themselves. The discourse used within the codices is of a fundamentally ritual essence. Thus, it is necessary to discuss the concept of religion itself and how it is understood in order to approach the case studies.

This thesis operates under Rappaport's definition of ritual in his 1999 classic, *Ritual and Religion in the Making of Humanity*, which uses the word ritual to convey "*the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the*

performers" (Rappaport 1999, 24). Ritual is a formal, rule-governed practice which shapes and is shaped by those involved in it. The subject of ritual is often indicative of the most important aspects of society, be they religious, political or social. Examining which activities are ritualized and how this occurs can lead to more complete understandings of the greater underpinnings of a community or social group.

Rather than reiterate the entirety of Rappaport's book, I will simply review a few factors which are heavily important in the context of ritual blood practice and ritual discourse, the first of which is the formalized, repetitive aspect. While some rituals are not time-constrained, many are associated with specific periods of time, specific times of day, or specific times of life. All rituals are governed by some sort of formal period for conducting the ritual, such as under specific physical or social conditions, and this often leads rituals to occur in a particular place as well (Rappaport 1999, 33). Understanding the social and temporal conditions required for a certain ritual is integral in approaching any study of ritual. Rituals are also often highly performative, which is something especially relevant in approaching the codices. Rituals do not exist without their performance, and this performance is not uniform across the community. The differing participation of individuals within a ritual highlights their differing social status and maintains social orders in which individuals have access to the sacred in varying degrees (Rappaport 1999, 331). Additionally, rituals are simultaneously invariant in their strict adherence to their requirements while also allowing for the autonomy of their participants. To clarify, "there is the possibility or, or even the necessity for, some choice to be exercised by performers even within the most invariant of liturgical orders" (Rappaport 1999, 36). The choice to participate or not participate in a ritual, and the specific method of participation, determines the role of an actor in the larger religious community. While this is by no means an exhaustive definition of ritual, the preceding features are those which appear to be most necessary to understand before moving on to the ritual of the current study.

The word 'religion' itself and its applicability to Mesoamerica must also be discussed. Most academic discussions of religion operate under a Western definition of the practice, in which there is a clear distinction between the secular and religious (Pharo 2007, 58). The use of the word "religion" to refer to Mesoamerican ritual practice must be applied with caution, as does any use of European terms to refer to non-European practice, because the distinctions which exist within European society are not necessarily universal or even the most popular way of

viewing the world. Within Mesoamerica, religion was not seen as a practice separate from the secular but something which permeated every area of life, from the most mundane to the most sacred. Examining the indigenous words which have been translated as "religion" offers insight into how the concept of religion was expressed in Mesoamerica. For the Mixtec, religion is conveyed through terms such as *sa ñuhu*, "that of the Gods"; *sa sicaa sa ñuhu*, "that what is that of the Gods"; and *sa sica huaha* "that of the walking well" (M.E.R.G.N. Jansen, personal communication, November 17th, 2015). Zapotec translates religion as *xiguela*, which means "being" or "essence", while Nahuatl uses the term *teoyotica nemiliztli*, "living with the divine" (Pharo 2007, 40-41; M.E.R.G.N. Jansen, personal communication, November 17th, 2015). Tarascan and Michoacan use the term *dioseo cez hangua* or "divine spiritual life," emphasizing the existence of the religious experience within the daily workings of life (Pharo 2007, 42). Even within the same language family differing definitions exist, such as Yucatec Maya using phrases such as *okol k'u,* "to demonstrate grief," for religion and *(ah) okol k'u*, "a chaste, pure, abstinent, penitent hermit," for a priest, emphasizing their pure and repentant nature, while Tzoltzil uses the phrase *ch'uul utz xanbal*, "a (sacred) righteous, correct way of life" to convey the same system of belief (Pharo 2007, 44-45). While there is much variety within these definitions as to what they emphasize and how they represent religious practice, they are similar in that they overwhelmingly do not categorize religion and religious acts as separate from life but as something which is constantly present. Religious behavior and interaction with the sacred is a fundamental undercurrent of within Mesoamerican societies, coexisting and merging within the daily practices of life. Understanding the lack of distinction between the religious and the secular is essential in understanding the meaning of Mesoamerican ritual behavior.

In the chapters to follow, the nature of writing in Mesoamerica will be discussed and explored in various ways. Chapter 2 questions what exactly the word "writing" means and if it is a valid word to use in Mesoamerica. Alternative traditions of knowledge in across the Americas are investigated, along with the archaeological evidence for the history and development of writing in the Mesoamerican region. The first case study of this thesis, Chapter 3, studies how the Mesoamerican codices depict the same subject matter. The purpose of and evidence for the ritual practice of bloodletting will be explained, followed by an analysis of how each of the codices depicts bloodletting based on a series of variables and an identification of the correlations between these variables. The second case study, Chapter 4, studies how the

Mesoamerican codices depict the same linguistic practice. The ritual language of difrasismo will be explained in terms of function and practice, and then reviewed as related to its use in the codices. Finally, Chapter 5 will provide an overview of this research, propose final results, and discuss future directions for codical analyses.

2 WRITING THEORY

2.1 Introduction

Writing as a category has never been clearly defined due to its ambiguous and non-uniform nature. Some definitions of writing are seen as too rigorous and elitist, while others can be seen as too lax and inclusive. The study of writing within an archaeological context is not simply the study of ancient literature or myth, but the study of innovation and development. Writing is an invention, invented three times in the course of human history, which went on to revolutionize the entirety of human existence. Although a relatively new invention for the genus *homo*, writing has gone on to allow the human world to be connected across space and across time to a degree which would be impossible without it. The current academic paradigm tends to privilege Mesopotamian-derived alphabetic writing over all other forms, citing its ability to transmit complex information at a level which logosyllabographic or semasiographic writing cannot. Literature which is intended to provide an overview of history of writing instead becomes a repetitive exercise in extolling the brilliance of the alphabetic tradition and its predecessors, rather than addressing the natural benefits and drawbacks of all systems (see Powell 2012). Rather than continue this stale academic tradition, the meaning and purpose of writing itself will be examined in order to illustrate the context-specific nature of epigraphic practice and the need to approach writing not as an isolated achievement but one which rests upon the entire history of a cultural group.

2.2 Writing Theory

There is currently no uniform definition of writing used within academic communities, and the definition used often depends on which discipline is engaged in study. Archaeologists, anthropologists, philologists, and linguistics each support differing definitions, and even within a discipline there may be differing factions of belief. The discrepancy about what actually constitutes writing and what is merely pre-writing plagues any academic discussion of writing,

highlighting the ambiguous nature of the term. The issue becomes even more complex with the inclusion of alternative categories of representation which coexist with 'writing', which leads to definitions that define "writing as a form of graphic communication which represents linguistic information, different from but related to notation, which encodes mathematical information, and iconography, which uses graphic representation to convey meaning" (Whittaker 2009, 52). The overlap between the categories of writing, notation, and iconography is obvious but poorly defined, which lends itself to the issue of how to distinguish between these categories. The most liberal definitions are from scholars such as Gelb, for whom writing is "a system of human intercommunication by means of conventional visible marks" (Gelb 1952, 12). Stricter guidelines emphasize the necessity of representing sound, such as Diringer who defines writing as only the "graphic counterpart of speech" (Diringer 1962, 20). Both of these classic epigraphic definitions makes a strong case for the inclusion or exclusion of certain systems as writing, again evidencing the ambiguous nature of the term itself.

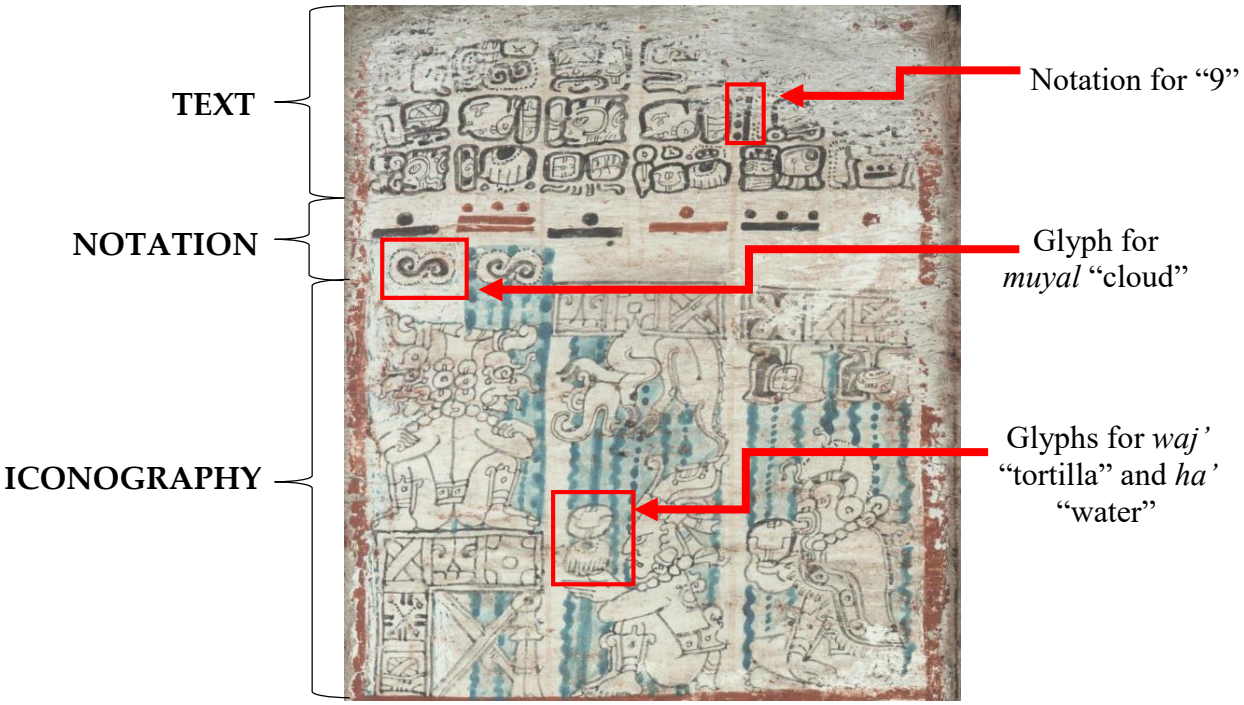


Figure 2.1

Example of the distinction and overlap between text, notation, and iconography in the Dresden Codex p. 68. After Whittaker 2009, 53.

Other definitions approach writing more inclusively, such as Whittaker who writes that writing "codifies and represents linguistic information by means of autonomous graphic elements (signs) of generally uniform size, arranged in sequence… A writing system, also known as a script, usually in-corporates a notational subset with autonomous features. It is often found in symbiosis with iconography" (Whittaker 2009, 52). While the use of the terms "iconography" and "script" is problematic in that it creates a clear distinction between the two, the definition addresses the exchange between these graphic communications, unlike many other definitions which neglect the iconographic or notational components of script. However, it is important to remember that while the categories of notation, text, and iconography are clearly distinguished in modern Western scripts, within Mesoamerican writing these categories blend together and are present in overlapping manners as indicated by Figure 2.1.

Rather than struggling against the seeming inability to define writing, perhaps it is better if academia accepts that it is in the nature of writing to be abstract and complex, to live between the realms of language and art. This thesis argues for an inclusive view of writing which includes semasiographic, logographic, and alphabetic scripts within the category of writing. While many writing systems may seek to represent sound, the idea that the representation of sound is mandatory in a writing system assumes that all communities with use of a script felt the representation of sound to be a necessary practice.

It primarily must be understood that writing is not a natural phenomenon. No matter how natural it may feel to those educated in a script to write, the fact remains that writing has not always existed and has barely been present throughout most of human history. Writing must be understood as an invention, created to serve a social function. If this statement can be taken as the most basic purpose of writing, the logical conclusion must follow that it is not natural. Sound is a natural animal behavior, and speech has evolved to be natural in human beings, but the representation of words and sounds is not a natural act. Understanding writing as an inherently unnatural act allows for better comprehension of the variety of writing systems in existence. Every human society is different, with varying needs and cultural practices. Writing as an invention occurred in order to meet the needs of a community, and it logically follows that different communities would have differing needs in terms of information transmission systems. Exploring the unnatural nature of writing brings to light a myriad of questions, particularly those

of the interaction between the spoken word and written script. Ong explains in his 1982 classic *Orality and Literature* that "talk implements conscious life but it wills up into consciousness out of unconscious depths, though of course with the conscious as well as unconscious cooperation of society. Grammar rules live in the unconscious in the sense that you can know how to use the rules and even set up new rules without being able to state what they are" (Ong 1982, 81). The process of writing takes these conscious practices, based in unconscious thoughts, and attempts to transform the underlying grammatical structures into something concrete and documented.

Writing, regardless of script, must be rule-governed. The rules and regulations of a writing system must be agreed upon by all who use it before they begin this practice. By understanding writing as that which is rule governed, systems of symbols and pictography which do not follow formally defined rules can be excluded from the category of writing, relying instead upon iconography to transmit their information. This is where the inclusion of semasiography becomes difficult to justify, as semasiography is often commonly referred to as "picture" writing. The line between art and text is blurry at best and indistinguishable at worst, but this dilemma highlights the true difficulty in defining writing. To those who are illiterate in a certain system, a system of writing may be seen as art. Take, for example, the Egyptian stelae in the Metropolitan Museum of Art. The inscriptions on these stelae were intended to convey information and adhered to a rule-governed, deciphered script. Despite this, the majority of visitors to the museum do not come with the intention to read literature but to view ancient art and may indeed even neglect to remember that Egyptian hieroglyphs actually convey information and are not simply interesting looking shapes on interesting looking objects. While only a simple example, it demonstrates that writing must be identified as such in order to be interpreted as such. Again the writings of Ong are relevant, as "writing or script differs as such from speech in that it does not inevitably well up out of the unconscious. The process of spoken language into writing is governed by consciously contrived, articulable rules: for example, a certain pictogram will stand for a certain specific word, or *a* will represent a certain phoneme, *b* another, and so on." (Ong 1982, 81). If a distinction is to be drawn between writing and art, perhaps the easiest line to draw it at is that art is natural, formless, and rule-less, while writing is unnatural, has a set form, and adheres to specific, difficult to change rules. While not a strict distinction, it does provide some sort of parameter from which to begin this investigation.

2.3 An argument for the inclusion of Central Mexican pictorial writing in the category of writing

Criticisms of non-phonetic writing rely upon a theoretical foundation which gives priority to phonetic writing, but often the justification for this priority is never explained. The alphabet has often been seen as the pinnacle of writing, allowing any person to express any sound and convey any word they desire. This belief, however, is not true. The alphabet faces just as many limitations as any other writing system, and indeed newcomers to the English language and alphabet from non-alphabetic systems like Chinese are often astounded by how little the English alphabet actually follows the rules which supposedly govern it. Here we can see that the existence of rule-governed writing does not eliminate the fact that there are often many exceptions to these rules. Of the many criticisms which are applied to non-alphabetic writing, it can be said that "such criticism, which is based essentially on the assumed superiority of alphabetic scripts over all others, is quite misplaced. It not only overrates the efficiency of alphabetic systems, it also seriously undervalues the merits of others" (Hooker 1990, 107).

Few would argue against the inclusion of Maya hieroglyphic writing within the category of writing, but this thesis also includes the Mexican pictorial style of writing within the category of writing, a choice which will be defended as follows. Firstly, the intersection of orality and literacy is present in Mexican writing. While I do not adhere to the belief that writing must be phonetic in order to be writing, I am aware that other academics consider this to be a pivotal point of departure. Phonetic elements exist within the Mexican codices in the form of day signs, names, and linguistic features which are coded into the imagery. The necessary inclusion of even highly pictographic systems is evidenced through the fact that even pictographic systems adhere to rules, and these systems intend to depict events, experiences, or emotions through a system of set imagery. While the rules governing pictographic systems may be more fluid, this is no indication that they are any less useful or valid. As stated previously, some academics believe that "a script in the sense of true writing, as understood here, does not consist of mere pictures, of representations of things, but is a representation of an *utterance*, of words that someone says or is imagined to say" (Ong 1982, 83). This preoccupation with speech actually lends support to the inclusion of the Mexican codices in the category of writing, as the codices were often primarily intended for use in religious performance.

As a quick side note, the notion of "true" writing is an interesting concept. The disparagement of many writing systems as "not true," with the claim that the rules and laws

discussed governing the validity of writing are simply based in a desire to be academically rigorous, is a familiar argument. However, what benefit is there in claiming these strict rules besides privileging the European form of writing above all others? Pictographic writing systems have many advantages, one of which is that it allows speakers of other languages to understand the text even if they do not understand the language of those who wrote it. Systems in which phonetic elements are present but do not dominate the scene open the message of the codex to an entirely new demographic which would be closed off if the system was entirely phonetic. The conventions used in the Mexican writing style were common elements of iconography across Mesoamerica, and those who came in contact with written documents would immediately know what the image was trying to convey, even if they could not pronounce it. Practices such as semasiography embrace this, as "semasiographs stand not for the sounds of the name of a referent but rather for the referent itself. They are therefore said not to be "in" any particular language" (Salomon 2001, 2). It is useful to cite W.C. Brice's 1977 list of the benefits of non-phonetic writing, created while studying Linear A:

1) It does not rely on any specific language and thus transcend linguistic boundaries.
2) It can be brief and understandable within a moment.
3) There is a great deal of freedom in the combination of signs and their order, allowing for a greater ability to convey subtleties.
4) The number of signs with definite meanings is quite small.

Supporting the idea of pictorial writing as having its own benefits is the fact that the Mexican people were certainly aware of Mayan phonetic writing but still chose to maintain their pictographic tradition, a choice which indicates there were some things pictorial systems were better equipped for than their phonetic equivalents.

Having established that writing is a cultural phenomenon whose form depends on the social role it must fill, it is possible to discover many other practices with similar ideological functions to that of writing. Traditions of knowledge and forms of knowing are culturally influenced and given varying importance based on the culture in which they exist. Across the Americas there are many forms of complex knowledge which have been continually de-emphasized as a result of the colonial process, but which may have existed in place of a script-based practice. These ritual practices are "legitimate forms of knowing which the historiographers… may flatten, consciously or unconsciously, due to the influence of a colonial

administration that privileges European literacy as a method of control and as the only valid ―system for storing and transmitting knowledge" (Allen 2011, 88). Such systems as the Andean *khipu*, which is often referred to as "writing without words," bear great similarity to semasiography, using a more abstract form of reference to communicate specific events and situations (Salomon 2001, 1). Other systems, such as the Tupicochan code (*vara*) which often coexists alongside *khipu*, use carved staffs to record important historical and religious information in an alternative mode of literacy. It is important to review these methods of communication because it establishes that a lack of writing does not indicate a lack of intelligence of the inability to process complex thought. The fact that people existed without the narrow definition of writing present today but still had the ability to communicate complex thoughts removes writing from the pedestal of uniqueness which it has been placed upon and reinforces the fact that writing in the style of the Western world is not necessary to maintain complex ideologies.

Ethnohistorical accounts reinforce this, such as the encounter between Peruvian leader Atahualpa and the European colonizers. This story, raised almost to the status of myth, has historically told of the amazement of Atahualpa when confronted with a European book and has been used to support the idea of indigenous Americans as unfamiliar with writing. However, many scholars have now come to interpret this incident not as indicating an unfamiliarity with writing but an unfamiliarity with the codex format of writing on thin paper. The idea of the Andeans as amazed by the intelligence of the Europeans supports a colonial mentality not rooted in fact, as "the ability of writing to communicate across time and space… is possible with most indigenous pictographic systems" (Allen 2011, 16). This story, presented as historical fact, in all likelihood was an incident manipulated to further preexisting attitudes towards indigenous Americans, causing a simple interaction between peoples of vastly different cultures to go down in history as a statement on the mental inferiority of an entire race of people. Encountering people from another continent who spoke a different language and came from an entirely different cultural background, the idea that it was writing which most amazed Atahualpa makes astonishingly little sense.

One effect of a more inclusive view of writing is a sacrifice of clarity regarding what the grammatology and ethnography of writing entails, which seems to be a pivotal point for many researchers. However, "it would also equip us to deal with what is, after all, a large share of the

human race's inscriptive inventions—that rich accumulation of unwanted gifts with which ethnographers have been pelting grammatologists since long before Gelb invented the term" (Salomon 2001, 2). The choice between a highly prescribed definition which functions primarily as an academic tool and a more fluid definition which seeks to understand universal human behavior largely depends on the discipline of the person doing the defining. However, allowing other epigraphic traditions into the realm of writing may be crucial to understanding how humans process and share their thoughts, feelings, and ideas. Rather than fitting representational systems into the loosely defined boxes of proto-writing, subgraphemics, or picture writing solely on the basis of their non-phonetic nature, an inclusive view of writing allows for the comparison of vastly different traditions within a theoretical framework which not only accounts for, but embraces the changing nature of writing and the benefits and drawbacks found within all systems.

2.4 Traditions of knowledge in Mesoamerica

Mesoamerican writing is a unique instance of isolated development in which a writing system was created, spread, and developed away from the rest of the written world, all of whom interacted with or owed their existence to Mesopotamian writing. The uniqueness of Mesoamerican writing cannot be denied, as they are "possibly the only systems of writing created anywhere in the world that do not owe their existence to the concept of writing developed even earlier by the ancient Egyptians and Sumerians" (Jimenez & Smith 2008: 31). The invention of writing in one human society is striking enough, but the invention of writing independently at different points in history by different cultures provides an opportunity in which the aspects of writing which are seen as natural or obvious can be contested and the culturally relative nature of writing can be emphasized.

2.4.1 Linguistic Development

The culture of the American continents developed in great isolation from the rest of world, including their language. It is important to discuss language briefly, as the languages represented in Mesoamerican scripts have a direct effect on the organizational premises of these scripts. If writing is often intended to represent phonetic language, then it follows that "the linguistic

representational principles of Mesoamerican scripts appear to be largely derivable from the grammatical structures of words in the languages they represented, with respect both to the distinctions they fail to represent and to how they represent what they do represent" (Justeson and Mathews 1990, 127). Linguistic studies of the Americas propose at least three migrations which emphasize the linguistic diversity of native languages. The dates for American occupation range from the early entry hypothesis, which proposes colonization at 40,000 years ago, to a more skeptical hypothesis for colonization of the Americas as late as 12,000 years ago (Rice 2009, 26). Regardless of which is correct, it is important to be aware of the variety of people in the Americas and the changes which would occur in their language and culture throughout the process of their dispersal. The earliest major language families of Mesoamerica are known as Uto-Azteca, Mixe-Zoquean, Mayan, and Proto-Otomanguean (Rice 2009, 26). Proto-Otomanguean is dated to between 8000 and 5000 BCE, but the dates for the other early Mesoamerican language groups are less clear. The ambiguity continues as languages diversify during the Archaic to Formative transition, with no clear consensus on many dates for the emergence of new languages (Rice 2009, 27). The inner workings of a language often affect a writing system and its development, as it becomes a visual representation of the world ordered according to the principles of the language. Additionally, there was not only one language used in many Mesoamerican cultures but often also a "ceremonial or reverential language, characterized first and foremost by parallelisms and metaphors, both in ritualized speeches or prayers and in sacred narratives (e.g. the Popol Vuh)." (Jansen & Pérez Jiménez 2010, 53). Understanding the writing systems of the Americas as derived from a common linguistic basis which emphasizes ritual speech is incredibly relevant when understanding the phonetic and non-phonetic elements of the writing, particularly when examining practices such as difrasismo (see Chapter 4), in which linguistic elements are often represented non-phonetically. Perhaps the importance of ritual speech can best be surmised by understanding that Mesoamericans "linked language and dialogue to the dawn of consciousness in the creation of the human condition. . . . In effect, beautifully executed speech and song are the only substances, with the possible exception of blood, that the human body can produce which are accessible to, and worthy before, divine beings. . . . If divine beings are pleased, human life is allowed to continue" (Gossen 1986, 7). The elevated meaning of both blood and language will be explored in the two case studies of this thesis.

2.4.2 Early Mesoamerican Writing

Many scholars point to an Olmec origin for writing, following the tradition of the "Mother Culture" theory which indicates that many Mesoamerican traditions came from the Olmec. This theory has been contested and given way to the emergence of the "Sister Culture" theory, which sees the Olmec as just one Mesoamerican group which interacted with other cultures in existence in Mesoamerica. The exact nature of the interaction between the Olmec and other groups is unknown, but some believe that later groups in Mesoamerica borrowed the ideas of writing and the calendar from the Olmec Middle Formative practices (Pohl *et al.* 2002, 1986). Others propose that the Olmec script was developed as a result of interregional interaction which then contributed to the development of regional scripts (Mora-Marin 2009, 409). Regardless, the Olmec have been discovered to have some sort of writing system containing logographic elements, grammatical suffixes, and semantic determiners, but the small corpus of Olmec inscriptions makes it difficult to draw any further conclusions (Bolinger 2013, 50).

One of the earliest lines of evidence for writing in Mesoamerica is the Cascajal Block, with a tentative radiocarbon date of 900 BC, which records this early Olmec script and contains pictorial signs which appear similar to those seen in later Mesoamerican writing systems. One such example is that of plaited mat and the throne, which are seen in many PostClassic codices indicating an association with authority and rulership. Another relevant sign is that of a bloodletting implement, indicating self-sacrificial rites (Magni 2008, 68). These particular signs are highlighted in order to indicate the longevity of these epigraphic conventions and support a shared used of writing among the PostClassic writing systems, which will be discussed more extensively in the following chapters.

Figure 2.2

Olmec plaited mat glyph from the Cascajal Block, Skidmore 2006, 2.

The San Andres cylinder seal and greenstone plaque is another inscription of Olmec origin dating to 650 BC, with glyphs identified as such based on their commonality with other early glyphs as well as the fact that greenstone was a common material used for early inscription (Pohl *et al.* 2002, 1986). At around the same time, Monument 3 of San Jose Mogote is thought to depict a Zapotec script below the image of a slain captive and has a radiocarbon date of 590 BC (McKillop 2003, 82). By the Late Formative Period, 400 BC – AD 200, at least three different

hieroglyphic systems were in use in various areas: Mayan writing, Isthmian (Olmec) writing, and Oaxacan writing (Pohl *et al.* 2002, 1984). The Mayan script of this time stretched from the Yucatan Peninsula to El Salvador. The earliest sources for Maya writing were thought to be at Chiapa de Corzo, with a deciphered date of 36 BC, and at Tres Zapotes, with a deciphered date of 31 BC, until the 2001 discovery of the murals at San Bartolo (McKillop 2003, 82). The San Bartolo murals have radiocarbon dates between 400 and 200 BC and are currently the earliest known examples of Maya hieroglyphic writing. However, barring the outlier of San Bartolo, early Maya writing is usually dated from 100 BC to AD 100, a period when writing is already commonplace in Mesoamerica (Saturno *et al.* 2006, 1281). The early Mexican script is seen at Piedra Labrada, a site which features multiple stelae with calendrical glyphs resembling those of the Zapotec (Mendoza 2008, 84). The Mixtec sites of Huamelulupan and Yucuita, which date to the Ramos phase (400 BC – 200 AD) also show early writing, again in the form of calendrical glyphs and name glyphs which are also similar to the Zapotec (Guzman 2008, 114-118). Some scholars reference the similarities between the Oaxacan and Mixtec scripts as indicating that "es probable que el sistema de representación de los glifos haya sido importado desde el Valle de Oaxaca, aunque ello no necesariamente indica la falta de un desarrollo local desde entonces" (Guzman 2008, 118). These early scripts all exhibited great similarity, probably because of their derivation from a common ancestor. While these systems then diversified into incredibly different practices, the similarities seen in their early forms provides a justification for their comparison in the future. Additionally, these early systems displayed great interaction between iconography and writing, supporting a view of these elements as complementary.

Mesoamerican writing included phonetic elements, but also relied heavily on non-phonetic tools to convey the intended message. Pictorial writing systems have the advantages of being able to function independently of language, transcend language boundaries, and escape the difficulties in representing the tonality of the many tonal languages in the area. The fact that the more pictorial systems of Central Mexico coexisted with the more phonetic system of the Maya and that these cultures were aware of each other indicate that neither representational practice was seen as superior (Jimenez & Smith 2008, 31). The presence of borrowed elements in both systems does not indicate a desire for a more complicated or phonetic script by either group but simply shows "that once the people of another language group have worked out the details of

how the particular glyphic technology works, they can adapt it fairly easily for their own purposes" (Bolinger 2013, 53).

2.4.3 Approaches to Mesoamerican Writing

The writing of Mesoamerica has a history of being misunderstood, starting in the colonial period with the actions of the friars, primarily of the Dominican order. Many early scholars of indigenous American writing and language published accurate documents, such as the Nahuatl dictionary published by Friar Alonso de Molina (1571), the Zapotec dictionary published by Friar Juan de Cordova (1578), and the Mixtec dictionary published by Friar Francisco de Alvarado (1593) (Jansen & Pérez Jiménez 2010, 49). These early publications are interesting because of how well they integrate the obvious colonial mentality with what seems to be a genuine interest in the indigenous language and culture. These publications coincided with extreme efforts to destroy indigenous culture by the same people recording it, such as the infamous *auto-de-fe* of Friar Diego de Landa in 1562, in which thousands of indigenous books were destroyed (McKillop 2003, 288). De Landa is a key figure in the history of academic studies of Mesoamerican writing due to his publication of the *Relación de Las Cosas de Yucatan* (1566), which included his attempt at recording the Maya alphabet. The "alphabet" recorded by de Landa played a paramount role in the decipherment of Mayan hieroglyphs but also hindered it, due to the fact that Maya writing is not alphabetic but logosyllabographic. Bernadino de Sahagún is another early colonial ethnographer of Mesoamerica, writing extensively about Nahua religion and society while simultaneously working to Christianize it (Rodenburg 2011, 9). These early sources exhibit an obvious colonial bias due to the circumstances of their creation but remain crucial documents in understanding and interpreting Mesoamerican writing.

Modern times saw Eric Thompson rise as one of the biggest names in Mesoamerican archaeology and epigraphy. A strong proponent of the belief that Maya writing was not alphabetic but symbolic, his dominance over the academic world and resistance to an alphabetic approach drastically slowed down the decipherment of Mayan glyphs. It was not until the 1958 publication of "The problem of the study of the Maya hieroglyphic writing" by Yuri Knorosov in Soviet Russia that a strong argument for understanding Maya glyphs as phonetic was widely accepted. Since then, the field of Maya hieroglyphs has expanded incredibly, indicating just how impactful the alphabetic assumption can be. The wrongful belief that Maya writing was either

logographic or alphabetic by Thompson and de Landa and the effect that these beliefs had on the academic community demonstrate the effect these pervasive biases can have on academic research and the need to eliminate them. These beliefs are not limited to the recent past, as many other academics still cling to approaches which privilege alphabetic systems over all others. Such is the case of *Writing: Theory and History of the Technology of Civilization* by Barry Powell (2012), a philologist, whose book marketed as a comprehensive history of writing instead reads as manifesto on the alphabet and its history, assuming that the alphabet is the evolutionary highpoint of writing development across the world. This evolutionary approach is flawed for a number of reasons, one of which is that it assumes an endpoint to the evolutionary process:

> "This [the evolutionary model] would imply that things become more highly evolved as time passes, rather than differentiating into ecological niches created by the particularities of their environment as the currently accepted consensus on evolution holds. It assumes that the alphabet is the highest pinnacle of human textual development. The problem is that there is no evidence for this claim whatsoever aside from the current socio-political supremacy of alphabet using peoples" (Bollinger 2013, 36-37).

Additionally, the existence of pictorial scripts alongside logosyllabic scripts can be interpreted as evidence against the phonetic evolution of writing, as if it phonetic writing was truly the evolutionary high point then it would be expected that it would overtake the more pictorial style. However, in PostClassic Mesoamerica it is clear that phonetic and non-phonetic styles of writing coexist, sometimes even within the same documents.

2.5 The Mesoamerican Codices

The codices were chosen for this study over other mediums of writing, like stelae or pottery, because the codices are present throughout Mesoamerica at the same time period operating at the same level of complexity and conveying similar ideological themes. This makes them prime candidates for comparative research because there are many controls in place. When a distinction is spotted between the codices, the variables of time and form can then be eliminated as the cause. The codices were sacred manuscripts, known as *ñii ñuhu* or "sacred skin" in Mixtec (Jansen & Pérez Jiménez 2004, 286). Words are important, and already the

words used to describe the codices by indigenous peoples indicates the value associated with them. The codices were also performative, written to be performed rather than read in the sense someone from a Western culture would read a book (Williams 2009, 21). This is an important distinction and helps to understand the exact role of the codices within society. Inherently performative, the codices existed as public objects which demonstrate the importance of writing and the role of writing in society. To clarify, they were not public in the sense that everyone in a community could read them, but in the sense that they served a purpose associated with the religious practices of the larger community. As public documents written specifically for a public purpose, they can be seen as indicating something about the public conception of writing rather than if they were simply written as private documents.

When referring to the codices, there is often controversy regarding which named should be used to refer to them. Firstly, it is important to remember that "when using universal concepts in the exploration of a specific culture or religion, the corresponding word from the language of the culture must always be considered and included" (Pharo 2007, 60). The codices may not seem to be universal, but they do speak to what may be a universal desire to record and commemorate history as well as prepare for the future. The codices are widely known by their European names, which many consider to be a continued form of colonization in the sense that even indigenous documents cannot remain indigenous but must become tools of their oppressor, even in name. While not all codices have been provided alternative names, those which have will be included and explained. This small effort to resist European dominance over the indigenous American narrative seeks to overcome "the historic alienation of the Mixtecs (and indigenous peoples in general) from those who study their heritage and who generally belong to another, dominant ethnic group" (Jansen 1990, 100). Additionally, the inclusion of a name of indigenous origin supports the practice that "the Mesoamerican pictorials should never be studied in isolation but always within their meaningful cultural contexts," and serves as a continual reminder of their original birthplace (Nicholson 1975, 498). The debate surrounding codical naming is difficult to solve due to the plethora of literature which uses one name or another and thus leads to confusion. Thus, for the sake of clarity, the codices will be referred to within the case studies by their most popular European names, while keeping in mind that these names have been imposed upon them.

The Central Mexican Codices / The Borgia Group

The Borgia Group of codices originates from Central Mexico, where they recorded religious information in the Central Mexican pictographic style of writing. The people creating these documents most likely spoke Nahuatl, an Uto-Aztecan language, with currently 1.5 million speakers (Bollinger 2013, 5). The codices of the Borgia group focus on the mystical meaning of time. They are known as *tonalamatl*, or divinatory guides, which describe the rituals to be undertaken during various stages of the time cycles which governed Mesoamerican life (Gerritse 2013, 7). While these codices are religious documents, they also outline the ancient beginnings of the Mesoamerican peoples which makes them, in a sense, historical. This blurring between religion and history highlight an important factor of Mesoamerican cosmology: the interconnectedness of religion with daily life.

The Codex Borgia / The Codex Yoalli Ehecatl originates from Central Mexico in the Pueblo-Tlaxcala area and is painted in the Mixteca-Puebla style of iconography (Gerritse 2013, 8). The Borgia has 39 leaves made of hide which total to 1033.5 centimeters, with page dimensions of 27 cm by 26.5 cm. The name Yoalli Ehecatl translates as "night and wind" and is named after the difrasismo of night and wind which indicates the mysterious divinity of the gods (Jansen & Pérez Jiménez 2004, 270). The namesake of the Borgia group, the content of this codex is of a divinatory and religious nature, particularly emphasizing the Sacred Bundle.

The Codex Cospi / The Codex Tlamanalli is also from the Puebla-Tlaxcala region of Central Mexico. It has 20 leaves made of hide which total to 364 centimeters, with page dimensions of 18.2 cm by 18.2 cm. This codex features a calendrical section followed by sections referencing the deities and indicating offerings. The name *Tlamanalli* is Nahuatl for offering, thus making the title of this codex "Book of Offerings" (Jansen & Pérez Jiménez 2004, 270).

The Codex Fejérváry-Mayer / The Codex Tezcatlipoca is from Central Mexico. It has 23 leaves made of hide which total to 400.2 centimeters, with page dimensions of 16.6 cm by 17.4 cm. The proposition of the name Codex Tezcatlipoca for this codex derives from the importance of the deity of the Smoking Mirror in the codex, thus leading to the title "Book of the Smoking Mirror" (Jansen & Pérez Jiménez 2004, 270).

The Codex Laud / The Codex Mictlan originates from Central Mexico. It has 24 leaves made of hide which total to 398.4 centimeters, with page dimensions of 15.7 cm by 16.5 cm. The codex is named as the "Book of Death" due to the importance given to the death deities within the codex (Jansen & Pérez Jiménez 2004, 270).

The Codex Vaticanus B / The Codex Tonalpouhqui is also from the Puebla-Tlaxcala region. It contains 49 leaves made of animal hide which total to 710.5 centimeters, with page dimensions of 12.5 cm by 14.5 cm. The name Tonalpouhqui is derived from the fact that this codex is considered the manual of a day keeper, thus naming this codex "Book of the Diviner" (Jansen & Pérez Jiménez 2004, 270).

The Mixtec Codices

The Mixtec codices record the genealogical information of the Mixtec people through a representational code which "allowed for the elaboration of pictography, or pictorial writing, an original, precise and consistent system of graphic register, which uses mainly figurative (iconic) images in combination with specific conventional signs, also figurative in appearance but more ideographic (indexical, symbolic) and/or phonetic in nature" (Jansen & Pérez Jiménez 2010, 47).

The Codex Bodley / *Ñuu Tnoo – Ndisi Nuu* depicts the dynasties of these polities, which are known in Nahuatl as Tilantongo and Tlaxiaco (Jansen and Broekhaven 2008, 3). It originates from western Oaxaca (Johnson 2005, 24). It is 23 leaves of animal hide which totals to 667 centimeters, with page dimensions of 26 cm by 29 cm.

The Codex Becker I originates from western Oaxaca and was originally part of a continuous manuscript with the *Codex Colombino* (Johnson 2005, 14). Because of this, the Becker and Colombino have been analyzed as a single unit in this thesis. It has been named *Iya Nacuaa*, after the Dzaha Dzaui name of Lord 8 Deer, the protagonist of the story (Jansen and Broekhaven 2008, 3). The codex recounts the political history of 8 Deer without any references to marriages and children, omitting the genealogical information usually found in the Mixtec codices (Troike 1974, 107). It has 40 leaves of hide which add up to 1008.5 cm, with dimensions of 18.5 by 26.2 cm.

The Codex Zouche-Nuttall / The Codex Tonindeye originates from western Oaxaca and details the politics and history of the Apoala lineage, starting with events in AD 963 and including the history of 8 Deer (Williams 2009, 23). The name *Tonindeye* means "lineage

history" in Dzaha Dzaui and reflects the contents of the codex (Jansen and Broekhoven 2008, 3). The Nuttall is 47 leaves of animal hide which add up to 1140.9 cm, with dimensions of 18.4 cm by 24.3 cm.

The Codex Selden / The Codex Añute is a colonial Mixtec document from western Oaxaca. While it was technically created in the colonial period, there are no indicators of colonial influence on the codex itself. There are also no colonial glosses in the manuscript, unlike other postcolonial manuscripts of the time. It has been given the name Añute as it contains the geneaology of Añute, also known in Nahuatl as Jaltepec (Jansen and Broekhoven 2008, 3). It is 20 leaves which add up to 550 cm, with dimensions of 27.5 by 27.5 cm.

The Codex Vindobonensis / Yuta Tnoho originates from western Oaxaca and is a sister document to the Nuttall (Williams 2009, 31). Its Mixtec name comes from Yuta Tnoho, the location of the Nahuatl Apoala, and tells the genealogical history of Tilantongo as well as the origins of the Mixtec Lords (Jansen 1990, 99) Additionally, much of it centers around rituals for the foundation of village-states and dynasties (Jansen & Pérez Jiménez 2010, 63). The Vindobonensis is 52 leaves of animal hide which add up to 1352 cm, with dimensions of 22 by 26 cm.

The Maya Codices

The Maya codices are written in Maya glyphs and most likely record the Yucatec Mayan language (McKillop 2003, 290). Maya writing is logosyllabographic, using a highly complex and pictorial script with over one thousand glyphs currently recorded. The codices were produced by specialized class of scribe, with the likelihood that multiple scribes were working on the same codex and deriving it from an earlier source (Bolinger 2013, 52; Vail 2004, 13)**.** Interestingly, the Maya codices exhibit some of the Mixteca-Puebla style seen in the Central Mexican codices (Vail 2004, 10). No names for these codices have been proposed in an indigenous language.

The Dresden Codex was likely produced in the Yucatan, possibly in the area of Chichen Itza and Mayapan. It contains 260 day almanacs, 364 day counts of worship, astronomical material, and prophecies for the coming time periods (Barnhart 2005, 1). The Dresden codex is made of native paper with a total of 39 leaves which total to 356 centimeters, with page dimensions of 20.5 by 9.1 centimeters.

The Madrid Codex / Trocortesiano contains no astronomical tables but a series of 260 day almanacs, discussing a variety of ritual events from the sacrifice of captives to beekeeping (Vail 2004, 5). Although most scholars believe that the Madrid is from the Yucatan peninsula, some question if it may originate from the Peten region of Guatemala (Vail 2004, 10).The Madrid Codex is made of native paper with a total of 56 leaves which total to 682 centimeters, with dimensions of 22.9 by 12.1 cm.

The Paris Codex / Perez / Peresianus is the shortest surviving Maya codex and is extremely fragmentary. It is thought to originate from the east coast of the Yucatan, possibly at Mayapan (Vail 2004, 11). The Paris Codex is made of native paper with a total of 11 leaves which total to 140 centimeters, with dimensions of 23.5 cm by 12.5 cm.

Exploring shared cultural practices between the codices makes sense for a variety of reasons, one of which being the inclusion of Mexican imagery in the Maya codices. The Maya have a long history of incorporating Mexican imagery into their art and iconography, such as in the Early Classic period at Copan where the rulers of Copan are depicted in Central Mexican headdresses on Altar Q (Fash and Fash 2002, 448). It should come as no surprise, then, that the Maya codices also reference Mexico, such as in scenes in the Paris which depict a Mixteca-Puebla style of headdress. The exchange between the Maya and the Central Mexicans has been well documented, particularly in parallels between the almanacs of the Borgia group and the Maya codices (Vail 2006, 510). This iconographic overlap sets the stage for the existence of other forms of cultural overlap, which will be explored in the following chapters. The existence of shared epigraphic and iconographic conventions in Mesoamerica has a long history, and an inquiry into these conventions allows for a better understanding of how these distinct writing systems "reflected the perspectives, needs, and ideologies of those who implemented them" (Jimenez & Smith 2008, 30).

The question of what writing is and what writing isn't is not something which can be clearly determined. The variety of definitions and criteria which exist for writing vary based on the discipline, the researcher, and one's own personal views on knowledge and information transmission. Rather than propose an official designation for writing in this chapter, it is hoped that this can provide an introduction to the complexity of the issue at hand. At the very least, it should illustrate that the Western definition of writing cannot serve as the only way of understanding writing in the indigenous American world, as indigenous American writing does

not necessarily operate on the same principles. Perhaps a better question than “What is writing?” is “How does a specific system of graphic representation work?” Allowing for cultural relativity within the study of writing is the only way in which a writing system can be understood, not as a concept divided from its culture, but as an expression of culture in and of itself.

3 CASE STUDY: BLOODLETTING

3.1 Bloodletting as a case study

Blood ritual is one of the most heavily sensationalized practices seen in Mesoamerica. The large social taboo against blood within modern society has led to Western researchers approaching the religious and ritual use of blood in a manner which advertently or inadvertently leads to the reinforcement of racist and colonial stereotypes. These stereotypes were often used to justify the subjugation of indigenous peoples through the conquest, and so it is necessary to preface any academic discussion of the practice with a nuanced awareness of the social issues surrounding this subject.

The case study of this chapter approaches the depiction of blood sacrifice within the pre-Columbian Mesoamerican codices, examining how the act is depicted within the Maya, Central Mexican, and Mixtec codices and looking for patterns. This case study uses bloodletting as the subject matter with which to understand writing. Using blood sacrifice as a case study allows for a significant amount of control over the comparisons between codices, as blood ritual has been significantly studied throughout Mesoamerica and well documented archaeologically and ethnographically. The practice existed within Maya, Nahua, and Mixtec communities in a similar manner and involved the same cosmology and approach to life. Because they are so similar, comparing these scenes allows for writing itself to be viewed as the source of deviations or patterns, rather than differing attitudes towards bloodletting. Deviations can be seen then as more indicative of attitudes towards writing, rather than attitudes towards blood ritual.

Blood ritual was chosen as a case study because of the deep association between ritual and writing. While modern academics tend to draw harsh lines between areas of study, classifying and categorizing to the most minute level, not all societies traditionally have done so. For Mesoamerican's in particular, their experience of writing was not as an independent tool but something engrained in ritual practice. Literacy was not widespread and rarely extended beyond the politico-religious sphere. Using depictions of one ritual to explore another allows for an

interpretation which embraces the fluidity of the categories of writing and ritual and which does not impose categorization onto that which was not categorized in the past.

The longevity of bloodletting as a practice as well as it's widespread use across Mesoamerica suggest that it's use as a ritual practice is rooted in a similar cosmology across cultures, making it an excellent subject to use in comparing texts from various Mesoamerican communities. The image of bloodletting functions in a sense as a control in this experiment – archaeologists are well aware of the importance of bloodletting in Mesoamerica and many studies have investigated the meaning of these rituals. This allows the present analysis to draw on past conclusions in order to focus exclusively on the differences in how this practice is depicted.

3.2 A brief history of the ritual sacrifice of human blood

Blood ritual is not something specific to Mesoamerica but something which exists around the world in varying degrees. Human sacrifice was used by the political elite in Bronze Age Europe in order to gain power over death, while the African kingdom of Dahomey fought a series of wars in order to acquire people for sacrificial purposes (Otto *et al.* 2006, 15; Steuer 2006, 223). The Shang dynasty of China relied extensively on sacrifice, using it as a way of exacting political and social control over the people (Campbell 2007, 177). Within Mesoamerica, auto-sacrificial acts in which an individual pierces him or herself and extracts blood for offering were one of the most widespread and important rituals practiced.

The theory of costly signaling can be of some help in understanding why a painful practice which often involves forms of self-mutilation came to be one of the most widespread and ideologically significant practices in the region. Within costly signaling theory, practices which require a significant sacrifice on the part of those involved are often seen to "enhance social cohesion and promote cooperation for human society" (Munson *et al.* 2014, 1). These public displays of commitment strengthen social ties and allow for a greater propagation of the social ideology which it supports. Costly signaling is not limited simply to acts of physical sacrifice but also includes social and economic sacrifices, such as providing offerings or a social service which requires a sacrifice on the part of the individual supplying it. In situations when an individual is asked to hurt himself or others to indicate support for the governing religion or political body, rejection of this practice can identify an individual as a non-committed member

of the community and a possible dissident. These "hard-to-fake religious behaviors are argued to promote beliefs in moralizing supernatural agents by enhancing within-group interpersonal trust through low monitoring costs and by stabilizing prosocial norms " (Munson *et al.* 2014, 2). In this way bloodletting is incredibly successful in promoting the overarching religious ideology and creating a sense of community which is difficult to work against. This type of costly signaling behavior has the additional benefit of using physical pain associated with authority to maintain the social order, creating a complex web of exchange in which violence, religion, and power are maintained by each other. Violence itself is always rooted in social behaviors, relying on the values of society and the desire to maintain certain socio-political interests (Martin *et al.* 2013, xii). Violence is a meaning-laden act intended to communicate a message which is not simply between those offering and receiving sacrifice, but which also involves all who witness this event (Hatch 2013, 202). The prevalence of ritual violence is particularly interesting when confronted with extensive evidence which suggests humans naturally avoid involvement in violent situations (Fry 2013, 10). The intensity and importance of ritualized sacrifice comes from the full experience of the practice, which manipulates a series of variables in order to convey a specific ideological concept which cannot be expressly fulfilled in any other manner.

Figure 3.1

Hero Twin Hunahpu pierces his genitals in the murals at San Bartolo, Guatemala. Photograph by Kenneth Garrett © 2006 National Geographic.

The archaeological evidence for bloodletting dates at its earliest to the Formative period at around 1200 BC, being notably absent from Olmec art in the previous period (Graulich 2005, 302). The earliest actual iconographic representation of the practice of auto-sacrifice comes from the murals of San Bartolo, in which one of the Hero Twins of Mesoamerican legend, Hunahpu, pierces his genitals in a sacrifice to the Principle Bird Deity (Wright 2011, 68).

While the archaeological origins of the practice are ambiguous, the mythical origins of bloodletting are associated with the actions of deities. The first auto-sacrifice is thought to be that of the deities, with humans

continuing the practice because "creatures owe their creators respect and submission… they have to acknowledge their own inferiority and humble themselves by offerings and autosacrifice" (Graulich 2005, 302-303). Representations of deities in the act of bloodletting is extremely common in Mesoamerican iconography and literature, such as in the Codex Borgia p. 53, where Quetzalcoatl and Macuilxochitl are seen engaged in genital bloodletting to irrigate the earth goddess, who then grows a maize tree from her fields of blood (Gralulich 2006, 305). This association between sacrifice, maize, and rebirth, particularly in the story of the Hero Twins, is illustrated across Mesoamerica.

The act of auto-sacrifice is seen in myth not only to function as a reminder of human mortality and subjugation before the divine, but to also aid in the obtaining of something important or highly desired (Graulich 2005, 307). Alternate approaches to the practice emphasize the deep association between blood ritual and *ch'ulel*, or the soul, which was thought to reside in the heart and blood and was then offered to the gods through bloodletting (Wright 2011, 7). In this way, auto-sacrifice is not simply a penitential act but a transaction of sorts, in which an individual recognizes his subservience and uses the gift of his blood and even his soul to claim a gift of his own. This act is not limited to myth and legend but was practiced, with evidence from archaeological, ethnohistorical, and ethnographic sources. One of the earliest documents published on the conquest, *Relación de los Cosas de Yucatan* by Fray Diego de Landa, offers a firsthand account of the act of sacrificial bloodletting, writing:

> "They offered sacrifices of their own blood, sometimes cutting themselves around in pieces and they left them in this way as a sign. Other times they pierced their cheeks, at other times their lower lips. Sometimes they scarify certain parts of their bodies, at others they pierced their tongues in a slanting direction from side to side and passed bits of straw through the holes with horrible suffering, other slit the superfluous part of the virile member leaving it as they did their ears" (de Landa 1566, 27).

While the accounts of Franciscan friars who were sent to convert and colonize the indigenous peoples cannot be seen as entirely accurate, the practices outlined by De Landa in *Relacion* are very similar to the practices seen in the pre-Columbian Mesoamerican codices.

Archaeologically it is difficult to find skeletal evidence of bloodletting, as the sacrifice of blood is only visible skeletally in situations of complete human sacrifice which are very

uncommon. Piercing the flesh is typically not something which effects the skeleton, so if proof of this practice is to be found it is through the most extreme example – that of human heart extraction. Even in only examining a practice which leaves skeletal traces, another difficulty comes from the fact that bone damage viewed may be peri or postmortem and not the actual cause of death. Because of this it is necessary to establish patterns of damage which may be encountered in the skeletal record which can indicate fatal sacrificial behaviors. Recent work by Tiesler and Cucina (2006) discusses the specific skeletal evidence of sacrificial behavior, focusing on the act of heart removal. Often sensationalized, heart removal seems to be exceedingly rare in the skeletal record, but leaves distinctive marks on the skeleton in the process. The actual skeletal marks visible may depend on anything from the time of the action, the method of heart extraction, the tools used, and how the individuals accessed the heart (Tiesler and Cucina 2006, 494). In skeletons which were determined to have experienced sacrificial death, a common pattern can be observed in which the spine is affected ventrally and ventrolaterally from the 10^{th} – 12^{th} vertebrae. Additionally, penetrations of compressed impacted bony mass from 1 – 4 mm are also an indication of direct violence enacted on the bone (Tiesler and Cucina 2006, 503).

Figure 7. Twelfth thoracic vertebral body showing cut marks on the left side, Burial E-1003, Becán.

Figure 3.2

Skeletal evidence indicating ritual human heart extraction.

Tiesler and Cucina 2006, 500.

Using the above criteria, situations can be identified in which the skeletal evidence suggests and even supports the act of sacrificial heart removal. Ranging across time, from PreClassic burials at Loma Alta to the PostClassic mass burials at Champoton, Campeche, and the Aztec Tlatelolco, evidence indicates that the individuals buried had been sacrificed through the process of heart extraction (Tiesler and Cucina 2006, 495). While the skeletal evidence only supports human heart extraction and no other sacrificial practice, it is not unreasonable to suggest that the less extreme forms were also taking place. Additionally, the absence of evidence

cannot be seen as evidence of absence, and the limited sample currently available indicating human heart extraction and other sacrificial acts cannot be seen as representative of the entire original sample set, which may have been destroyed due to poor preservation (Tiesler and Cucina 2006, 505).

It is important to remember that bloodletting as a practice existed in order to accomplish a specific goal, one of which was to earn merit with deities, particularly in situations of fecundation through the sacrifice of penile blood (Graulich 2005, 305). Additionally, the effectiveness of the sacrifice was not dependent upon the simple completion of the action but the sincerity behind the action. The Nahua phrase *nextlahualli* refers to not only auto-sacrifice but also to the killing of other adults and children, as well as ritual without bloodshed (Graulich 2005, 313). These rituals were often conducted with a specific purpose in mind, many of which mirrored those of the deities in religious stories. Mesoamericans did not practice sacrificial acts in solely the spirit of deference but also in the spirit of imitation:

> "El sacrificio humano se expresa a través de los productos del sacrificio, principalmente la sangre y los corazones, los cuales constituían el material que los humanos ofrecían a los dioses a cambio de que la vida en la tierra continuara y que el sol saliera diariamente" (Montes de Oca 2009, 430).

The areas of the body pierced were typically the ears and tongue, followed by the arms, thighs and legs. Less common were the lips, nose, penis, breast, finger, and eyelid, although these too are still documented. While some academics propose that individuals were told to bleed the part of the body associated with sin, this suggestion only works for situations involving the penis and for an allegory of Quetzalcoatl in which he sacrifices his ear and tongue due to their propensity to engage him in sin (Graulich 2005, 308). Beyond this, the association of body parts with specific sins is unsubstantiated.

More is known about bloodletting implements than the skeletal traces of bloodletting, largely due to their preservation in the archaeological record. These implements were made of bone, maguey, or obsidian and often deified or seen as a manifestation of a deity. Bloodletting paraphernalia was often part of royal attire, signifying the connection between the royal and the divine (Wright 2011, 69). Archaeological evidence produces bloodletting implements which are similar to those seen in the codices, such as these Mixtec knives in the collection of the Harvard Peabody Museum seen in Figure 3.3, which lends legitimacy to the interpreting the codices as

representing actual practices. This knife, which dates to the PostClassic period and is attributed to the Mixtec people, is one of many which is visually similar to those seen in the codices. The skeletal study by Tiesler and Cucina (2006) supports the use of these type of instruments in sacrificial acts, particularly emphasizing the need for tools which had the ability to both chop and slice.

Figure 3.3

Mixtec sacrificial knife compared to the depiction of a sacrificial knife in the Codex Laud p. 8. Photo courtesy of the Harvard Peabody Museum.

Bloodletting implements varied from spines stuck in balls of plaited grass, referred to as *zacatapayoll*, to more elite tools such as highly worked obsidian (Graulich 2006, 311). Within Mesoamerica obsidian was a highly sought after, featuring a specialized craft production and expansive trade network created primarily for the creation and distribution of such tools (Hirth 2008, 453). Obsidian used in the act of sacrificial bloodletting was often prepared by masters and even given ritualistic names. Maguey thorns, or *huitztli*, were often even more important than obsidian as they were a symbol of both Quetzalcoatl and Huitzilopochtli (Graulich 2006, 311). Every aspect of ritual bloodletting was encoded with meaning, and while the meaning of specific bloodletting implements will not be further explored in this thesis, it is necessary to remain aware of the differing associations between various implements and their ritual importance.

3.3 Statistical analysis

The data analyzed for this thesis was derived from identifications of bloodletting scenes in the codices based on current translations of the documents. The term ‘bloodletting scene’ refers

to any situation in which a human or deity emits or ingests blood derived from a human or deity and includes any depiction of definitively human or deity blood in the codices (with the exception of blood used in name signs). By this definition, scenes of warfare and murder in which blood is shown are also included in this analysis due to the purposeful choice of an artist or scribe to include blood in the scene, which is not always the case. The Mexican and Mixtec codices were primarily investigated using a series of translations published by Anders and Jansen (1993, 1994); Anders, Jansen, and Garcia (1993); Anders, Jansen, Pérez Jiménez (1992a, 1992b, 1994); Anders, Jansen, and van der Loo (1994); Jansen & Pérez Jiménez Jimenez (2005); Troike (1974); and Bakewell and Hamann (2015). The Maya codices were analyzed using translations by Bricker (1997); Love (1994); Schele and Grube (1997); and Vail and Hernández (2013).

In order to determine if patterns were present in the data set, correlations between variables were tested using the phi coefficient in SPSS. The confidence level for all correlations is 99%, unless otherwise specified in the text. Rather than citing these correlations as definitive proof of patterning, they are instead used as a platform with which to identify possible paths of exploration. In order to compare the general trends seen in the data set with the sub groups of Central Mexican, Maya, and Mixtec codices, correlations were run on the data set as a whole, and then on the subsets of Central Mexican, Mayan, and Mixtec. These values were then compared in order to understand if the codices follow similar trends or if meaningful differences between them can be observed. The null hypothesis tested was that there would be no meaningful differences in correlations between the total data set and the subsets. This would manifest as the correlations of each subset matching or being similar to the correlations of the main data set.

3.3.1 Type and subtypes

The investigation into bloodletting in the Mesoamerican codices began with an analysis of scene type. Scenes were divided into two types: scenes in which bloodletting occurs and scenes in which bloodletting implements are present but not in use. An additional category was created for scenes in which bloodletting is discussed textually but not depicted visually, which happens exclusively in the Maya codices. As these scenes of bloodletting are explored, it is necessary to remember that Mesoamericans viewed death as not the end of life but as a continuation (Houston

et al. 2006, 93). Therefore, presuppositions of blood and death as inherently negative must be avoided. Within the 13 codices, 225 clear instances involving bloodletting were documented. This number is not definitive, as many of the codices are poorly preserved and contain scenes which may be ambiguously identified as bloodletting but are unclear enough as to provide reasonable doubt. The confidence level of the following correlations is 99% unless otherwise specified.

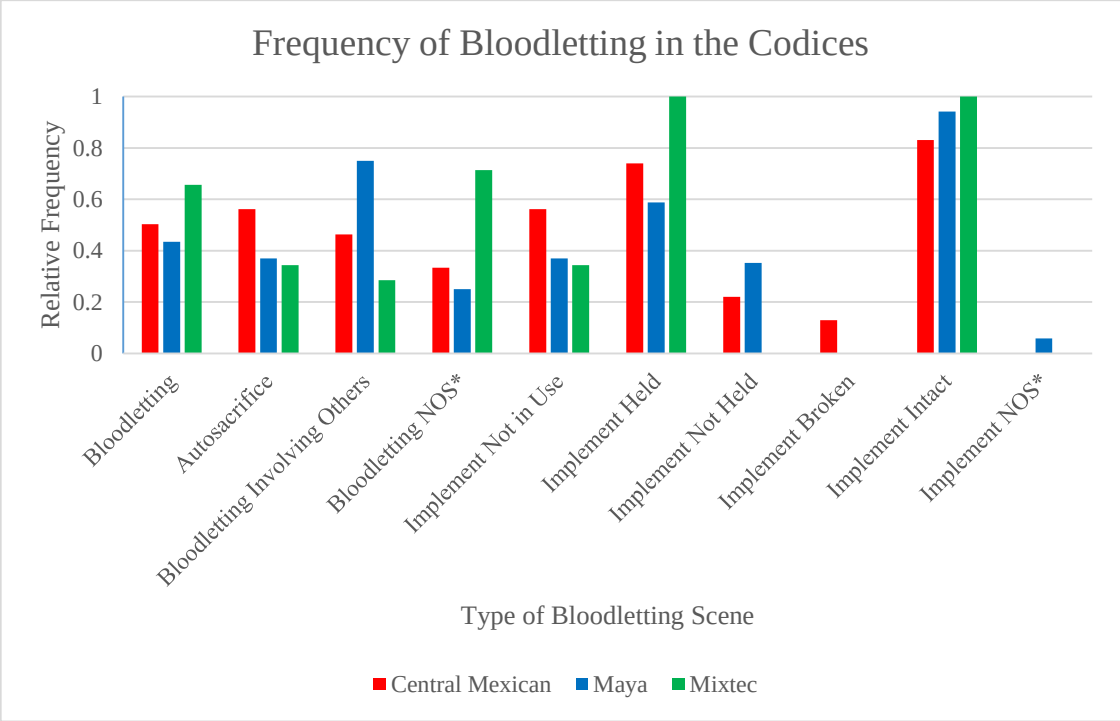


Figure 3.4

Relative frequency of types of bloodletting within the codices.

**NOS indicates not otherwise specified*

Type A - Scenes of bloodletting in practice

The first analytical unit is scenes in which bloodletting occurs. Any codex scene in which a human or deity emits blood is included in this category, regardless of intention. This includes scenes of self-sacrifice, sacrifice of others, and murder. While warfare does not fit entirely into the paradigm of sacrificial bloodletting, it exhibits associations with sacrificial behavior and is a

scenario in which a human being loses blood for a ritual or social purpose. 46.759% of the total bloodletting scenes analyzed exhibit the action of bloodletting in practice. The Codex Borgia has the highest relative percentage of bloodletting at 57.627%. Bloodletting is the most popular scene type for the codices Bodley, Borgia, Colombino, Cospi, Madrid, Selden and Vindobonensis. It is tied equally with scenes of bloodletting implements not in use in the codices Dresden and Paris. On average, the Mixtec codices have the highest relative occurrence of bloodletting scenes at 65.625%. There is a low negative correlation for the overall data set between scenes of bloodletting in practice and the presence of deities. There is also a low positive correlation in the Central Mexican codices between scenes of bloodletting and named individuals. Of all of the scenes in which bloodletting is practiced, 43.564% are scenes of auto-sacrifice, 39.604% are scenes of bloodletting of others, and 15.841% are scenes of bloodletting not otherwise specified.

Autosacrificial bloodletting

The Madrid Codex has the highest relative percent of auto-sacrificial bloodletting at 83.352%. Auto-sacrifice is the most popular type of bloodletting scene in the Cospi, Fejérváry-Mayer, Madrid, Nuttall, and Paris, and is tied with the bloodletting of others in the Becker-Colombino. The Maya codices exhibit the highest relative frequency of auto-sacrifice, with 75% of the bloodletting actions within these codices being autosacrificial. The Codex Selden has no identified scenes of autosacrifice.

Bloodletting of others

The Vaticanus B and the Vindobonensis I are tied for the highest percentage of scenes of bloodletting of others, with both at 71.428%. The sacrificial bloodletting of others is the most popular form of bloodletting in practice in the Bodley, Borgia, Dresden, Selden, Vaticanus B, and Vindobonensis I, and is tied with autosacrificial acts in the Becker-Colombino. The Mixtec codices have the highest frequency of bloodletting of others at 71.428%. There is a low positive correlation in the total data set between the sacrifice of others and named individuals.

Bloodletting not otherwise specified

The final category of bloodletting in practice denotes sacrifice which does not fall into the categories of autosacrifice or the sacrifice of another. This category was primarily created in order to account for scenes in the Codex Borgia and Codex Laud in which deified elements were bloodlet, but which appeared markedly different to the bloodletting seen in the other categories. Accordingly, The Codex Laud has the highest percentage of bloodletting not otherwise specified at 60%. The Central Mexican codices have the highest percentage of bloodletting not otherwise specified. There is a low positive correlation between the presence of deities and ambiguous bloodletting in the total data set as well as in the Central Mexican codices.

Table 3.1: General bloodletting correlations

Variable 1	Variable 2	Total Data Set	Central Mexican	Maya	Mixtec
Bloodlettting	Named victim	--	Low positive	--	--
Bloodletting	Deity presence	Low negative	--	--	--
Bloodletting of another person	Named victim	Low negative	--	--	--
Bloodletting not otherwise specified	Named victim	--	--	--	--
Bloodletting Not Otherwise Specified	Deity presence	Low negative	Low negative	--	--

Type B – Bloodletting implement not in use

Scenes in which bloodletting does not occur but bloodletting implements are present have been designated as an alternative category. This category refers to scenes which contain implements which can be definitively identified as used to pierce the body in order to obtain blood, as well as situations with other physical markers which identify the aftermath of bloodletting, such as the presence of a bowl containing blood or an extracted human heart. The Codex Nuttall has the highest relative percentage of bloodletting implements not in use at 78.571%. Scenes in which bloodletting implements are present but not in use are the most common for the Fejérváry-Mayer, Laud, Nuttall, and Vaticanus B, and are tied with scenes of

bloodletting in the Dresden and Paris. The majority of scenes in the Mixtec category are from the Codex Nuttall, and so any analysis of the Mixtec in the following paragraphs is based in this codex. The Central Mexican codices have the highest relative frequency of bloodletting implements not in use at 56.204%. There is a low negative correlation between bloodletting implements not in use and the presence of named individuals in the Central Mexican codices. There is a moderate positive correlation between bloodletting implements not in use and the presence of deities in the Maya codices.

The category of bloodletting implements not in use has further been broken down into five more specific categories: intact bloodletting implements which are held; broken bloodletting implements which are held; intact bloodletting implements which are not held; broken bloodletting implements which are not held; and bloodletting implements not otherwise specified. These categories are of interest because the statud and quality of the bloodletting implement is often of importance in conveying the message of a scene.

Bloodletting implements held, intact

The Codex Borgia has the highest relative percentage of bloodletting implements which are held and intact at 84%. This is the most popular subcategory of bloodletting implements not in use for the Borgia, Fejérváry-Mayer, Laud, Madrid, Nuttall, and Vaticanus B. There are no scenes of bloodletting implements which are held and intact in the Bodley, Becker-Colombino, Cospi, Selden or Vindobonensis I. It is the most popular subcategory for the Mixtec codices, which only feature bloodletting implements which are held and not broken. Again, there is only one Mixtec codex which features any bloodletting implements not in use, so this cannot be taken as a diagnostic feature of the Mixtec codices in general. This is the most popular subcategory of unused bloodletting implements for the Central Mexican, Maya and Mixtec codices. There is a general low negative correlation between held and intact bloodletting implements and named individuals.

Bloodletting implements held, broken

The Laud has the highest relative percentage of bloodletting implements which are held and broken at 17.64%. This is not the most popular subcategory of unused bloodletting implements for any codex. The Central Mexican codices have the highest relative percentage of

bloodletting implements which are held and broken at 7.792%. There are no scenes of held and broken bloodletting implements in the Bodley, Colombino-Becker, Cospi, Dresden, Madrid, Nuttall, Paris, Selden, Vaticanus B or Vindobonensis. The only codices with images of bloodletting implements held and broken are the Borgia, Fejérváry-Mayer, and Laud, all members of the Central Mexican group. The Maya codices exhibit a strong negative correlation between bloodletting implements which are held and broken and the presence of deities.

Bloodletting implements not held, intact

The Vaticanus B has the highest relative percentage of bloodletting implements which are not held and not broken at 42.105%. For the Dresden Codex, this subtype is tied for most popular with bloodletting implements which are held and intact. The Maya codices have the highest relative percentage of bloodletting implements not held and not broken at 35.294%. There are no scenes of intact and not held implements in the Bodley, Colombino-Becker, Cospi, Nuttall, Paris, Selden or Vindobonensis I. The Central Mexican codices exhibit a low positive correlation between bloodletting implements which are intact and not held and named individuals.

Bloodletting implements not held, broken

The Fejérváry-Mayer has the highest percentage of not held and broken bloodletting implements at 6.25%. This is not the most popular subtype for any codex. The Central Mexican codices have the highest percentage of not held and broken bloodletting implements at 5.195%. There are no scenes of not held and broken bloodletting implements in the Bodley, Colombino-Becker, Cospi, Dresden, Madrid, Nuttall, Paris, Selden or Vindobonensis. The codices with images of not held and broken bloodletting implements are all in the Central Mexican category, in the Borgia, Fejérváry -Mayer, Laud, and Vaticanus B. There is a low negative correlation between not held and broken bloodletting implements and the presence of deities in the Central Mexican codices at 95% confidence.

Bloodletting implements not otherwise specified

The subtype of bloodletting implement not otherwise specified was created to account for the bowl of human hearts in the Paris Codex on page 9. While no bloodletting occurs in this

scene, it is obviously associated with sacrificial ideology and contains many images related to bloodletting. This is not an isolated occurrence, as there are many other scenes in the codices which depict blood and hearts of ambiguous origin. However, in many cases it is difficult to determine if the blood is human or animal without the assistance of a caption, such as is provided with this scene in the Paris. For this reason the Paris Codex is the only codex which features this subtype, and the Maya codices accordingly have the highest percentage at 5.882%. However, there are likely more scenes which could be assigned to this category pending further analysis.

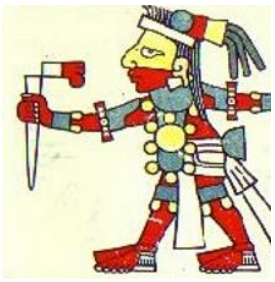
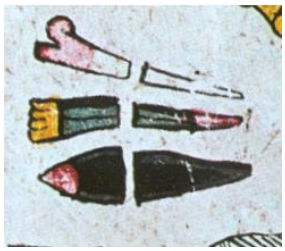
A)  *B)*  *C)*  *D)* 

Figure 3.5

Examples of bloodletting implements in the categories of a) held, intact: Dresden p. 32, b) held, broken: Laud p. 17 c) not held, intact: Fejérváry-Mayer p. 36, and d) not held, broken: Borgia p. 18

Held v. not held

The holding or not holding of a bloodletting implement can be an important indicator of the meaning of a scene. The majority of bloodletting implements not in use are held by individuals. Held bloodletting implements which are present in the Borgia, Fejérváry-Mayer, Laud, Madrid, Nuttall and Vaticanus B. Within the codices, bloodletting implements are most commonly held. In the Dresden there is an equal percentage of implements held and not held. The Borgia has the highest percentage of held bloodletting implements not in use at 92%. The Central Mexican codices have the highest percentage of held bloodletting implements not in use at 74.026%. For all the codex groups bloodletting implements are more often held than not. Bloodletting implements are present but not held in the Borgia, Dresden, Fejérváry-Mayer,

Laud, Madrid and Vaticanus B. The Dresden features the highest percentage of implements not held at 50%. The Maya codices have the highest percentage of implements not held at 35.294%.

Broken v. unbroken

The existence of broken bloodletting implements is also of significance, particularly in scenes such as auguries which designate good or bad omens. Intact bloodletting implements are present in the Borgia, Dresden, Fejérváry-Mayer, Laud, Madrid, Nuttall, Selden and Vaticanus B, while broken implements are present in the Borgia, Fejevery-Mayer, Laud, and Vaticanus B. Accordingly, The Central Mexican codices are the only in which broken bloodletting implements have been clearly identified. The Laud has the highest percentage of broken implements at 23.529%. Within all codices, intact implements are more common than broken. There are no bloodletting implements, broken or unbroken, in the Vindobonensis I. The Vaticanus B has the highest percentage of unbroken implements at 94.736%, while the Maya codices have the highest percentage of unbroken implements at 94.118%.

Table 3.2: Bloodletting implement correlations

Variable	Variable	Total Data Set	Central Mexican	Maya	Mixtec
Implement not in use	Named victim	--	Low negative	--	--
Implement not in use	Deity presence	--	--	Moderate positive	--
Implement held, not broken	Named victim	Low negative	--	--	--
Implement held, broken	Deity presence	--	--	High negative	--
Implement not held, not broken	Named victim	--	Low positive	--	--
Implement not held, broken	Deity presence	--	Low negative	--	--

Type C – Textual bloodletting with no accompanying image

Type C is the final designation for bloodletting scenes and is restricted to those in which bloodletting is referred to textually rather than through the iconography or through more pictorial means of communication. Accordingly, the Maya codices are the only which influence

this category. The use of ‘textually’ here is incredibly problematic, as this thesis seeks to bridge the gap between the interpretation of pictorial and grammatical writing systems. However, in light of a more correct term, the world ‘textually’ will be used to refer to readings of the highly grammatical Maya script and its ability for some degree of direct phonetic translation. This category is restricted to the Madrid Codex and is very limited due to the poor preservation of areas of the codex and our current inability to fully translate the glyphs. There are 9 scenes in which bloodletting is clearly referenced textually in the Madrid Codex. There are many scenes which may or may not be referring to sacrificial events or bloodletting practices, but for the sake of clarity those have been omitted in favor of inclusion of only those instances which clearly indicate bloodletting. While these scenes will not be discussed in depth, it is important to recognize that the Maya chose to represent the same subject matter both in a pictorial and phonetic manner.

3.3.2 Actors involved in bloodletting

The individuals who are involved in a bloodletting scene can be indicative of how the scene was understood and practiced. The following analysis summarizes the individuals involved in the actual practice of bloodletting, designating who is doing which action, if they are deity or human, and if they have names.

Autosacrificial human behavior

Individual humans participating in autosacrifice are found in the Bodley, Borgia, Colombino-Becker, Cospi, Dresden, Fejérváry-Mayer, Laud, Madrid, Nuttall, Vaticanus B and Vindobonensis I. There are no humans engaged in autosacrifice in the Paris or Selden. The Cospi has the highest relative percentage of humans involved in autosacrifice at 80%. This category is the most popular for the general data set and is also most popular in the Bodley, Borgia, Cospi, Fejérváry-Mayer, Laud, Nuttall and Vindobonensis I, and is tied for most popular in the Colombino-Becker. The Mixtec codices have the highest percentage of autosacrificial human behavior at 50%, and it is the most popular type of bloodletting in both the Mixtec and Central Mexican codices.

Examining the areas of the body which individual humans let blood from demonstrates culturally specific trends. There is a small positive correlation in the general data set between

bloodletting from the head and autosacrifical humans, but a moderate positive correlation between the two in the Mixtec codices. There is no significant correlation in the Central Mexican or Maya codices. There is a moderate positive correlation between bloodletting of the chest and autosacrificial humans in the general analysis and in the Central Mexican codices, but a very slight negative correlation in the Mixtec codices. There is no correlation in the Maya codices. There is a slight positive correlation between bloodletting of the hands, feet, and limbs and autosacrifical humans in general, but a strong positive correlation between them in the Maya codices.

The depiction of blood in these practices has also been noted. There is a moderate positive correlation between autosacrificial humans and depictions of blood as a continuous flow in the total data set and in the Central Mexican and Mixtec subgroups, with no correlation between them in the Maya. There is also low positive correlation between autosacrificial humans and depictions of blood in the form of drops in the general data set and in the Maya codices.

Autosacrificial deity behavior

Deities performing autosacrificial behaviors brings a different set of associations than the actions of human beings. The influence and impact of deities on bloodletting has already been discussed, and deity bloodletting is featured in many Mesoamerican religious stories. The Madrid has the highest percentage of deities engaged in autosacrifice at 80%. This is the most popular form of sacrifice in the Madrid and Paris. The Maya codices have the highest relative percentage of deities engaged in autosacrifice at 70%.

There is a slight positive correlation between autosacrificial deities and bloodletting from areas of the head in the general data set and in the Central Mexican codices. In the Maya codices there is a moderate positive correlation between bloodletting of the head and autosacrificial deities, and a moderate positive correlation between autosacrificial deities and genital bloodletting which is also seen in the general data set.

There is a moderate positive correlation between autosacrificial deities and droplets of blood in the general data set and in the Maya codices. There is a low positive correlation between autosacrificial deities and bloodletting with no depiction of blood in the general data set, and a low correlation in the Maya codices.

Human on human sacrificial behavior

This category designates scenes of sacrificial behavior in which humans perform sacrifice on other humans. There is no human on human bloodletting present in any of the Maya codices. The Vaticanus B has the highest percentage of human on human bloodletting at 86.000%. This is the most common type of bloodletting in the Selden and Vaticanus B, and is tied for most popular in the Colombino-Becker. There is a low positive correlation between human on human sacrificial behavior and bloodletting from the head in the total data set, and a moderate correlation between the two in the Central Mexican codices. There is a low positive correlation between human on human sacrificial behavior and bloodletting from the chest in both the general data set and the Central Mexican codices. There is a moderate correlation between human on human sacrificial behavior and scenes of bloodletting with no depiction of blood in the general data set, and a high correlation between the two in the Central Mexican codices.

Deity on human sacrificial behavior

Deity on human sacrifice is present in the Borgia, Fejérváry-Mayer, Laud and Madrid. It is the most common in the Fejérváry-Mayer and Laud with a relative frequency of 20%, and is most popular in the Central Mexican codices with a relative frequency of 13%. It is not the most popular form of sacrifice for any codex or group. There is a moderate positive correlation between deity on human sacrificial behavior and bloodletting from areas of the head in the Maya codices at 95% confidence. There is a low negative correlation between the two in the Mixtec codices. There is a moderate positive correlation between deity on human sacrificial behavior and bloodletting of the hands, feet, and limbs in the total data set and in the Central Mexican codices. There is a low positive correlation between the deity on human sacrificial behavior and the depiction of blood as flowing in the total data set and in the Central Mexican codices. There is a moderate correlation between the two in the Maya codices.

Deity on deity sacrificial behavior

Deity on deity bloodletting is the most popular in the Dresden, with a relative frequency of 50%. It most commonly occurs in the Maya codices, with 10% of the bloodletting scenes depicting deity on deity bloodletting. Deity on deity bloodletting has a low correlation with the piercing of the eye in the total data set at 95% confidence. There is a low positive correlation

between deity on deity behavior and more general bloodletting from areas of the head in the total data set and in the Central Mexican codices. There is a low correlation between deity on deity behavior and bloodletting from the chest in the total data set at 95% confidence, but a very high correlation between the two in the Maya codices at 99% confidence. There is also a low correlation between deity on deity behavior and bloodletting from the hands, feet, or limbs in the Central Mexican codices.

Actors involved in bloodletting not otherwise specified

This final category of actors involved in bloodletting designates situations in which deified elements engage in acts of bloodletting but are not present as deities themselves. Particularly designed to accommodate scenes in the Borgia such as the bloodletting of the deified sun, these scenes were designated their own category because of the uniqueness displayed when compared to other scenes in which bloodletting is depicted in a more traditional sense. There is a low negative correlation between this category and scenes of autosacrifice in the total data set and in the Central Mexican codices. There is a high positive correlation between this category and scenes of bloodletting not otherwise specified in the total data set and in the Central Mexican codices. This is not surprising, as these scenes were often difficult to classify according to the framework laid out previously. There is a low positive correlation between these scenes and the depiction of blood as flowing in the total data set and in the Central Mexican codices, and a low negative correlation between the two in the Mixtec codices. It is difficult to interpret these correlations, as the variables chosen for analysis are body-based and thus not entirely appropriate for situations involving deified, non-bodily elements. However, the existence of bloodletting which occurs in this context reveals that this ideological practice was not limited to bodily expression but could be conceived of in a more abstract manner.

Nameless victims

Named individuals generally do not appear in the same scene as a deity, exhibiting a moderate negative correlation between the two in the total data set. The presence of individuals with no name may signify that these are captives chosen for bloodletting. Captives are often described in negative terms such as “no fast or penitence, no darkness,” which “hints at the categorical differences in the existential state of captives” (Houston *et al.* 2006, 131). While not

all unnamed victims are necessarily captives, the omission of their names may indicate a lack of status on their part during this sacrificial interaction with the deities.

Table 3.3 Bloodletting actor correlations

Actor	Variable	Total Data Set	Central Mexican	Maya	Mixtec
-Area of the Body-					
Autosacrifice: human	Head	Low positive	--	--	Moderate positive
Autosacrifice: human	Chest	Low positive	Moderate positive	--	--
Autosacrifice: human	Hand, foot, limb	Low positive	--	--	--
Autosacrifice: deity	Head	Low positive	Low positive	--	--
Autosacrifice: deity	Genital	Moderate positive	--	Moderate positive	--
Human on human	Head	Low positive	Moderate positive	--	--
Human on human	Chest	Low positive	Low positive	--	--
Deity on human	Hand, foot, limb	Moderate positive	Moderate positive	--	--
Deity on deity	Eye	Low positive	--	--	--
Deity on deity	Head	Low positive	Low positive	--	--
Deity on deity	Chest	Low positive	--	High positive	--
Deity on deity	Hand, foot, limb	--	Low positive	--	--
-Depictions of Blood-					
Autosacrifice: human	Flowing blood	Moderate positive	Moderate positive	--	Moderate positive
Autosacrifice: human	Droplets of blood	Low positive	--	Moderate positive	--
Autosacrifice: deity	Droplets of blood	Moderate positive	--	Moderate positive	--
Autosacrifice: deity	No blood	Low positive	--	Moderate positive	--

Human on human	No blood	Moderate positive	High positive	--	--
Deity on human	Flowing blood	Low positive	Low positive	Moderate positive	--
Other actor	Flowing blood	Low positive	Moderate positive	--	Low negative
-Deity Presence-					
Named actors	Deity presence	Moderate negative	--	--	--

3.3.3 Body parts involved in sacrificial behavior

The relationship between representations of blood sacrifice and the body is fascinating when one considers the connections that already exist between writing and the body, such as the growing belief that "in their earliest manifestations, Maya day signs represent bloody objects ripped primordially from a sacrificial body," even to the point of being tinted with red as to appear as bloody (Houston *et al*. 2006, 93). This early relationship between blood sacrifice and scribal traditions sets a precedence which suggests that we examine the relationship between the body and bloodletting within Mesoamerican writing more closely.

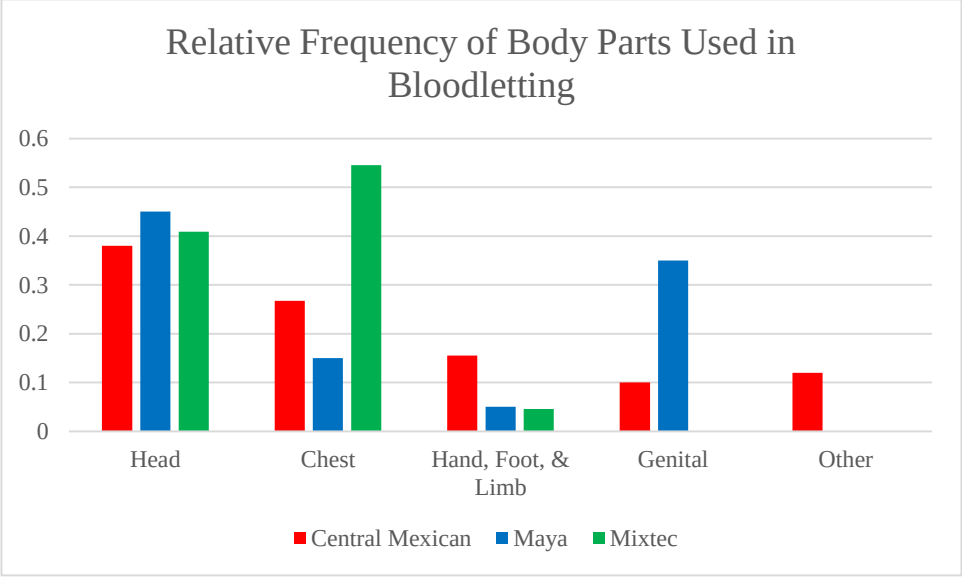


Figure 3.6

Relative frequency of body parts from which blood is extracted in scenes of bloodletting.

Particularly when studying violence, the body is of paramount importance in communicating the desired message. The act of giving blood from a specific area of the body not only has a connection to the spiritual and sacrificial, but underlies major ideological premises of Mesoamerican society due to the fact that, "as a communicative medium, violence transforms the physical human bodies it targets into a message" (Hatch 2013, 202). Understanding the practice of bloodletting as conveying a message allows for that specific message to be investigated further in explorations of what specific bloodletting practices mean.

The Head

There are many metaphorical associations with the head. Seen as the "locus of identity" by some, the head is considered the place from which the rest of a person's personality and character develops (Houston *et al.* 2006, 28). The word for head in Maya is *bah*, which also indicates the general person and the presence of personhood. With all of the metaphorical and ideological beliefs associated with the head, the act of decapitation becomes an even more interesting practice. While decapitation itself was not a common sacrificial practice, symbolic decapitation was prevalent in the Mesoamerican conception of the world, particularly through actions such as the harvesting of corn which is likened to the decapitation of the Maize God in the primordial creation myth (Houston *et al.* 2006, 45). The following correlations refer to bloodletting from the head in general, followed by correlations relating to specific areas of the head such as the eyes, nose, and ears.

Bloodletting from areas of the head is present in the Borgia, Colombino-Becker, Dresden, Fejérváry-Mayer, Madrid, Nuttall, Vaticanus B and the Vindobonensis I. There is no sacrifice from areas of the head in the Bodley, Cospi, Paris or Selden. The Vaticanus B and the Vindobonensis I are tied for the highest frequency of head sacrifice with 85.71% of their bloodletting occurring on areas of the head. The head is the most popular bodily location from which to take blood in the Borgia, Fejérváry-Mayer, Madrid, Nuttall, Vaticanus B and Vindobonensis I. It is tied for the most popular form in the Colombino-Becker and Dresden. The Maya codices are the cultural group with the highest relative percentage of head sacrifice at 45%. Head sacrifice is the most common in the Central Mexican and Mayan.

In the main data set and all sub groups there is a positive correlation between autosacrifice and bloodletting from areas of the head. In the total data set, the Central Mexican, and the Mixtec groups, there is a low positive correlation, while in the Maya group there is a strong positive correlation. There is also a low positive correlation between bloodletting involving two actors and bloodletting from the head in the main data set and the Central Mexican group. There is no correlation in the Maya group.

There is a low positive correlation between the head and blood as droplets in the general data set and in the Central Mexican codices, with a high correlation between the variables in the Maya. There is also a moderate correlation between bloodletting from areas of the head and no depiction of blood for the total data set.

There is a low positive correlation between the piercing of the head and humans engaged in autosacrifice in the general data set, and a moderate positive correlation between them in the Mixtec. There is no meaningful correlation in the Central Mexican or Maya groups. There is a low positive correlation between bloodletting from the head and deities engaged in autosacrifice in the main data set and the Central Mexican group, and a moderate correlation in the Maya group. There is no correlation in the Mixtec codices. There is a low positive correlation between bloodletting from the head and human on human bloodletting in the total data set, and a moderate correlation in the Central Mexican. There is no correlation in the Maya or Mixtec. There is a low positive correlation in the total data set and the Central Mexican group between deity on deity sacrificial behavior and piercing of the head. There is no correlation in the Maya or Mixtec. There is a low positive correlation between deity on human sacrificial behavior and bloodletting from the head in the Central Mexican group, and a low negative correlation in the Mixtec group. There is no correlation in the Maya group.

Ear

Bloodletting of the ear is found in the Borgia, Colombino-Becker, Fejérváry-Mayer, Laud, Madrid, Nuttall and Vindobonensis I. It is not found in the Bodley, Cospi, Dresden, Paris, Selden or Vaticanus B. The Colombino-Becker has the highest percentage of sacrifice involving the ear, with 50% of its scenes involving this behavior. However, there are only two scenes of bloodletting in the Colombino-Becker and so this result cannot be seen as significant. Bloodletting of the ear is the most popular area of the head for the Colombino-Becker, Nuttall

and Vindobonensis I. The Mixtec codices have the highest relative frequency of bloodletting of the ear at 23%. In the Central Mexican codices, there is a moderate positive correlation between bloodletting of the ear and autosacrificial behavior.

Nose

Bloodletting of the nose is not the most popular type of bloodletting for any codex. It is only present in the Madrid codex, which has the highest frequency at 5.88%. Because of this, the Maya codices have the highest frequency of nose bloodletting. There is a low positive correlation between bloodletting of the nose and autosacrifice in the general data set, and a moderate correlation between the two in the Maya group. There is no meaningful correlation in the Central Mexican or Mixtec groups.

Mouth

The bloodletting of the mouth and tongue is present in the Borgia and Madrid, which are tied for the highest relative percentage of mouth/tongue bloodletting with 12%. The Maya codices have the highest percentage of overall mouth/tongue bloodletting with 10% of scenes involving this behavior. There is a low positive correlation between bloodletting of the mouth and tongue and individuals engaged in autosacrificial behavior in the total data set, the Central Mexican codices, and the Mixtec codices.

Eye

Bloodletting of the eye is present in the Laud, Madrid and Vaticanus B. There is no bloodletting of the eye in the Bodley, Borgia, Colombino-Becker, Cospi, Dresden, Fejérváry-Mayer, Nuttall, Paris, Selden or Vindobonensis I. The Laud has the highest relative frequency of eye bloodletting at 28.6%. The Maya codices have the highest overall frequency of eye bloodletting at 5%. There is a low positive correlation between bloodletting involving two people and bloodletting from the eye in the general data set and the Central Mexican group, with no correlation in the Maya or Mixtec groups. There is a low positive correlation between deity on deity bloodletting and bloodletting of the eye in the general data set, with no correlation in any of the other subgroups.

Heart & Chest

The sacrifice of the human heart was perhaps the most ideologically significant bloodletting practice. Beyond the simple offering of blood to the deities in payment, tribute, or penance, the offering of a human heart indicated complete obedience to the deities and their desires. The probable experience of heart sacrifice likel differs from that of Western peoples in that Mesoamericans conceived of death as a transitional experience rather than simply an ending, with the deceased remaining a crucial part of life. Tiesler and Cucina describe the religious experience:

> "Human heart sacrifice was conceived as a supreme religious expression among the ancient Maya. The amputation of the still-beating heart, the annihilation of human life, and the offering of this vital organ, considered the essence of life and nourishment for the divine forces, allowed for the ultimate communication with the sacred and compensation to the gods" (Tiesler and Cucina 2006, 505).

Additionally there exists a connection between the physical heart of a human being and the ephemeral soul, which is not bound by human experience but may even be freed by death. The soul itself was considered "immortal and indestructible," and thus the process of human heart extraction was both a mortal and immortal event, one which marked the completion of one journey and the beginning of another (Vogt 1965, 33). The word itself for heart is *(y)óol* in both Nahua and Yukatekan Maya, and refers not only to the physical heart but also the concept of life and spirit which the heart embodies (Macri and Looper 2003, 288). Within the codices, one unique example involving the sacrifice of human hearts comes from page 9 of the Paris Codex, in which hearts are piled in a bowl at the feet of an eroded ruler surrounded by captions dictating the death succession of various rulers.

While the actual practice of human heart extraction is believed to have been rare, the practice is depicted in the codices. Bloodletting of the chest is present in the Bodley, Borgia, Colombino-Becker, Cospi, Dresden, Fejérváry-Mayer, Laud, Madrid, Nuttall, Selden and Vaticanus B. There is no bloodletting of the chest in the Paris or Vindobonensis I. The Bodley and Selden have the highest percentage of chest sacrifice, with 100% of the scenes of sacrifice featuring this. The Mixtec codices have the highest percentage of chest sacrifice at 54.54%, and it is the most popular form seen in the Mixtec codices. Chest sacrifice is the most popular form

of sacrifice for the Bodley, Cospi, Laud, and Selden, and is tied with another category in the Colombino-Becker and Dresden.

There is a low positive correlation between the piercing of the chest and human on human sacrifice in the general data set and the Central Mexican group, with no correlation in the Maya or Mixtec groups. There is a low positive correlation between the piercing of the chest and deity on deity sacrifice in the general data set at 95% confidence.

There is a low negative correlation between piercing of the heart and autosacrifice in the Central Mexican codices, and a low negative correlation in the Mixtec group. There is no such correlation in the Maya or Central Mexican groups. There is a moderate positive correlation between bloodletting involving two people and the piercing of the chest in the general data set and the Mixtec group, a low positive correlation in the Central Mexican group, and a strong positive correlation in the Maya group. The presence of a positive correlation in all data sets suggests a uniform understanding and representation of this practice across Mesoamerica.

There is a moderate positive correlation in all data groups between the piercing of the chest and the depiction of blood as flowing. There is a low negative correlation in the Central Mexican group between the piercing of the chest and blood depicted as droplets.

Hands, Feet, & Limbs

The Borgia, Fejérváry-Mayer, Laud, Madrid and Vindobonensis I all have bloodletting of the hands, feet, or limbs. The Bodley, Colombino-Becker, Cospi, Dresden, Nuttall, Paris, Selden and Vaticanus B do not. The Borgia has the highest percentage of hand, feet, and limb bloodletting at 17.6%. The Central Mexican codices have the highest percentage of bloodletting of the hand, feet, and limb at 14.5%. It is not the most popular subtype for any codex or codex group.

There is a moderate positive correlation between bloodletting of the hands, feet, and limbs and autosacrificial behavior in the Mixtec codices at 95% confidence. There is a low positive correlation between this category and sacrificial behavior involving two actors in the general data set, and a moderate positive correlation between them in the Central Mexican codices. There is a low positive correlation between bloodletting of the hands, feet, and limbs and depictions of blood as flowing as well as depictions of blood as droplets in both the main data set as well as the Central Mexican codices. There is a moderate correlation between bloodletting of

the hand, feet, and limbs and depictions involving no blood in the Mixtec codices. There is a low positive correlation between bloodletting of the hands, feet, and limbs and autosacrificial human behavior in the general data set, and a low positive correlation between the variable and deity on deity sacrificial behavior in the Central Mexican codices at 95% confidence. There is a moderate positive correlation with deity on human sacrificial behavior in both the total data set and in the Central Mexican codices.

Hand

Bloodletting of the hand is present in the Borgia, Fejérváry-Mayer, Madrid and Vindobonensis I. There is no bloodletting of the hand in the Bodley, Colombino-Becker, Cospi, Dresden, Laud, Nuttall, Paris, Selden, or Vaticanus B. The Vindobonensis I has the highest frequency of hand bloodletting at 14.29%, where the Maya codices have the highest frequency at 5%. There is a low positive correlation with autosacrifical behavior in the total data set, as well as a moderate correlation in the Mixtec codices. There is a low positive correlation between sacrifice involving two people and bloodletting from the hands in the Central Mexican codices.

Arms

Bloodletting of the arms is found in the Fejérváry-Mayer and Laud. There is no bloodletting of the arms in the Bodley, Borgia, Colombino-Becker, Cospi, Dresden, Madrid, Nuttall, Paris, Selden, Vaticanus B, Vindobonensis I. The Laud has the highest frequency of bloodletting of the arm at 14.3%. The Central Mexican codices have the highest frequency of bloodletting of the arm at 3.2%.

Legs

Bloodletting of the legs and feet is present in the Borgia and Fejérváry Mayer. The Borgia has the highest frequency of bloodletting of the leg at 15%. The Central Mexican codices have the highest frequency of bloodletting of the leg at 10%. There is a low positive correlation with bloodletting involving two people in the general data set, and a moderate positive correlation in the Central Mexican codices.

Sexual Organs

The letting of blood from the sexual organs is an often sensationalized behavior that is rarely depicted in the codices. Bloodletting from the genitals may serve a more regenerative purpose than from other areas of the body, such as on the Tablet of Foliated Cross at Palenque which shows sexual mutilation being performed to ensure regeneration of natural world (Joralemon 1974, 67). Bloodletting from the genitals is present in the Madrid, Paris, and Borgia codices, but overall there are few depictions of the practice. All genital bloodletting identified in the codices is from the penis, which may reflect both the sex of those participating in these rituals as well as the reluctance to depict female genitalia in Mesoamerican art (Houston *et al.* 2006, 41). There is a strong positive correlation between genital bloodletting and the autosacrifice of deities in the general data set and the Maya group. There is a moderate positive correlation between genital bloodletting and a lack of blood in the general data set, and a high positive correlation between them in the Maya codices.

Table 3.4 Bloodletting body parts correlations

Area of Body	Variable	Total Data Set	Central Mexican	Maya	Mixtec
-Actors-					
Head	Autosacrifice	Low positive	Low positive	High positive	Moderate positive
Head	Sacrifice of others	Low positive	Moderate positive	--	--
Head	Autosacrifice: human	Low positive	--	--	--
Head	Autosacrifice: deity	Low positive	Low positive	Moderate positive	--
Head	Human on human	Low positive	Moderate positive	--	--
Head	Deity on deity	Low positive	Low positive	--	--
Head	Deity on human	--	Low positive	--	Low negative
Ear	Autosacrifice	--	Low negative	--	--
Nose	Autosacrifice	Low positive	--	Moderate positive	--
Mouth	Autosacrifice	Low positive	Moderate positive	--	Moderate positive

Eye	Sacrifice of others	Low positive	Low positive	--	--
Eye	Deity on deity	Low positive	--	--	--
Chest	Human on human	Low positive	Low positive	--	--
Chest	Deity on deity	Low positive (95%)	--	--	--
Chest	Autosacrifice	--	Low positive	--	Low negative
Chest	Sacrifice of others	Low positive	Low positive	Moderate positive	Moderate positive
Hand, Foot, Limb	Autosacrifice	--	--	--	Moderate positive (95%)
Hand, Foot, Limb	Sacrifice of others	Low positive	Moderate positive	--	--
Hand, Foot, Limb	Autosacrifice: human	Low positive	--	--	--
Hand, Foot, Limb	Deity on deity	Low positive (95%)	--	--	--
Hand, Foot, Limb	Deity on human	Moderate positive	Moderate positive	--	--
Hand	Autosacrifice	Low positive	--	--	Moderate positive
Hand	Sacrifice of others	--	Low positive	--	--
Leg	Sacrifice of others	Low positive	Moderate positive	--	--
Genital	Autosacrifice: deity	Moderate positive	--	Moderate positive	--
-*Depiction of Blood-*					
Head	Droplets of blood	Low positive	Low positive	High positive	--
Head	No blood	Moderate positive	--	--	Moderate positive
Chest	Flowing blood	Moderate positive	Low positive	Moderate positive	Moderate positive
Chest	Droplets of blood	--	Low positive	--	--

Hand, Foot, Limb	Flowing blood	Low positive	Low positive	--	--
Hand, Foot, Limb	Droplets of blood	Low positive	Low positive	--	--
Hand, Foot, Limb	No blood	--	--	--	Moderate positive
Genital	No blood	Moderate positive	--	High positive	--

3.3.4 Deities involved in bloodletting

The pantheon of deities in Mesoamerica reflects the complex ideologies which guided everyday life. There are many deities who are associated with sacrificial acts in some way throughout the region, the majority of which are associated with the sun and the earth. Tonatiuh, the sun god, was thought to need offerings of beating hearts in order to propel himself on his journey and to initiate the sequence of days and seasons (Graulich 1998, 394). The battlefield was often referred to as "the place where Tonatiuh and Tlaltecuhtli eat and drink", while Tezcatlipoca has been described as being "thirsty for the blood of humans" (Graulich 1998, 397). Tlaloc has specifically been associated with beheading, the act producing blood which would then irrigate the earth. This blood "issuing from the victim's neck is often represented as serpents, symbols of fertility," supporting the idea of a connection between fertility, maize, and blood sacrifice (Graulich 1998, 401). There is also the story of Coyolxauhqui, the moon deity, who is decapitated and dismembered by her brother for the act of killing their mother (Graulich 1998, 401).

While the specific deities worshipped by the Nahua, Maya, and Mixtec differed, counterparts are often found in most cases. Deity presence is not limited to only the participation of deities in the act of bloodletting, but also their presence within the context of a specific scene. In order to better understand the types of deities associated with bloodletting in Mesoamerica, larger groups of deities were created based on their association with various elements such as the earth, the sun, and death, among others. In doing so, there is an overwhelming association between bloodletting and sun deities such as Quetzalcoatl, Tonatiuh, and Itzamna in the Central

Mexican and Maya codices, but not in the Mixtec. This is likely due to the general absence of deities from the Mixtec codices, which focus more on the history of the ancestors. There is also an association between bloodletting and death deities in the Central Mexican codices, which is seen in a similar manner in the few appearances of deities in the Mixtec codices.

Quetzalcoatl is the most often depicted deity in scenes of sacrifice in the Central Mexican codices, followed by Tonallehqueh and Tezcatlipoca, while Itzamna is the most common in the Maya codices. As Quetzalcoatl is a deity associated with both the sun and death, his reoccurring presence in scenes of blood sacrifice is not surprising as her perhaps best embodies the regenerative practice of blood sacrifice and the liminal period between life and death. Despite the fact that there are few representations of deities in the Mixtec codices, deity presence is sometimes conveyed through alternative means such as the sacred bundle, a physical manifestation of divine presence.

3.4 Conclusions

Depictions of bloodletting are complicated and variated, manipulating many aspects of Mesoamerican religion and life in order to convey an intended message. As the above results indicate, while all of the codices draw on similar elements, they also show marked differences in how they use these elements. A few variables have been shown to have shared correlations between the codices, all of which relate to areas of the body, such as the shared positive correlation between bloodletting of the chest and sacrifice involving others. The existence of these shared trends indicates at least some degree of cultural similarity. However, the majority of correlations seen are culturally specific and are present in only one cultural group, with the Central Mexican codices having the most culturally specific trends, followed by the Maya and then the Mixtec. One of the most notable results of the study is that there are trends which are shared between only two cultural groups rather than the whole data set. The Central Mexican and the Maya codices share the most trends, all of which are positive, while the Central Mexican and the Mixtec codices share a few positive trends but primarily exhibit trends which are in direct opposition to each other. One example of this opposition is the correlation between bloodletting of the head and deity on human bloodletting, which is positive in the Central Mexican codices but negative in the Mixtec and indicates an entirely different use of these variables. The opposition between the Central Mexican and Mixtec codices is notable as their

iconographic similarity might suggest a more uniform use of writing, while the statistical analysis shows multiple instances of direct opposition. Another notable result is that there are no correlations shared exclusively between the Mixtec and Maya codices, which again suggests very different uses of writing.

The results indicate that the Mesoamerican codices largely did not represent the same subject matter through the same techniques but primarily relied on culturally specific practices. The existence of some shared patterning does acknowledge the pan-Mesoamerican experience of writing, but the cultural specificity of the trends observed indicates that these depictions were largely dependent on the culture which created them. The lack of patterning shared by the Maya and Mixtec codices suggests that the ways in which they represented this subject matter was drastically different, while the existence of patterning between the Central Mexican and Maya codices suggests that they manipulated this subject matter in a more similar manner. These results go against what one might hypothesize based on the traditional grouping of the Central Mexican and Mixtec codices as similar based on their pictorial features, with the Maya codices as the outlier. In this situation the Mixtec codices are the outlier, sharing the least trends of any cultural group. Likely, the shared patterns seen in the Maya and Central Mexican codices are linked to their role as ritual codices based in religious practice. Bloodletting as an activity is fundamentally based in religious belief and practice, and it follows that it may be represented differently in religious documents as compared to the historical documents of the Mixtec. Despite these similarities, it still remains that the majority of the correlations recorded belong to only one cultural group and thus indicates that PostClassic Mesoamerican people did not represent the same ritual subject matter in precisely the same way. Rather, representations of bloodletting indicate the shared manipulation of physical elements in similar yet unique manners. The meaning of these results will be further explored in Chapter 5, in conjunction with the results of the following case study of difrasismo.

4 CASE STUDY: DIFRASISMO

4.1 Difrasismo as a case study

The second case study in this thesis compares the use of the same linguistic phenomenon in the Mesoamerican codices. Including a case study based on linguistic practice allows for the phonetic element of both the more phoneticized and more pictorial writing systems to be explored. This is particularly interesting when one remembers that the pictorial scripts of the Central Mexican and Mixtec people have traditionally been discounted as encoding little to no linguistic information. This research is explicitly designed to analyze the transmission of linguistic information in the codices, = providing an opportunity to directly compare the phonetic element of the Maya codices, in which the phonetic is often emphasized, and that of the Mexican, in which the phonetic is often deemphasized in favor of an art historical approach.

The practice of difrasismo was first recorded by Garibay in 1953, who described it as "pairing two metaphors which together give a symbolic means of expressing a single thought" (Garibay 1953, 19). Also known as diphrasis or diphrases, this linguistic phenomena has been documented in a variety of Mesoamerican cultures. More elaborate discussions of difrasismo define it as "a parallel construction in which two elements are combined to express something new, something that *cannot necessarily be predicted by considering the meaning of the individual parts*" [emphasis mine] (Suslak 2010, 93). The key attribute of difrasismo is that its meaning is always greater than the mere sum of its parts. This leads to an ambiguity and permeability inherent in the use of difrasismo and other ritual language, which invokes the mystical and mysterious through elevated manners of speaking requiring elaborate interpretation in order for those not familiar with the system to understand.

In contrast to the more empirical, statistics-based case study of the previous chapter, this case study is more interpretive and focuses on the presence, absence, and use of various difrasismo in the codices. This approach fits with the conceptual nature of difrasismo, as working with difrasismo is always an interpretive experience, and acknowledges that in many circumstances it is near impossible to identify every example of a certain difrasismo clearly. It

also seeks to explore the concept of alternative forms of knowing as discussed in Chapter 2. While primarily qualitative, some difrasismo are included with statistical tables of their use, due to the plethora of literature ensuring that they were clearly identified. Difrasismo in the codices necessarily serve a performative role, as the codices are performative documents. The inclusion and use of difrasismo, which is fundamentally ambiguous, contests the dominant narrative of knowledge which prioritizes the unambiguous and empirical transmission of information. This prioritization has led to situations in which "performance and performativity have not been considered legitimate forms of knowledge because they are ephemeral (and often considered idolatrous), whereas the written word materially endures" (Allen 2011, 101). The fleeting nature of these performative practices lends itself to even more ambiguity than that which is already present. However, when we include "embodied practice/knowledge, such as spoken language, dance, sports, [and] ritual into our conception of knowledge… we examine scenarios as meaning-making paradigms that structure social environments, behaviors, and potential outcomes" much in a similar way writing structures meaning in the West (Allen 2011, 101).

4.2. Difrasismo & ritual language

The study of linguistic structures allows for a revelation of the subconscious priorities of the cultural group which uses the language. Within cultures such as the Central Mexicans, Mixtec, and Maya, where language is used in a heavily ritualistic manner, the specific mechanisms of their languages reveal patterns in ways of thinking. The neurological effects of repetitive ritual language on the development and shaping of the brain have been well noted by Rappaport (Rappaport 1999, 142). Additionally, one study by Ramus (2004) examined the neurological processes involved in children learning to read and noted that different areas of the brain were used during different reading strategies. The conclusions were used to suggest that "as we move forward from the visual centers of the brain towards the hearing and speaking centers, we also move away from concrete word forms in an abstract sense, adding layers of meaning and slotting them into the functional roles they play within sentences" (Bolinger 2013, 71). The codices were primarily performative and thus heard rather than seen directly, and so an ambiguous and interpretative practice such as difrasismo fits within the scope of the natural neurological response to spoken word. Languages themselves are verbal depictions of indigenous philosophy, showing how the surrounding world is categorized and explained.

Within Nahuatl "metaphorical abundance" functions as a fundamental feature, while Maya speech as been described as "rich in the use of proverbs and metaphors" (Abbott 1987, 259; Helland 2012, 42). The poetic nature of these languages lends itself to increased ritualization in social practice and in the indigenous American view of the world around them. Helland summarizes the link between the linguistic, the ritual, and the social:

> "Poetics became the commonsensical mode of articulation since among Mesoamericans it has been widely accepted that in the cosmos all is passing, living, transient, becoming and in a ceaseless cyclical transforming. Language should therefore not attempt to contain, comprehend, delimit, determine or define – let alone arrest – the inexorable passing of cosmic life" (Helland 2012, 44).

Understanding the social importance of the ephemerality present in these ritual languages is a necessary prerequisite for understanding the use of difrasismo in any capacity.

Within Mesoamerica, there are often specific words used to refer to sacred language which emphasize similar features. The colonial ethnohistoric writings of Spaniards such as Sahagún indicate that "despite the diversity of subject matter these speeches share essential stylistic and situational elements," (Abbott 1987, 260). Within Maya society ritualized language was known as the *zuyua* language, a register limited in use to the elite within society, while the Nahua referred to their ritual language as *nahuatolli*, a similar style of linguistic register which was used only by a select few (Mikulska Dabrowska 2010, 327). Within the category of ritual speech there are further distinctions, such as that of *huehuetlahtolli*, a modern register which indicates that the speaker is using the language of the ancestors and is only performed by elderly men of high status (Abbott 1987, 252). The modern Mixtec people refer to their ritual language as *sahu*, which translates as "formal or ceremonial discourse," while the Mixe use the term *ayuuk*, which comes from the words for "mouth" and "wilderness" in order to indicate "the sacred work" (Jansen & Pérez Jiménez 2010, 53; Suslak 2010, 81). These languages are often very secretive and even disguised at times, using the same term to refer to different concepts depending on the register being invoked. This exclusivity and secretiveness strengthens the ties to the realm of religion and mystery and supports a class structure in which elites with knowledge of this language are placed at the top of the social hierarchy. While the ability to speak difrasismo may be limited, the general community is often familiar with this type of speech and understands the subject matter it conveys. On a larger American scale, the Navajo of North America have a

similar practice of "intimate grammar" which invokes a strong emotional attachment, indicating the possibility of a more widespread experience of ritualized language in the Americas (Suslak 2010, 98). The knowledge of these ritual languages is necessary because difrasismo does not exist as an isolated linguistic practice but creates a language in itself which uses metaphor, parallelism, and other linguistic phrasings to indicate an elevated ritual meaning beyond what the words themselves may suggest (Jansen & Pérez Jiménez 2009, 119). Understanding the ritual context in which difrasismo lives is thus critical to understanding any application of difrasismo within the codices.

Linguistic parallelisms are a form of ritual language found in literature throughout the world, from the Bible to the *Kalevala* to Southeast Asian songs, but are limited in their function as a major organizing principle (Bright 1990, 438). Parallelisms function as a way of organizing and structuring the world, ordering the chaos that exists in the universe with repetitious phrases. Parallelisms are a particularly strong feature of Mesoamerican verbal art, with many researchers taking note of the parallel morphosyntactic structure as well as the close relationships between elements which are paralleled (Bright 1990, 439). Difrasismo is a form of parallelism which is unique in its heavily metaphorical content. Within a difrasismo, two concrete terms are combined in order to convey a more abstract concept (Jansen & Pérez Jiménez 2009, 15). Crucially, the meaning of a difrasismo often surpasses the sum of its parts and expresses an entirely new concept. The formal structuring of difrasismo allows for the invocation of ritual language and a ritual experience, but can also be used ironically or for humorous purposes (Suslak 2010, 81). As many difrasismo combine terms which appear to be oppositional or strange together, the use of difrasismo can be seen in some ways as "a dialectical space where new understandings might emerge through the integration of polarities" (Rendon 2009, 68). Difrasismo also often requires a degree of tonality in order to be interpreted correctly, which may have been more easily transmitted through pictorial conventions.

While the study of difrasismo is difficult due to its complex conceptual nature, instances of difrasismo have been well documented through modern and colonial ethnographic practice. Sahagún is considered by many to be the earliest ethnographer of the Mesoamerican people, and difrasismo appear continually within his texts (Abbott 1987, 260). The 1992 ethnolinguistic analysis of oral literature in Mesoamerica by Bright, particularly that of Nahuatl, illustrates the continued importance of difrasismo as an indicator of high social status and emphasize the social

function it serves, particularly within the religious sphere (Bright 1992, 440). More recently Jansen & Pérez Jiménez have conducted further research into the ceremonial language of indigenous American peoples, particularly making reference to ceremonial language within the codices (Jansen & Pérez Jiménez 2010, 57). Recognizing the existence of modern difrasismo allows for an analysis which incorporates the structural element of difrasismo and its role in shaping society and the brain. Difrasismo help to reinforce social norms, legitimize positions of power, and elevate speech to the status of divine. It is not simply a manner in which people speak but an indicator of the belief system of the people themselves.

It is necessary to remember that most academics agree that writing "does not consist of mere pictures, of representations of things, but is a representation of an *utterance*, of words that someone says or is imagined to say" (Ong 1982, 83). The presence of difrasismo, a linguistic practice, in the codices supports the interpretation of the pictorial codices as script as according to popular guidelines. One of the benefits of utilizing this system is that while difrasismo encodes linguistic information, it does not explicitly state it but allows for the reader to interpret it in their own language, conveying the idea and the concept without the use of specific words which may be limited to one language. This allows for a greater perpetuation of the messages encoded within the codices and a more expansive concept of literacy.

As noted, difrasismo are inherently ambiguous and indeed it is the ambiguity itself from which difrasismo derive their authority. An example of the layers of interpretation involved in using difrasismo can be seen through the Totontepecano Mixe example of *tùýk ýaaj tùýk joot*, which translates to "one mouth, one stomach" and indicates that an individual is speaking with sincerity (Suslak 2010, 80). Referencing various body parts in order to convey a specific metaphorical point is a common use of difrasismo in Mesoamerica (Montes de Oca 2004, 234). Interpreting this difrasismo first requires understanding the underlying metaphorical association in the language between the mouth and expression and between the stomach and emotion. However, the combination of these metaphorical assumptions alone simply creates "expression, emotion," which is not what this difrasismo conveys. This example emphasizes that "one of the defining characteristics of difrasismo is that the meaning of the whole expression cannot be determined by simply adding its two halves together" (Suslak 2010, 80). Knowing the literal meaning, and even knowing the metaphorical meaning, of these words is not enough. Because difrasismo by nature convey something which cannot be expressed through the words alone, it is

important to explore instances of difrasismo carefully and keep in mind the possible metaphorical associations which may be manipulated.

4.3 Analysis of the codices

The original intention of this thesis was to investigate the use of the same difrasismo in different codices. However, soon into beginning this investigation I recognized that while similar difrasismo *are* present in all of the codices, it is difficult to record in its entirety something so fundamentally interpretative. When possible, the same difrasismo will be explored between the codices, but other popular difrasismo which are only present in some of the codices will also be mentioned in an effort to explore the overall use and experience of difrasismo between cultural groups. It should be noted that this is not intended to be a comprehensive overview of difrasismo within the codices or to record all known examples of certain difrasismo. Rather, it is a qualitative approach to difrasismo which seeks to explore the presence or absence of various difrasismo and their variations in the codices. The identification of the following difrasismo was based on both the translations referenced in Chapter 3 as well as recent work by Mikulska Dąbrowska (2010) and Helmke (2013).

Figure 4.1

Lord 10 Reed depicted speaking difrasismo, Selden p. 18(3)

A basis for interpreting pictorial difrasismo as conveying information of a linguistic rather than simply conceptual nature is justified by instances in which signs indicating speech are explicitly included before the depiction of a difrasismo. One example is found on page 3 of the Codex Selden, in which Lord 10 Reed speaks a series of paired difrasismo connected by lines which includes the rope and knife which indicates justice (Jansen & Pérez Jiménez Jimenez 2009b, 13). The choice to include a speech swirl in front of Lord 10 Reed's mouth is purposeful, as are the paired combinations which he speaks. This image and others like it indicate that these

difrasismo are not simply intended to communicate the idea of the difrasismo but are intended to convey this information in a linguistic manner.

4.3.1. Flower & Song / Red & Black Ink

Difrasismo are in some circumstances self-referential, such as the case of the flower and song which conceptually indicates poetry, writing, and other artistic endeavors concerned with beauty (Baca 2006, 125). Known in Nahuatl as *in xochitl in cuicatl*, this difrasismo relies on the link between the earth and poetics as "for the Aztecs, the only truth on earth was poetic and beautiful, like flowers and song" (Rendon 2009, 68). While the flower and song is not present within the codices, there may be more ambiguous uses of the term within the Madrid Codex, such as on page 22 with the text "*tu-tz'u // ??-chu-wa // nah? // na?-nik-li // itzamna*" which can be translated as "first honored Flower Itamna plays drums" (Vail and Hernández 2013). In this more difficult interpretative case there is certainly an association between music (drums) and flowers, and if not an explicit statement of the difrasismo then an associative use of the motif. A similar situation occurs on page 23 of the Madrid, with the text "*nah?/na-uh?//yu-tan/ta//nik-k'uh//le*" which may be read as "first moon, Lord Flower, in rulership" and appears in conjunction with the image of a deity referred to as Lord Flower who is holding a rattle (Vail and Hernández 2013). This again brings to mind the conceptual association between music and flowers. The difrasismo of the flower and song may not be definitively present in these circumstances, but the possible references to it may imply a similar understanding to the way it was used in Mexican cultures to indicate beauty.

Another self-referential difrasismo is that of the red and black ink, which is used to refer to writing, and explicitly to the codices, and is known as *in tlapalli in tlilli* in Nahuatl (Montes de Oca 2004, 226). While no examples are currently identified in the codices, it is an example of how difrasismo may reference and re-reference themselves in a complex exchange of metaphorical meaning in order to "refleja la expresión de un concepto que involucra aspectos perceptuales culturales y axiológicos" (Montes de Oca 2004, 230).

4.3.2 Arrow & Shield

The motif of the arrow and shield is common throughout Mesoamerica and is present in all of the codices. It signifies warfare or designates an individual as a warrior, and is conveyed through a combination of flint, arrow, spear, or other weapon and shield (Montes de Oca 2004, 234). On a more conceptual level, it indicates the quality of courage as associated with the warrior. Because this difrasismo is clearly present in the Nahua, Mixtec, and Maya codices, a more comparative approach has been taken and an inventory of all scenes of this difrasismo was created.

Figure 4.2

The difrasismo spear and shield in the Central Mexican, Maya, and Mixtec codices. Left: Cospi p. 9, middle: Madrid p. 32, right: Colombino-Becker p. 6.

The inventory of difrasismo indicates that there is clear variation in its depiction. In some circumstances, individuals are carrying the spear and shield motif, while in others the spear and shield exists as an independent entity and does not involve any actors. Additionally, the spear and shield may be displayed in a position of activity, such as warfare, or may simply be held at the side. More rarely, the spear and shield are seen accompanying an actor in a position of defeat. For the total data set, the majority of scenes (81.5%) involve the spear and shield motif being held by an actor, while only around a fifth (18.4%) have the spear and shield motif exist independently of any actors. Of the scenes in which the motif is carried, the majority of these scenes are those of inactivity (73.9%), with 24.6% featuring the motif used in scenes of combat or action and only 1.5% exhibiting the motif in a scene of defeat.

The difrasismo of the spear and shield is known as *in mitl chimalli* in Nahuatl (Helmke 2013, 4). The carried spear and shield is the most common variety in the Central Mexican codices (69.1%), while the independent spear and shield are far less common (29.6%). Of the scenes in which the motif is carried, scenes of inactivity are again most common (64.3%). This motif is present within all of the codices of this group, with the Borgia containing the most and thus greatly affecting the data. The table below exhibits the relative frequency of these scenes within a specific codex, with the subtypes indicating the percentage of the scenes in which the motif is carried actively, inactively, or with defeat as compared to the total number of scenes in which the motif is carried.

Table 4.1 Spear and shield frequencies in the Central Mexican codices

Relative Percentage	**Central Mexican**	**Borgia**	**Cospi**	**Fejérváry-Mayer**	**Laud**	**Vaticanus B**
Data Points	81	46	16	4	6	9
Independent	29.6%	39.1%	--	25%	16.7%	88.9%
Carried	69.1%	60.9%	100%	75%	83.3%	11.1%
Carried – active	33.9%	--	100%	--	--	--
Carried – inactive	65.3%	100%	--	100%	100%	100%
Carried - defeated	1.7%	--	--	--	--	--

The difrasismo of the spear and shield is also present in the Maya codices and is read as *to'ok pakal* in Yucatec Maya (Helmke 2013, 4). The difrasismo is mentioned explicitly in the text in both the Dresden and Paris codices. The Dresden page 60 features the image of figures dressed as warriors is accompanied by the text "*b'olon-ok-te' // __ // yah?-winik / winal-ki // xul?-k'in-__ // tok'-pakal // pa-wah-och*" which can be translated as "damage to the people; end of days, Pawah-opossum's flint-shield" (Vail and Hernández 2013). Page 6 of the Paris Codex exhibits an image of a man seated on a throne with an animal head accompanied by the text *"??-kab' // k'ak // tu-xu-na // ??-kab' // tok'-pakal*" which can be read as "the earth sprouts fire, the earth sprouts flint-shield" (Vail and Hernández 2013). The explicit phonetic writing of the spear and shield, rather than simply writing the word for war, indicates that there is something about the combination of these elements which is necessary to represent in this manner. The example

of the Paris codex is particularly interesting because of the reference to fire, which is often associated with warfare and thus adds another element to this difrasismo.

Within the Maya codices there are also pictorial depictions of the difrasismo of spear and shield, which in all cases is being carried by an actor who is most commonly in a position of inactivity (76.9%). The table below exhibits the relative frequency of these scenes within a specific codex in the same manner as the previous table, with the addition of the differentiation between text-based and pictorial difrasismo. While the Maya had the ability to convey this difrasismo through phonetic means, as indicated above, they overwhelmingly chose to represent it in a pictorial manner similar to that of the Central Mexican codices. The choice to convey this difrasismo through image rather than text lends credibility to the interpretation of other pictorial elements as encoding linguistic information and also reinforces the concept that the manner of representation is equally as important as the information being conveyed.

Table 4.2 Spear & shield frequencies in the Maya codices

Relative Percentage	**Maya**	**Dresden**	**Madrid**	**Paris**
Data Points	16	11	4	1
Text	13.3%	9%	--	100%
Image	86.7%	90.9%	100%	--
Independent	--	--	--	--
Carried	100%	100%	100%	--
Carried – active	15.3%	80%	50%	--
Carried – inactive	76.9%	10%	50%	--
Carried - defeated	7.7%	10%	--	--

Finally, the difrasismo of the spear and shield is present in the Mixtec codices and is read as *tatnu yusa* in the Mixtec language (Jansen & Pérez Jiménez 2010, 56). Within the Mixtec codices it again follows the trend which has been demonstrated, with the majority of the scenes featuring the spear and shield as carried (89.6%), with only a small percentage depicting the motif as an independent entity (10.4%). It should be noted that a significant amount of the instances of this difrasismo come from the Codex Nuttall, which influences the statistical results below.

Figure 4.3 Spear & shield frequencies in the Mixtec codices

Relative Percentage	Mixtec	Bodley	Colombino	Nuttall	Selden	Vindobonensis
Data Points	154	20	23	82	20	9
Independent	10.4%	15%	13%	3.6%	35%	--
Carried	89.6%	85%	86.9%	96.3%	65%	100%
Carried – active	21.7%	64.7%	40%	2.5%	61.5%	11.1%
Carried – inactive	77.5%	35.3%	60%	97.4%	7.7%	88.9%
Carried - defeated	>1%	--	--	--	30.8%	--

As the table below indicates, the results are strikingly similar between the codices. There is an overwhelming trend to depict the spear and shield motif as carried, thus likely designating the actor who is carrying it as a warrior. However, there is also a very heavy trend for all of the codices to depict the carried spear and shield in a position of inactivity rather than in an active, violent, or warlike position. A position of inactivity is characterized by the fact that the spear and shield is not being used in any manner but rather functions as an accompaniment to an actor, and thus the spear and shield are not included in order to properly represent a scene of violence but for some other reason. The purpose in including this motif may be a choice to convey the difrasismo of warrior outside of the context of warfare as well as to designate the continuing status of the warrior in Mesoamerica.

Table 4.4 Spear & shield frequencies in the Central Mexican, Maya, and Mixtec codices

Relative Percentage	Total Data Set	Central Mexican	Maya	Mixtec
Data Points	250	81	15	154
Text	< 1%	--	13.3%	--
Image	99.2%	100%	86.7%	100%
Independent	18.4%	29.6%	--	10.4%
Carried	81.5%	69.1%	100%	89.6%
Carried – active	24.6%	33.9%	15.3%	21.7%
Carried – inactive	73.9%	65.3%	76.9%	77.5%
Carried - defeated	1.5%	1.7%	7.7%	< 1%

4.3.3. Mat & Throne

The difrasismo of the mat and throne is also a common pan-Mesoamerican metaphor and indicates the authority of the government, which is considered to be divinely inspired (Anders *et. al.* 1994, 6). The combination of the mat and the throne has a long history in Mesoamerica, with the combination of these elements even being identified on the Cascajal Block, considered by many to be the oldest example of writing in the Americas and which speaks to the antiquity of this phrase (Skidmore 2006, 2).

Figure 4.3

Olmec glyphs for throne (left) and mat (right) on the Cascajal Block, Skidmore 2006, 2.

Within the codices the motif of the mat and the throne is extremely popular, but experiences significant variation in how it is expressed. The diagnostic type can be considered a stylized throne drawn in the usual Mesoamerican style covered by an animal skin mat, often that of a jaguar. However, the stylization of the throne element and the type of animal skin are both elements which vary between the codices. When the diagnostic criteria in identifying this difrasismo is expanded from the typical depiction of a throne to include possible alternative depictions of thrones, such as platforms, the use of this difrasismo nearly triples. For the purposes of continuity, only instances in which both a mat element, such as an animal skin or thatched mat, and a throne element, such as a platform, were included in the database of the mat and throne difrasismo. Small platforms refer to those which do not extend beyond the mat itself, while large platforms to those which are wider than the mat. Only those which are unambiguously jaguar skin and include spots have been identified as such, with all others designated the category of 'other'.

The mat and the throne are referred to in Nahuatl as *petlatl icpalli* (Jansen & Pérez Jiménez 2009, 15). The traditional motif of the stylized throne with animal skin mat is present in all of the codices, with the exception of the Cospi. Within the Cospi no instances of the mat and the throne could be identified, despite the large amount of thrones which occur in the codex. This constitutes a significant deviation from the presence of the motif in the rest of the Central Mexican codices. It is unclear if this speaks to the contents and character of the codex Cospi or to our present inability to interpret it. There is also a sharp divide in how the Central Mexican

codices represent this motif. The Borgia shows a strict adherence to the traditional depiction, while the Fejérváry-Mayer, Laud, and Vaticanus B, while containing the traditional motif, more frequently show a mat on a platform in a similar manner as the Mixtec codices. Despite these issues, the Central Mexican codices are unified in their depiction of a jaguar skin mat in all instances of this difrasismo.

Figure 4.4

Comparison of the mat, the throne in the Borgia p. 14 (left) and the Paris p. 4 (right).

Table 4.5 Mat & throne frequencies in the Central Mexican codices

Relative Percentage	**Central Mexican**	**Borgia**	**Cospi**	**Fejérváry-Mayer**	**Laud**	**Vaticanus B**
Data Points	71	33	--	19	7	12
Mat, throne	54.9%	97%	--	26.3%	14.3%	8.3%
Mat, platform	45.1%	3%	--	73.7%	85.7%	91.6%
Mat, small platform	39.4%	3%	--	57.9%	--	83.3%
Mat, large platform	5.6%	--	--	15.8%	85.7%	8.3%
Jaguar skin	100%	100%	--	100%	100%	100%

In the language of the Maya codices, the difrasismo the mat and the throne are referred to as *pohp tzam* (Helmke 2013, 4). This difrasismo is explicitly mentioned on page 46 of the Dresden codex accompanying an image of the god K'awil with a spear protruding from his chest, reading "u-*muk-ka//po-po-tz'a-ma//u-muk-ka*," which translates to "the mat and throne are buried; it is their evil omen" (Vail and Hernández 2013). Interpreting this as an indication of authority, the text seems to refer to the end of one period of authority and the impending bad fortune that will come. That this motif is mentioned explicitly indicates that the Maya knew and used this difrasismo, which then validates its pictorial identification in the codices. The majority of instances of this difrasismo identified pictorially adhere to the traditional throne and animal

skin mat depiction, but differ in the type of animal skin used. It is difficult to determine the type of animal skin in many cases due to poor preservation, but the most likely candidate is peccary or caiman – and decidedly not jaguar.

A possible alternative depiction of the motif occurs in the Codex Madrid and depicts Itzamna seated on a platform containing glyphic representations of the earth while leaning against a mat. The earth has been associated metaphorically with divine power in Mesoamerica, providing a basis for this interpretation (Pharo 2007, 38). The similarity of this image to depictions of thrones, combined with the metaphorical association between the earth and power, may indicate this as an example of the difrasismo the mat and the throne which combines glyphic and pictorial elements. With the small sample size it is difficult to draw any definitive conclusions, but it is interesting to note that the same difrasismo may be present in phonetic and pictorial manners as well as in a combination of the two. The table below records the frequencies of this difrasismo, with the mat and throne/mat and platform distinction as well as the jaguar skin/non-jaguar skin distinction referring to pictorial representations only.

Figure 4.5

Possible depiction of the difrasismo of the mat, the throne, Madrid p. 88.

Table 4.6 Mat & throne frequencies in the Maya codices

Relative Percentage	**Maya**	**Dresden**	**Madrid**	**Paris**
Data Points	11	2	2	7
Text	18.2%	50%	--	--
Image	81.8%	50%	50%	100%
Combination	--	--	50%	--
Mat, throne	90%	--	50%	100%
Mat, platform	10%	100%	50%	--
Mat, small platform	10%	100%	50%	--
Jaguar skin	20%	100%	50%	--
Non-jaguar skin	80%	--	50%	100%

In the Mixtec language, the mat and throne is read as *yuvui tayu* and appears drastically differently than representations in other codices (Jansen and Broekhoven 2008, 2). A reed mat is often depicted, rather than that of an animal skin, with an individual seated on a raised portion of

the mat which is then located on a platform. While the Mixtec and Central Mexican codices are often highly iconographically similar, "none of the preconquest-style manuscripts from the Mixteca contains the central Mexican-style petlatl icpalli" (Terraciano 2001, 167). Some scenes appear similar to those in the Central Mexican codices and depict individuals seated on jaguar skin mats located on small platforms or depict a throne similar to those seen in the Central Mexican codices without a mat, but it is unclear if these are actually representations of this difrasismo. The variations of this motif may be due to "regional or temporal differences, as well as particular idioms and ceremonial practice" (Terraciano 2001, 437). Due to these variations, the process of identifying this difrasismo in the Mixtec codices has been incredibly difficult. However, literature which identifies a jaguar mat on a small platform in the Codex Nuttall and a reed mat on a large platform in the Codex Bodley as both examples of the difrasismo of the mat and throne have been used as indicators in this process (Mikulska Dąbrowska 2008, 70; Terraciano 2001, 167). While many scenes exist which feature jaguar skin mats in the Mixtec codices, only those which are depicted with a throne or platform were included in this category. Additionally, the discrepancy between frequencies of this difrasismo in the codices must be taken into account when interpreting these results.

Table 4.7 Mat & throne frequencies in the Mixtec codices

Relative Percentage	**Mixtec**	**Bodley**	**Colombino**	**Nuttall**	**Selden**	**Vindobonensis**
Data Points	434	277	1	70	80	6
Mat, small platform	7.4%	1.4%	--	32.9%	--	83.3%
Mat, large platform	92.6%	98.6%	100%	67.14%	100%	16.7%
Jaguar skin	31.3%	1.4%	--	97.1%	75%	66.7%
Non-jaguar skin	68.7%	98.5%	100%	2.9%	25%	33.3%

Reviewing the data indicates trends which were introduced in the earlier case study. The Maya and Central Mexican codices both contain full depictions of thrones and animal skin mats, with the variation deriving from the type of animal used. The Central Mexican and Mixtec codices share the convention of representing this difrasismo through a mat on a platform rather than a full throne, which is not seen anywhere in the Maya codices. These results reinforce the

connections between the Central Mexican and Maya as well as the Central Mexican and Mixtec, and highlights the great differences between the Mixtec and Maya codices.

Table 4.8 Mat & throne frequencies in the Central Mexican, Maya, and Mixtec codices

Relative Percentage	Total Data Set	Central Mexican	Maya	Mixtec
Data Points	516	69	11	434
Text	< 1%	--	9%	--
Image	> 99%	100%	81.8%	100%
Combination	< 1%	--	9%	--
Mat, throne	9.5%	55.7%	100%	--
Mat, platform	90.5%	44.3%	--	100%
Mat, small platform	11.7%	39.4%	10%	7.4%
Mat, large platform	78.9%	5.6%	90%	92.6%
Jaguar skin	40.4%	100%	20%	31.3%
Non-jaguar skin	59.6%	--	80%	68.7%

4.3.4. Day & Night

The difrasismo of the day and the night indicates the totality of the daily cycle or the passage of time and indicates the entirety of solar life (Montes de Oca 2004, 239). An alternative reading for this difrasismo, proposed for examples found in Maya writing, also sees it as indicating completeness, which is similar to other interpretations but carries different connotations (Stuart 2003, 1). One interesting aspect of this difrasismo is that it has been seen to occur not only in parallel expressions such as “day, night” but also over more extended sequences of images in an abstract manner. Because of this, it is difficult to clearly determine all instances of this difrasismo within the codices, a task which would go beyond the aims of this thesis. However, it has been noted in all three codex groups.

Figure 4.6

Representation of the difrasismo day & night in the Borgia p. 28 (left) Vindobonensis I p. 23 (right).

Within the Central Mexican codices it is seen typically in the form of a circle or semi-circle with half sun, half night imagery. The Spanish ethnographer Molina first recorded it in 1571 as *cemilhuitl cenyohual* (de Molina 1571, f. 164. col. 1). It appears both as part of a skyband, as an independent motif, or as separate day and night elements interspersed throughout the page. The Mixtec reading of this difrasismo is *ntuu ñuu* and appears very similar to that of the Central Mexicans, representing it in a nearly identical manner stylistically (Nieves 2012, 8). This similarity reflects the larger shared iconography of the Central Mexican and Mixtec codices. Additionally, the direction in which the day and night motif is facing is often an indication of which direction the text is meant to be read, as the reading of day comes before the reading of night.

The difrasismo of day and night is read in the Maya codices as *k'in ak'ab'* (Hull 2012, 83). This day and night motif often occurs in collaboration with Central Mexican symbols and is associated with eclipse imagery. One such example can be seen on page 57 of the Dresden Codex, which depicts a skyband containing the Maya glyph for night, *ak'ab'*, and the Central Mexican symbol for day accompanied by an eclipse element. While the pictorial difrasismo in the Maya codices use the Central Mexican day sign, the actual phonetic representations of this difrasismo use the Maya day sign. The incorporation of Maya and Central Mexican glyphs into a pictorial representation of difrasismo is a unique and interesting indicator of the degree of cultural exchange which may have occurred.

Figure 4.7

Skyband containing Maya sign for night (left) with Central Mexican sign for day (right), Dresden p. 57.

Because this is not a comprehensive overview of the use of this difrasismo in the codices, these results will not be compared in table form. Rather they are here to illustrate that there are many other difrasismo which exist in the Central Mexican, Maya, and Mixtec codices in overlapping forms which maintain distinction, and to encourage further discussion and research on the topic.

4.3.5 Food & drink

The difrasismo of food and water is seen heavily in the Maya codices, both as stated explicitly in the text and as incorporated pictorially into the accompanying images. This difrasismo can be understood in a literal sense as connoting feasts or offerings, or in a more metaphorical sense as indicating "fate" (Kettunen 2005, 8). It occurs within the Maya codices both through parallelism, in which the glyphs for food, usually tortillas (*waj*) are repeated, as well as through difrasismo, in which the glyphs for tortilla (*waj'*) and water (*ha'*) are combined. In many representations of this motif, parallelism and difrasismo take the same iconographic offertory form, such as an actor carrying the glyphs on their back or standing in front of a presentation of glyphs, indicating the relationship between the two linguistic practices.

The difrasismo for food and drink is also seen recorded phonetically in two manners: through the glyphs *ox-wi'il*, which read as "abundance of food and drink" and through the glyphs *waj ha'* which read as "tortilla, water." This occurs in all three of the Maya codices to varying degrees. Within the Paris Codex, the written *ox-wi'il* is never used in conjunction with the pictorial *waj'-ha*, while in the Madrid Codex these elements exist both on the same page and separately, and in the Dresden both the written *ox-wi'il* and the written *waj'-ha* can occur in the same context. The existence of a way to phonetically write out "abundance of food" while the same concept is often conveyed through "tortilla, water" indicates that the practice of difrasismo is not a matter of necessity. If the same information can be conveyed through clearly phonetic means, then the use of difrasismo must be considered important for more than just its ability to transmit information but for the *manner* in which it transmits that information.

Ox-wi'il

Waj-ha'

Figure 4.8

Different phonetic representations of the abundance of food: Dresden p. 6 (left), and Paris p. 6 (right).

Offertory scenes are not exclusive to the Maya codices, but due to their multivariate nature in these codices it is difficult to compare them to scenes in the Central Mexican and Mixtec. Rather than take a comparative approach, the discussion of this difrasismo exists to note the interplay between phonetics and iconography in this unique writing system.

Table 4.9 Food & water frequencies in the Maya codices

Relative Percentage	Maya	Dresden	Madrid	Paris
Data Points	228	58	151	19
Text	71.9%	91.4%	72.2%	89.5%
Combination	28.1%	8.6%	27.8%	10.5%
Difrasismo	78.1%	93.1%	76.2%	47.4%
Text	87.6%	90.7%	86.1%	88.9%
Combination	12.4%	9.3%	13.9%	11.1%
Parallelism	21.9%	6.9%	23.8%	52.6%
Text	71.9%	25%	13.8%	50%
Combination	28.1%	75%	86.1%	50%

4.3.6 Green/blue & yellow

The combination of green/blue and yellow, *yax k'an*, has been proposed as indicating the concept of completeness, or *tz'ak*, in the Maya codices (Monod Becquelin and Becquey 2008, 123). The *yax k'an* combination can be read as ripe and unripe as well as green/blue and yellow, and thus is considered by some to refer to maize or abundance in a similar manner as the difrasismo food and drink. However, the interpretation of this difrasismo as completeness has much evidence supporting it, such as the 2003 study by Stuart exploring the variety of ways in which the difrasismo for completeness is conveyed and which states that "no other Mayan word was spelled with such graphic flexibility" (Stuart 2003, 1).

Table 4.10 Difrasismo for tz'ak *(completeness) in Maya (after Stuart 2003, 1). Note the inclusion of the difrasismo food/water and day/night, which have already been discussed.*

Maya	English
yax/k'an	unripe, ripe
k'in/ak'ab	day, night
muyal/ha'(al)	cloud, rain
waj/ha'	food, water
chan/kab'	sky, earth

This difrasismo is far less common than the others mentioned in this thesis, but appears in all three of the Maya codices at least once and is seen both textually and as incorporated into the iconography. The association of this difrasismo with maize *and* with completeness, as well as its presence in an offertory context, suggests a more encompassing meaning for the motif. Keeping in mind the ideological significance of maize, this difrasismo may not be indicating one specific

offering but rather highlighting the importance of the complete offering of one of the most important aspects of Mesoamerican life.

Figure 4.9

Yax-k'an *as part of text block, Paris p. 7 (left) Ixik Kab' holding* yax-k'an *glyphs, Dresden p. 18 (right).*

The study of this difrasismo in the Central Mexican and Mixtec codices is more difficult due to the need to determine if the colors used are invoked for the purpose of difrasismo or for some other reason. In this circumstance, the phonetic specificity of Maya writing simplifies the study of this difrasismo. However, with the proper methodology further comparative research into the use of this difrasismo within the Central Mexican and Mixtec codices would be an interesting experiment into understanding more abstract metaphorical representations in the codices.

4.3 Conclusion

Difrasismo does not exist as an isolated linguistic practice but creates a language in itself which uses metaphor, parallelism, and other linguistic phrasings to indicate an elevated ritual meaning beyond what the words themselves may suggest (Jansen & Pérez Jiménez 2009, 119). Rituals in Mesoamerica were highly performative, and modern studies indicate that repetitive performance in ritual can have intense neurological effects on the brain (Rappaport 1999, 142). The intersection of these rituals with ritualized language is an essential to a holistic understanding of Mesoamerican life.

The difrasismo explored in this chapter are not representative of the entire collection of Mesoamerican difrasismo, but do highlight some interesting points and commonalities between as well as within cultural groups. The presence of the same difrasismo in a variety of forms, such as textually as well as through various iconographic conventions, speaks to the nature of difrasismo as well as the nature of Mesoamerican language itself. The fluidity of difrasismo and its various manifestations support a view of the codices as inherently interpretative and goes

against the practice of direct translation. That linguistic structures, which by nature are clearly defined, can exist in a framework which is anything but clear indicates that designating aspects of these codices as text or image may not be something applicable outside of the Western context in which these distinctions were created.

This is not to say that the translation of phonetic elements is not possible nor necessary in studying the codices, particularly in reference to the Maya. Rather, this interpretation stresses that phonetic translation alone is not an adequate approach to the codices. The evidence presented above clearly indicates that in some circumstances the Maya chose to represent pictorially what they had the ability to represent phonetically. Take, for example, the spear and shield difrasismo for warrior. The Maya people clearly had the words to convey this difrasismo, as it is seen written in the Paris Codex, but overwhelmingly the spear and shield is represented pictorially. This would indicate that it is the pictorial manner of representation, and not simply the inclusion of the elements themselves, that is important in conveying this concept. These scenes from the Maya codices, which would typically be interpreted as iconography, can instead be ascribed as encoding phonetic and linguistic information on the basis of their shared similarities with their contemporary sister cultures.

On a more specific note, the Maya and the Central Mexican codices particularly exhibit a large degree of shared tradition in this analysis of difrasismo, such as in their depictions of the mat and throne or in the cultural overlap seen in the day and night. The Maya represent this difrasismo through the use of both Maya and Central Mexican glyphs, speaking to the Maya awareness of Central Mexican writing systems and methods of representation. This may indicate on a broader level cultural similarities between the Central Mexican and Maya peoples which do not exist between these groups and the Mixtec. This in turn is likely linked to the function of the Central Mexican and Maya codices as divinatory guides, a context in which ritualized linguistic practice may be more necessary in order to convey the sacred nature of these documents. The historical function of the Mixtec codices and their role of transmitting historical information may require the manipulation of differing forms of ritualized language, which is then reflected in their varying participation in the patterns indicated above.

5 CONCLUSIONS

"But to tear down a factory or to revolt against a government or to avoid repair of a motorcycle because it is a system is to attack effects rather than causes; and as long as the attack is upon effects only, no change is possible. The true system, the real system, is our present construction of systematic thought itself, rationality itself, and if a factory is torn down but the rationality which produced it is left standing, then that rationality will simply produce another factory. If a revolution destroys a systematic government, but the systematic patterns of thought that produced that government are left intact, then those patterns will repeat themselves in the succeeding government"

(Pirsig 100, 1974).

5.1 The intersection of ritual

What is writing? How did Mesoamerican people understand it? And are we any closer to understanding these questions? The data presented in this thesis attempted to answer these questions by understanding how different cultural groups presented the same subject manner and the same linguistic practice within the same medium: highly stylized and complex ritual and historical manuscripts. These codices are dated to the PostClassic time period, from the 13th – 15th centuries, and the cultures which produced them exhibited a large degree of cultural similarity. The subject matter analyzed was bloodletting, offering an opportunity to examine how these communities represented the same practice through differing pictorial means. The linguistic practice analyzed was difrasismo, offering an opportunity to approach the codices from a linguistic manner. The inclusion of both a pictorial and linguistic approach was a purposeful choice to assist in avoiding presuppositions about the content of the codices. Pictorial-based approaches have traditionally been applied to the Central Mexican and Mixtec codices due to their more pictorial nature, while linguistic-based approaches have typically been applied to the Maya codices in an analysis of their phonetic content. By applying both

approaches to each codex, an effort was made to view them as equal documents and to understand how they used both pictorial and linguistic practices without assuming the prevalence of one or the other.

Before reviewing the results of the case studies, it is relevant to note the intersection of ritual blood offering and ritual language. As these are both elements of Mesoamerica ritual, it is unsurprising that they would appear in the same context. The combination of the terms penance and darkness has been shown to be a difrasismo for the act of bloodletting in the Classic period, which speaks to the antiquity of both these practices as well as provides a basis for their study together as differing aspects of the analytical unit of ritual (Hoppan and Jacquemot 2012, 5). While primarily recorded in the Classic period, this difrasismo is also seen in the Dresden Codex on page 46 which reads "*pop-ts'am ma-ch'ab-¿is? Ma-aak'ab-¿is? – ch'ok"* and which Hoppan and Jacquemot translate as "del petate-tron, del señor sin penitencia/creación, del nobel sin oscuridad" or (Hoppan and Jacquemot 2012, 9). In this example from the Codex Dresden, bloodletting is represented through a difrasismo which is used to further ritualize the experience of bloodletting. Interestingly enough, this difrasismo co-occurs with the difrasismo for the mat and throne, linking blood sacrifice, ritualized language, and divine authority all within the same sentence. Perhaps this example best epitomizes the nature of writing in Mesoamerica, as inherently tied to power and ritual through multifaceted layers of meaning. It certainly best epitomizes difrasismo itself, showing the complex web of associations which are manipulated in order to elevate language beyond the words themselves and into the realm of the mysterious and divine.

5.2 A review of the data

The first case study of this thesis aimed to understand how the codices depicted the same subject matter: bloodletting. While this case study did incorporate both textual and pictorial writing, the majority of the data points were of a pictorial nature. In this sense, the case study can be seen primarily as an understanding of how the codices pictorially represent the same subject matter, which proves to be highly variated. The results show a large degree of cultural specificity with specific trends largely being limited to their own cultural group, one example being the positive correlation between autosacrificial deities and genital bloodletting in the Maya

codices which is not present in any other group. Rather than discuss the specific trends of each codex group, it is more interesting to examine which of the correlations are actually shared. While very specific correlations are not typically shared, such as those pertaining to specific areas of the head, when the variables are made broader a higher degree of similarity can be observed across the codices, such as those pertaining to bloodletting of the head in general. One example of this is the positive correlation between autosacrifice in general and bloodletting from the head exhibited in all data sets. Once these parameters are expanded, it is clear that the Central Mexican and Maya codices share the most correlations, with the Central Mexican and Mixtec codices often exhibiting completely opposite correlations.

The second case study of this thesis aimed to understand how the codices depicted the same linguistic practice: difrasismo. Within the codices, difrasismo was found both pictorially and textually, as well as through a combination of the two. The analysis gave no privilege to what is considered pictorial or phonetic representations but saw both as equally valid manners of representing linguistic information, hoping to move past the assumption that pictorial writing does not include linguistic information. There are many examples of the same difrasismo being shared between cultures, such as the spear and shield or mat and throne, with each culture manipulating the difrasismo in various manners. Some difrasismo are restricted in their scope, such the prevalence of tortilla and water in the Maya codices. Others are firmly rooted in cultural overlap, such as the day and night. The representation of the day and night shows incredible variability in how it can be represented, with the Maya codices choosing to include Central Mexican characters in some pictorial representations but using their own Maya characters in textual representation. This can be contrasted with the fact that the Mixtec codices represent this difrasismo in a nearly identical manner to that of the Central Mexican codices, which places the Central Mexican method of representation at the center of this difrasismo. While the day and night is an example of a difrasismo with cultural variability which draws on other cultures, other difrasismo are opposite in their uniformity, such as the prevalence to represent the spear and shield pictorially, carried, and in a position of inactivity within all codex groups. The results indicate clearly that difrasismo involves a complex interplay of elements which cannot be generalized but require independent analysis in order to interpret correctly.

Moving beyond patterning on a small scale to view the larger picture, a strong trend emerges: that the Maya and Central Mexican codices often have much in common, while the

Mixtec do not. The Central Mexican codices are similar to the Mixtec when it comes to iconographic conventions, but differ in the statistical correlation of their variables as well as in their representation of linguistic information. Trends have been recorded which are shared between all three cultures, but overwhelmingly the use and manipulation of the same motifs and practices are seen in the Maya and Central Mexican codices. The relationship between the Maya and Central Mexican codices has been noted as early as the late 1800s, and over a century of research has demonstrated similarities related to the use of almanacs, calendrical tables, and religious iconography. These interactions are so great that some have proposed "that scribes from the Maya region and highland Central Mexico may have been in close contact with each other over an extended period of time, exchanging information about calendars and codex construction, and may even have had access to each other's manuscripts" (Hernández and Vail 2006, 334). Further evidence of the connection between Central Mexico and the Maya in the codices comes from the use of loan words from Nahuatl in the Codex Dresden, such as the Nahuatl *(y)ool* to represent heart, as well as in Classic period texts (Macri 2003, 287). I propose that the similarities seen between the Central Mexican and the Maya codices, and the exclusion of the Mixtec, is due to the differing nature of the codices in these societies. The first distinction that must be made is that the Central Mexican and Maya codices were primarily religious documents while the Mixtec codices are of a more mytho-historic nature. All of the codices involve ritual behavior and practice, but the intent behind their creation may be the cause of the differences in how they use writing. The patterning shared between the religious documents may be due to the increased need for ritualized practice and language within these documents. Documents of a less religious and more historical context may have less of a need for this elevated ritual speech and behavior.

Additionally, the Maya and Central Mexican peoples have a long history of interaction which does not involve the Mixtec. The arrival of Teotihuacanos from Central Mexico to large Maya sites such as Tikal and Copan in the Early Classic period is supported by a myriad of archaeological data, including the representation of Maya kings through stylistically Central Mexican motifs and the presence of Mexican architectural styles (Fash and Fash 2000, 435; 439). This adoption of Central Mexican conventions occurred roughly one thousand years before the creation of the PostClassic codices and sets a precedence for shared iconographic conventions between the Central Mexican and Maya peoples. The Mixtec are notably absent

from these interactions. As Central Mexican influence grew in the Maya area, the Maya positioned themselves in the same political tradition by adopting the Central Mexican legacy of Tollan as their place of origin in order to legitimize their political power (Fash and Fash 2000, 435). The Mixteca people, despite their geographic proximity to the Nahua, do not share this origin story, instead believing that the heart of their political power derived from ancestors from Apoala (Jansen & Pérez Jiménez 2010, 64). These differing mytho-political origin stories may be one explanation as to why the Central Mexican and Maya people shared many correlations and representational practices while the Mixtec did not. It is to be remembered that the codices were documents of a ritual nature, even those of which were not ritual in content, and thus the religious history of various Mesoamerican peoples may have had substantial effect on the representational practices within these documents. Additionally, as religious behavior is linked to political practice in Mesoamerica, the presence of a shared political origin myth between cultures provides a substantial basis for their interpretation in this manner.

5.3 A choice between traditions

There are two traditions at play in the study of indigenous American writing systems. One of these traditions is based in rigid academic definitions and an adherence to strictly defined categories of representation, privileging the alphabetic manner of representation as the highest form for no other reason than because it is the most prevalent in academia. The other tradition is based in an understanding of indigenous American worldview and culture, and sees the products of these communities as culturally specific and requiring an analysis which takes the needs of a community and peoples into account. These traditions can no longer coexist peacefully, and one must take precedent over the other. The idea of a choice between traditions may appear dramatic and unnecessary, but this dramatization is only the explicit statement of an unspoken debate which has raged in academia for many years.

In a sense, the analysis of bloodletting in Chapter 3 can be seen as representative of the traditional approach to the codices as primarily visual objects, while the analysis of difrasismo in Chapter 4 can be seen as representative of the emerging trend to view the codices as encoding linguistic information. When only the physical form of the codices are taken into account, they appear to use writing in a drastically different ways with little to no overlap in some cases.

However, when analyzed based on the linguistic information they contain, a strong trend emerges which indicates that the codices are indeed inhabitants of a shared tradition and manipulate linguistic practices in very similar ways. My own personal frustrations with the analysis of Chapter 3 and struggles to interpret the statistical results in a meaningful way speaks to the limitations of approaching the codices in a primarily visual manner. The form that writing takes is important undoubtedly; the visual impressions left by these texts are often what draws in researchers such as myself. But ultimately, these forms must be seen in conjunction with the language which exists behind them in order to arrive at a more holistic and meaningful understanding of their contents.

The pictorial and the phonetic cannot be considered meaningful categories when applied to Mesoamerican writing systems. There must be no confusion about this: these categories are necessary in order to allow the European mind to analyze these codices in the way we have been socialized to understand writing *but* they add nothing to the actual discussion and understanding of writing in Mesoamerica. The use of phonetic elements to emulate pictorial conventions and the use of pictorial conventions to convey phonetic information indicates a fluidity within the categories of pictorial and phonetic. The distinction between text and image, so often assumed, may not have existed in the same manner in Mesoamerica and to continue to allow this assumption to guide research perpetuates the ongoing suppression of the indigenous American voice. Again, this is not to say that the phonetic and the pictorial do not exist, but rather to remind that the understanding of the phonetic and pictorial within Mesoamerican may not have existed in the same manner as it exists in the Western world. The argument about what is and is not writing has proved to be a futile and fruitless one. There is nothing to be gained in continuing this debate. Rather than reiterating the same talking points, academia must ask itself why it is so important that writing have a uniform definition. What is gained by restricting the name of writing to phonetic representations? The limitation of the category of writing to only what is natural to the Western academic community is not only rooted in cultural supremacy but allows this supremacy to continue to govern academia in the name of objectivity.

Studies of writing in Mesoamerica must begin from a mindset which acknowledges the indigenous tradition of knowledge as a unique and complex experience which requires an approach which goes beyond the art historical or epigraphic. This may seem to be a meaningless academic statement, but it must be remembered that the interpretation of archaeological

materials has the power to impact attitudes towards living indigenous peoples. The theoretical stance taken towards material culture and archaeological remains signifies a broader stance taken towards indigenous peoples in general, and the continual discretization of indigenous knowledge serves to reinforce the idea of indigenous peoples across the world as lesser. As written in the famous philosophy book *Zen and the Art of Motorcycle Maintenance*, "the place to improve the world is first in one's own heart and head and hands, and then work outward from there" (Pirsig 1974, 305). Making the active choice to understand Mesoamerican writing on its own terms, in its own context, and as a product of the culture which created it is a small step, but one which academics have the power to embrace over adhering to the philological privileging of phonetic representation.

The way in which knowledge is constructed matters. The way in which knowledge is spoken about matters. Writing, regardless of how it is defined, still remains first and foremost a tool with which to communicate knowledge, and thus must be accorded the respect it deserves – in all of the forms it may take.

ABSTRACT

Despite the fact that the PostClassic Mesoamerican codices display a striking amount of similarity, academic studies of the discipline typically separate the Central Mexican and Mixtec manuscripts from those of the Maya, with the Maya receiving an epigraphic approach and the Mexican and Mixtec receiving an art historical approach. Many of these studies implicitly privilege phonetic writing systems, taking an evolutionary view of writing which devalues the pictographic. This privileging of the phonetic speaks to the more extensive devaluation of indigenous beliefs and practices on a wider scale. This thesis seeks to bridge the gap between the art historical and epigraphic by understanding the codices as products of the communities in which they were created, and thus fulfilling culturally-specific needs. *Ritualized Discourse in the Mesoamerican Codices: An Inquiry into Epigraphic Practice* accomplishes this through two case studies, one of which is based on the representation of the same subject matter, bloodletting, and one of which is based on the representation of the same linguistic practice, difrasismo. The results of the analysis indicate that while on a visual level the codices appear very different, on a phonological level there are many similarities in how they represent linguistic and phonetic elements. The Central Mexican and Maya codices in particular display a high degree of overlap, speaking to their shared scribal traditions. Approaching the codices as inventions designed to fulfill a purpose, interpretations of iconographic and phonetic elements are reached which speak to a pan-Mesoamerican experience of writing and highlight the benefits of alternative traditions of knowledge.

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FIGURES

TABLES

APPENDICES

APPENDIX 1: BLOODLETTING DATA SET

The following pages contain the scenes of bloodletting identified in the codices. Bloodletting scenes are defined as scenes in which a human or deity emits or ingests human or deity blood. It does not contain scenes of animal sacrifice or scenes in which an actor has a depiction of blood as part of his name, but rather indicates the purposeful choice of an artist or scribe to depict the act of spilling human blood. The following table is an abbreviated version of the bloodletting data set, the full version of which can be found on the accompanying disc.

Culture	Codex	Page	Scene Type
Mixtec	Bodley	7	Bloodletting in practice
Mixtec	Bodley	7	Bloodletting implement not in use
Mixtec	Bodley	14	Bloodletting in practice
Mixtec	Bodley	22	Bloodletting in practice
Mixtec	Bodley	35	Bloodletting in practice
Central Mexican	Borgia	1	Bloodletting implement not in use
Central Mexican	Borgia	5	Bloodletting implement not in use
Central Mexican	Borgia	7	Bloodletting implement not in use
Central Mexican	Borgia	10	Bloodletting in practice
Central Mexican	Borgia	15	Bloodletting in practice
Central Mexican	Borgia	15	Bloodletting in practice
Central Mexican	Borgia	15	Bloodletting in practice
Central Mexican	Borgia	16	Bloodletting in practice
Central Mexican	Borgia	16	Bloodletting in practice
Central Mexican	Borgia	16	Bloodletting in practice
Central Mexican	Borgia	18	Bloodletting in practice
Central Mexican	Borgia	18	Bloodletting implement not in use
Central Mexican	Borgia	18	Bloodletting implement not in use
Central Mexican	Borgia	19	Bloodletting in practice
Central Mexican	Borgia	19	Bloodletting in practice
Central Mexican	Borgia	19	Bloodletting implement not in use
Central Mexican	Borgia	21	Bloodletting in practice
Central Mexican	Borgia	22	Bloodletting implement not in use
Central Mexican	Borgia	22	Bloodletting implement not in use
Central Mexican	Borgia	22	Bloodletting implement not in use
Central Mexican	Borgia	23	Bloodletting in practice
Central Mexican	Borgia	23	Bloodletting in practice

Central Mexican	Borgia	26	Bloodletting in practice
Central Mexican	Borgia	26	Bloodletting in practice
Central Mexican	Borgia	26	Bloodletting in practice
Central Mexican	Borgia	26	Bloodletting in practice
Central Mexican	Borgia	30	Bloodletting implement not in use
Central Mexican	Borgia	30	Bloodletting implement not in use
Central Mexican	Borgia	30	Bloodletting implement not in use
Central Mexican	Borgia	30	Bloodletting implement not in use
Central Mexican	Borgia	33	Bloodletting in practice
Central Mexican	Borgia	34	Bloodletting in practice
Central Mexican	Borgia	34	Bloodletting in practice
Central Mexican	Borgia	35	Bloodletting in practice
Central Mexican	Borgia	37	Bloodletting implement not in use
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	40	Bloodletting in practice
Central Mexican	Borgia	41	Bloodletting in practice
Central Mexican	Borgia	41	Bloodletting in practice
Central Mexican	Borgia	47	Bloodletting implement not in use
Central Mexican	Borgia	47	Bloodletting implement not in use
Central Mexican	Borgia	47	Bloodletting implement not in use
Central Mexican	Borgia	47	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	48	Bloodletting implement not in use
Central Mexican	Borgia	52	Bloodletting in practice
Central Mexican	Borgia	53	Bloodletting in practice
Central Mexican	Borgia	53	Bloodletting in practice
Central Mexican	Borgia	53	Bloodletting in practice
Central Mexican	Borgia	54	Bloodletting in practice
Central Mexican	Borgia	54	Bloodletting in practice
Central Mexican	Borgia	54	Bloodletting in practice
Central Mexican	Borgia	54	Bloodletting in practice
Central Mexican	Borgia	59	Bloodletting implement not in use

Mixtec	Colombino-Becker	10	Bloodletting in practice
Mixtec	Colombino-Becker	16	Bloodletting in practice
Central Mexican	Cospi	1	Bloodletting in practice
Central Mexican	Cospi	9	Bloodletting in practice
Central Mexican	Cospi	9	Bloodletting in practice
Central Mexican	Cospi	24	Bloodletting in practice
Maya	Dresden	3	Bloodletting in practice
Maya	Dresden	32	Bloodletting in practice
Maya	Dresden	32	Bloodletting implement not in use
Maya	Dresden	58	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	1	Bloodletting in practice
Central Mexican	Fejervary-Mayer	1	Bloodletting in practice
Central Mexican	Fejervary-Mayer	1	Bloodletting in practice
Central Mexican	Fejervary-Mayer	1	Bloodletting in practice
Central Mexican	Fejervary-Mayer	2	Bloodletting in practice
Central Mexican	Fejervary-Mayer	3	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	3	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	5	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	6	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	9	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	11	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	14	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	23	Bloodletting in practice
Central Mexican	Fejervary-Mayer	23	Bloodletting in practice
Central Mexican	Fejervary-Mayer	23	Bloodletting in practice
Central Mexican	Fejervary-Mayer	24	Bloodletting in practice
Central Mexican	Fejervary-Mayer	24	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	24	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	30	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	32	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	33	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	36	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	38	Bloodletting in practice
Central Mexican	Fejervary-Mayer	38	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	39	Bloodletting in practice
Central Mexican	Fejervary-Mayer	40	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	40	Bloodletting implement not in use
Central Mexican	Fejervary-Mayer	41	Bloodletting in practice
Central Mexican	Fejervary-Mayer	42	Bloodletting in practice
Central Mexican	Fejervary-Mayer	44	Bloodletting in practice
Central Mexican	Laud	11(14)	Bloodletting implement not in use
Central Mexican	Laud	13(12)	Bloodletting implement not in use
Central Mexican	Laud	15(10)	Bloodletting implement not in use

Central Mexican	Laud	16(9)	Bloodletting implement not in use
Central Mexican	Laud	17(8)	Bloodletting in practice
Central Mexican	Laud	17(8)	Bloodletting implement not in use
Central Mexican	Laud	18(7)	Bloodletting implement not in use
Central Mexican	Laud	19(6)	Bloodletting implement not in use
Central Mexican	Laud	20(5)	Bloodletting in practice
Central Mexican	Laud	22(3)	Bloodletting in practice
Central Mexican	Laud	24(1)	Bloodletting in practice
Central Mexican	Laud	24(1)	Bloodletting implement not in use
Central Mexican	Laud	24(1)	Bloodletting implement not in use
Central Mexican	Laud	25(45)	Bloodletting implement not in use
Central Mexican	Laud	25(46)	Bloodletting implement not in use
Central Mexican	Laud	34(37)	Bloodletting implement not in use
Central Mexican	Laud	39(32)	Bloodletting implement not in use
Central Mexican	Laud	41(30)	Bloodletting implement not in use
Central Mexican	Laud	43(28)	Bloodletting implement not in use
Central Mexican	Laud	44(27)	Bloodletting implement not in use
Central Mexican	Laud	45(26)	Bloodletting in practice
Central Mexican	Laud	9(16)	Bloodletting implement not in use
Maya	Madrid	8	Bloodletting in practice
Maya	Madrid	19	Bloodletting in practice
Maya	Madrid	23	Bloodletting in practice
Maya	Madrid	27	Bloodletting implement not in use
Maya	Madrid	34	Bloodletting in practice
Maya	Madrid	40	Bloodletting implement not in use
Maya	Madrid	50	Bloodletting in practice
Maya	Madrid	63	Bloodletting in practice
Maya	Madrid	75	Bloodletting in practice
Maya	Madrid	75	Bloodletting implement not in use
Maya	Madrid	81	Textual bloodletting
Maya	Madrid	81	Bloodletting implement not in use
Maya	Madrid	82	Bloodletting in practice
Maya	Madrid	82	Bloodletting in practice
Maya	Madrid	82	Bloodletting in practice
Maya	Madrid	82	Bloodletting in practice
Maya	Madrid	85	Textual bloodletting
Maya	Madrid	85	Bloodletting implement not in use
Maya	Madrid	85	Bloodletting implement not in use
Maya	Madrid	87	Bloodletting in practice
Maya	Madrid	91	Textual bloodletting
Maya	Madrid	91	Textual bloodletting
Maya	Madrid	91	Textual bloodletting
Maya	Madrid	91	Bloodletting implement not in use

Maya	Madrid	91	Bloodletting implement not in use
Maya	Madrid	91	Bloodletting implement not in use
Maya	Madrid	91	Bloodletting implement not in use
Maya	Madrid	92	Textual bloodletting
Maya	Madrid	92	Textual bloodletting
Maya	Madrid	92	Textual bloodletting
Maya	Madrid	92	Bloodletting implement not in use
Maya	Madrid	92	Bloodletting implement not in use
Maya	Madrid	92	Bloodletting implement not in use
Maya	Madrid	92	Bloodletting implement not in use
Maya	Madrid	95	Bloodletting in practice
Maya	Madrid	95	Bloodletting in practice
Maya	Madrid	95	Bloodletting in practice
Maya	Madrid	95	Bloodletting in practice
Maya	Madrid	96	Textual bloodletting
Maya	Madrid	96	Bloodletting in practice
Mixtec	Nuttall	3	Bloodletting in practice
Mixtec	Nuttall	3	Bloodletting in practice
Mixtec	Nuttall	16	Bloodletting implement not in use
Mixtec	Nuttall	17	Bloodletting implement not in use
Mixtec	Nuttall	18	Bloodletting implement not in use
Mixtec	Nuttall	18	Bloodletting implement not in use
Mixtec	Nuttall	19	Bloodletting implement not in use
Mixtec	Nuttall	20	Bloodletting implement not in use
Mixtec	Nuttall	20	Bloodletting implement not in use
Mixtec	Nuttall	22	Bloodletting implement not in use
Mixtec	Nuttall	25	Bloodletting in practice
Mixtec	Nuttall	29	Bloodletting implement not in use
Mixtec	Nuttall	35	Bloodletting implement not in use
Mixtec	Nuttall	36	Bloodletting implement not in use
Maya	Paris	4	Bloodletting implement not in use
Maya	Paris	11	Bloodletting in practice
Mixtec	Selden	9	Bloodletting in practice
Mixtec	Selden	9	Bloodletting in practice
Mixtec	Selden	13	Bloodletting in practice
Mixtec	Selden	13	Bloodletting in practice
Central Mexican	Vaticanus B	5-6	Bloodletting in practice
Central Mexican	Vaticanus B	5-6	Bloodletting implement not in use
Central Mexican	Vaticanus B	5-6	Bloodletting implement not in use
Central Mexican	Vaticanus B	7-8	Bloodletting implement not in use
Central Mexican	Vaticanus B	7-8	Bloodletting implement not in use
Central Mexican	Vaticanus B	7-8	Bloodletting implement not in use
Central Mexican	Vaticanus B	7-8	Bloodletting implement not in use

Central Mexican	Vaticanus B	13-14	Bloodletting implement not in use
Central Mexican	Vaticanus B	25-26	Bloodletting implement not in use
Central Mexican	Vaticanus B	33-34	Bloodletting in practice
Central Mexican	Vaticanus B	33-34	Bloodletting in practice
Central Mexican	Vaticanus B	33-34	Bloodletting in practice
Central Mexican	Vaticanus B	33-34	Bloodletting in practice
Central Mexican	Vaticanus B	35-36	Bloodletting in practice
Central Mexican	Vaticanus B	35-36	Bloodletting implement not in use
Central Mexican	Vaticanus B	37-38	Bloodletting in practice
Central Mexican	Vaticanus B	63-64	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	77-78	Bloodletting implement not in use
Central Mexican	Vaticanus B	79-80	Bloodletting implement not in use
Central Mexican	Vaticanus B	79-80	Bloodletting implement not in use
Central Mexican	Vaticanus B	79-80	Bloodletting implement not in use
Mixtec	Vindobonensis	13	Bloodletting in practice
Mixtec	Vindobonensis	17	Bloodletting in practice
Mixtec	Vindobonensis	20	Bloodletting in practice
Mixtec	Vindobonensis	22	Bloodletting in practice
Mixtec	Vindobonensis	30	Bloodletting in practice
Mixtec	Vindobonensis	30	Bloodletting in practice
Mixtec	Vindobonensis	AX	Bloodletting in practice

APPENDIX 2: DIFRASISMO DATA SET

The following pages contain the difrasismo and parallelisms identified in the codices during the course of this thesis. For a further discussion of these and other difrasismo, see Chapter 4: Difrasismo and Appendix 3: Guide to Identifying Difrasismo. In a similar manner as Appendix 1, the following table is an abbreviated version of the full database which can be found on the accompanying disc.

Culture	Codex	Page	Difrasismo
Mixtec	Bodley	4	Flint, shield = war
Mixtec	Bodley	9	Flint, shield = war
Mixtec	Bodley	9	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	10	Flint, shield = war
Mixtec	Bodley	11	Mat, throne = rulership
Mixtec	Bodley	11	Mat, throne = rulership
Mixtec	Bodley	13	Mat, throne = rulership
Mixtec	Bodley	13	Mat, throne = rulership
Mixtec	Bodley	13	Mat, throne = rulership
Mixtec	Bodley	13	Mat, throne = rulership
Mixtec	Bodley	14	Mat, throne = rulership
Mixtec	Bodley	14	Mat, throne = rulership
Mixtec	Bodley	14	Mat, throne = rulership
Mixtec	Bodley	15	Mat, throne = rulership
Mixtec	Bodley	16	Mat, throne = rulership
Mixtec	Bodley	16	Mat, throne = rulership
Mixtec	Bodley	16	Mat, throne = rulership
Mixtec	Bodley	18	Mat, throne = rulership
Mixtec	Bodley	18	Mat, throne = rulership
Mixtec	Bodley	19	Mat, throne = rulership
Mixtec	Bodley	20	Mat, throne = rulership

Mixtec	Bodley	20	Mat, throne = rulership
Mixtec	Bodley	20	Mat, throne = rulership
Mixtec	Bodley	22	Flint, shield = war
Mixtec	Bodley	22	Mat, throne = rulership
Mixtec	Bodley	23	Mat, throne = rulership
Mixtec	Bodley	24	Mat, throne = rulership
Mixtec	Bodley	25	Flint, shield = war
Mixtec	Bodley	25	Flint, shield = war
Mixtec	Bodley	25	Flint, shield = war
Mixtec	Bodley	26	Mat, throne = rulership
Mixtec	Bodley	27	Mat, throne = rulership
Mixtec	Bodley	27	Mat, throne = rulership
Mixtec	Bodley	28	Mat, throne = rulership
Mixtec	Bodley	29	Mat, throne = rulership
Mixtec	Bodley	32	Flint, shield = war
Mixtec	Bodley	33	Flint, shield = war
Mixtec	Bodley	34	Flint, shield = war
Mixtec	Bodley	34	Flint, shield = war
Mixtec	Bodley	34	Flint, shield = war
Mixtec	Bodley	34	Mat, throne = rulership
Mixtec	Bodley	34	Mat, throne = rulership
Mixtec	Bodley	34	Water, hill = town
Mixtec	Bodley	35	Flint, shield = war
Central Mexican	Borgia	7	Assorted body parts = body
Central Mexican	Borgia	8	Mat, throne = rulership
Central Mexican	Borgia	9	Mat, throne = rulership
Central Mexican	Borgia	11	Flint, shield = war
Central Mexican	Borgia	11	Mat, throne = rulership
Central Mexican	Borgia	11	Mat, throne = rulership
Central Mexican	Borgia	11	Mat, throne = rulership
Central Mexican	Borgia	11	Mat, throne = rulership
Central Mexican	Borgia	12	Mat, throne = rulership
Central Mexican	Borgia	12	Mat, throne = rulership
Central Mexican	Borgia	12	Mat, throne = rulership
Central Mexican	Borgia	12	Mat, throne = rulership
Central Mexican	Borgia	13	Flint, shield = war
Central Mexican	Borgia	13	Mat, throne = rulership
Central Mexican	Borgia	13	Mat, throne = rulership
Central Mexican	Borgia	13	Mat, throne = rulership
Central Mexican	Borgia	15	Flint, shield = war
Central Mexican	Borgia	16	Mat, throne = rulership

Central Mexican	Borgia	16	Mat, throne = rulership
Central Mexican	Borgia	17	Flint, shield = war
Central Mexican	Borgia	17	Mat, throne = rulership
Central Mexican	Borgia	17	Mat, throne = rulership
Central Mexican	Borgia	21	Flint, shield = war
Central Mexican	Borgia	21	Flint, shield = war
Central Mexican	Borgia	25	Flint, shield = war
Central Mexican	Borgia	25	Flint, shield = war
Central Mexican	Borgia	25	Flint, shield = war
Central Mexican	Borgia	25	Flint, shield = war
Central Mexican	Borgia	27	Day, night = to comply
Central Mexican	Borgia	29	Night, wind =
Central Mexican	Borgia	30	Night, wind =
Central Mexican	Borgia	35	Flint, shield = war
Central Mexican	Borgia	35	Flint, shield = war
Central Mexican	Borgia	35	Flint, shield = war
Central Mexican	Borgia	35	Flint, shield = war
Central Mexican	Borgia	41	Flint, shield = war
Central Mexican	Borgia	42	Flint, shield = war
Central Mexican	Borgia	43	Flint, shield = war
Central Mexican	Borgia	43	Flint, shield = war
Central Mexican	Borgia	43	Mat, throne = rulership
Central Mexican	Borgia	45	Flint, shield = war
Central Mexican	Borgia	45	Flint, shield = war
Central Mexican	Borgia	45	Flint, shield = war
Central Mexican	Borgia	47	Flint, shield = war
Central Mexican	Borgia	47	Flint, shield = war
Central Mexican	Borgia	48	Flint, shield = war
Central Mexican	Borgia	49	Flint, shield = war
Central Mexican	Borgia	49	Flint, shield = war
Central Mexican	Borgia	49	Flint, shield = war
Central Mexican	Borgia	53	Flint, shield = war
Central Mexican	Borgia	54	Flint, shield = war
Central Mexican	Borgia	54	Flint, shield = war
Central Mexican	Borgia	54	Flint, shield = war
Central Mexican	Borgia	54	Flint, shield = war
Central Mexican	Borgia	54	Flint, shield = war
Central Mexican	Borgia	54	Mat, throne = rulership
Central Mexican	Borgia	55	Flint, shield = war
Central Mexican	Borgia	55	Flint, shield = war
Central Mexican	Borgia	57	Flint, shield = war

Central Mexican	Borgia	58	Day, night = to comply
Central Mexican	Borgia	58	Day, night = to comply
Central Mexican	Borgia	58	Day, night = to comply
Central Mexican	Borgia	58	Day, night = to comply
Central Mexican	Borgia	59	Day, night = to comply
Central Mexican	Borgia	59	Flint, shield = war
Central Mexican	Borgia	60	Day, night = to comply
Central Mexican	Borgia	60	Day, night = to comply
Central Mexican	Borgia	60	Flint, shield = war
Central Mexican	Borgia	61	Mat, throne = rulership
Central Mexican	Borgia	62	Day, night = to comply
Central Mexican	Borgia	62	Mat, throne = rulership
Central Mexican	Borgia	63	Flint, shield = war
Central Mexican	Borgia	63	Flint, shield = war
Central Mexican	Borgia	63	Mat, throne = rulership
Central Mexican	Borgia	64	Flint, shield = war
Central Mexican	Borgia	64	Mat, throne = rulership
Central Mexican	Borgia	64	Mat, throne = rulership
Central Mexican	Borgia	65	Mat, throne = rulership
Central Mexican	Borgia	65	Mat, throne = rulership
Central Mexican	Borgia	66	Mat, throne = rulership
Central Mexican	Borgia	66	Mat, throne = rulership
Central Mexican	Borgia	67	Mat, throne = rulership
Central Mexican	Borgia	68	Day, night = to comply
Central Mexican	Borgia	68	Mat, throne = rulership
Central Mexican	Borgia	69	Flint, shield = war
Central Mexican	Borgia	69	Mat, throne = rulership
Central Mexican	Borgia	69	Mat, throne = rulership
Central Mexican	Borgia	70	Mat, throne = rulership
Central Mexican	Borgia	75	Flint, shield = war
Central Mexican	Borgia	75	Flint, shield = war
Central Mexican	Borgia	76	Flint, shield = war
Central Mexican	Borgia	76	Flint, shield = war
Mixtec	Colombino-Becker	3	Flint, shield = war
Mixtec	Colombino-Becker	4	Flint, shield = war
Mixtec	Colombino-Becker	6	Flint, shield = war
Mixtec	Colombino-Becker	6	Flint, shield = war
Mixtec	Colombino-Becker	10	Flint, shield = war
Mixtec	Colombino-Becker	10	Rope, knife = lover
Mixtec	Colombino-Becker	13	Flint, shield = war
Mixtec	Colombino-Becker	14	Flint, shield = war

Mixtec	Colombino-Becker	14	Flint, shield = war
Mixtec	Colombino-Becker	14	Flint, shield = war
Mixtec	Colombino-Becker	14	Flint, shield = war
Mixtec	Colombino-Becker	15	Flint, shield = war
Mixtec	Colombino-Becker	15	Flint, shield = war
Mixtec	Colombino-Becker	17	Flint, shield = war
Mixtec	Colombino-Becker	19	Flint, shield = war
Mixtec	Colombino-Becker	19	Flint, shield = war
Mixtec	Colombino-Becker	19	Flint, shield = war
Mixtec	Colombino-Becker	23	Flint, shield = war
Mixtec	Colombino-Becker	24	Flint, shield = war
Mixtec	Colombino-Becker	24	Flint, shield = war
Mixtec	Colombino-Becker	24	Flint, shield = war
Mixtec	Colombino-Becker	24	Flint, shield = war
Mixtec	Colombino-Becker	24	Flint, shield = war
Central Mexican	Cospi	9	Flint, shield = war
Central Mexican	Cospi	9	Flint, shield = war
Central Mexican	Cospi	10	Flint, shield = war
Central Mexican	Cospi	10	Flint, shield = war
Central Mexican	Cospi	10	Water, hill = town
Central Mexican	Cospi	11	Flint, shield = war
Central Mexican	Cospi	14	Flint, shield = war
Central Mexican	Cospi	15	Flint, shield = war
Central Mexican	Cospi	16	Flint, shield = war
Central Mexican	Cospi	17	Flint, shield = war
Central Mexican	Cospi	18	Flint, shield = war
Central Mexican	Cospi	19	Flint, shield = war
Central Mexican	Cospi	20	Flint, shield = war
Central Mexican	Cospi	21	Flint, shield = war
Central Mexican	Cospi	22	Flint, shield = war
Central Mexican	Cospi	23	Flint, shield = war
Central Mexican	Cospi	24	Flint, shield = war
Maya	Dresden	2	Food, drink = feast
Maya	Dresden	3	Food, drink = feast
Maya	Dresden	5	Food, drink = feast
Maya	Dresden	5	Food, drink = feast
Maya	Dresden	6	Food, drink = feast
Maya	Dresden	6	Food, drink = feast
Maya	Dresden	6	Food, drink = feast
Maya	Dresden	7	Food, drink = feast

Maya	Dresden	8	Food, drink = feast
Maya	Dresden	9	Food, drink = feast
Maya	Dresden	9	Food, drink = feast
Maya	Dresden	9	Food, drink = feast
Maya	Dresden	9	Food, drink = feast
Maya	Dresden	10	Green, yellow = to comply
Maya	Dresden	11	Food, drink = feast
Maya	Dresden	11	Food, drink = feast
Maya	Dresden	12	Food, drink = feast
Maya	Dresden	12	Food, drink = feast
Maya	Dresden	14	Food, drink = feast
Maya	Dresden	16	Food, drink = feast
Maya	Dresden	16	Food, drink = feast
Maya	Dresden	17	Food, drink = feast
Maya	Dresden	18	Green, yellow = to comply
Maya	Dresden	18	Green, yellow = to comply
Maya	Dresden	19	Food, drink = feast
Maya	Dresden	19	Green, yellow = to comply
Maya	Dresden	20	Food, drink = feast
Maya	Dresden	21	Food, drink = feast
Maya	Dresden	22	Food, drink = feast
Maya	Dresden	23	Food, drink = feast
Maya	Dresden	23	Food, drink = feast
Maya	Dresden	23	Food, drink = feast
Maya	Dresden	25	Food, drink = feast
Maya	Dresden	26	Assorted body parts = body
Maya	Dresden	26	Food, drink = feast
Maya	Dresden	27	Food, drink = feast
Maya	Dresden	27	Green, yellow = to comply
Maya	Dresden	27	Assorted body parts = body
Maya	Dresden	27	Food, food = feast
Maya	Dresden	28	Food, food = feast
Maya	Dresden	28	Food, drink = feast
Maya	Dresden	29	Green, yellow = to comply
Maya	Dresden	30	Green, yellow = to comply
Maya	Dresden	33	Day, night = to comply
Maya	Dresden	34	Food, drink = feast
Maya	Dresden	35	Food, food = feast
Maya	Dresden	35	Day, night = to comply
Maya	Dresden	36	Food, drink = feast
Maya	Dresden	36	Day, night = to comply

Maya	Dresden	36	Day, night = to comply
Maya	Dresden	37	Day, night = to comply
Maya	Dresden	37	Food, drink = feast
Maya	Dresden	38	Food, drink = feast
Maya	Dresden	38	Mat, throne = rulership
Maya	Dresden	38	Food, drink = feast
Maya	Dresden	39	Day, night = to comply
Maya	Dresden	39	Food, drink = feast
Maya	Dresden	39	Day, night = to comply
Maya	Dresden	39	Food, drink = feast
Maya	Dresden	39	Food, drink = feast
Maya	Dresden	40	Food, drink = feast
Maya	Dresden	40	Day, night = to comply
Maya	Dresden	41	Food, drink = feast
Maya	Dresden	41	Day, night = to comply
Maya	Dresden	42	Food, drink = feast
Maya	Dresden	42	Food, drink = feast
Maya	Dresden	42	Food, drink = feast
Maya	Dresden	43	Food, drink = feast
Maya	Dresden	44	Food, drink = feast
Maya	Dresden	44	Food, drink = feast
Maya	Dresden	44	Day, night = to comply
Maya	Dresden	44	Food, food = feast
Maya	Dresden	45	Day, night = to comply
Maya	Dresden	45	Food, drink = feast
Maya	Dresden	46	Flint, shield = war
Maya	Dresden	46	Green, yellow = to comply
Maya	Dresden	46	Mat, throne = rulership
Maya	Dresden	49	Flint, shield = war
Maya	Dresden	50	Food, drink = feast
Maya	Dresden	50	Flint, shield = war
Maya	Dresden	53	Assorted body parts = body
Maya	Dresden	53	Day, night = to comply
Maya	Dresden	54	Day, night = to comply
Maya	Dresden	55	Water, cave
Maya	Dresden	56	Water, cave
Maya	Dresden	57	Day, night = to comply
Maya	Dresden	57	Day, night = to comply
Maya	Dresden	60	Flint, shield = war
Maya	Dresden	60	Flint, shield = war
Maya	Dresden	60	Flint, shield = war

Maya	Dresden	65	Food, drink = feast
Maya	Dresden	66	Flint, shield = war
Maya	Dresden	66	Water, cave
Maya	Dresden	66	Day, night = to comply
Maya	Dresden	66	Day, night = to comply
Maya	Dresden	66	Flint, shield = war
Maya	Dresden	67	Day, night = to comply
Maya	Dresden	67	Flint, shield = war
Maya	Dresden	67	Flint, shield = war
Maya	Dresden	68	Water, cave
Maya	Dresden	68	Food, drink = feast
Maya	Dresden	69	Food, drink = feast
Maya	Dresden	69	Food, drink = feast
Maya	Dresden	69	Day, night = to comply
Maya	Dresden	70	Flint, shield = war
Central Mexican	Fejervary-Mayer	3	Rope, knife = lover
Central Mexican	Fejervary-Mayer	5	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	5	Rope, knife = lover
Central Mexican	Fejervary-Mayer	6	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	7	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	13	Flint, shield = war
Central Mexican	Fejervary-Mayer	17	Rope, knife = lover
Central Mexican	Fejervary-Mayer	18	Flint, shield = war
Central Mexican	Fejervary-Mayer	24	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	24	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	25	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	25	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	29	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	29	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	30	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	31	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	35	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	35	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	36	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	36	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	36	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	36	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	38	Flint, shield = war
Central Mexican	Fejervary-Mayer	39	Mat, throne = rulership
Central Mexican	Fejervary-Mayer	44	Flint, shield = war
Central Mexican	Laud	1	Rope, knife = lover

Central Mexican	Laud	2	Flint, shield = war
Central Mexican	Laud	4	Flint, shield = war
Central Mexican	Laud	5	Flint, shield = war
Central Mexican	Laud	7	Flint, shield = war
Central Mexican	Laud	8	Flint, shield = war
Central Mexican	Laud	9	Mat, throne = rulership
Central Mexican	Laud	12	Assorted body parts = body
Central Mexican	Laud	12	Flint, shield = war
Central Mexican	Laud	13	Mat, throne = rulership
Central Mexican	Laud	33	Mat, throne = rulership
Central Mexican	Laud	33	Mat, throne = rulership
Central Mexican	Laud	34	Mat, throne = rulership
Central Mexican	Laud	37	Mat, throne = rulership
Central Mexican	Laud	38	Mat, throne = rulership
Maya	Madrid	2	Flowers, songs = poetry
Maya	Madrid	5	Water, fire = war
Maya	Madrid	6	Water, fire = war
Maya	Madrid	8	Food, drink = feast
Maya	Madrid	9	Food, drink = feast
Maya	Madrid	10	Food, food = feast
Maya	Madrid	10	Food, drink = feast
Maya	Madrid	10	Food, food = feast
Maya	Madrid	10	Food, food = feast
Maya	Madrid	10	Food, drink = feast
Maya	Madrid	11	Food, drink = feast
Maya	Madrid	11	Food, drink = feast
Maya	Madrid	11	Food, food = feast
Maya	Madrid	11	Food, food = feast
Maya	Madrid	11	Food, drink = feast
Maya	Madrid	11	Food, food = feast
Maya	Madrid	12	Food, drink = feast
Maya	Madrid	12	Food, food = feast
Maya	Madrid	12	Food, food = feast
Maya	Madrid	12	Food, food = feast
Maya	Madrid	15	Food, drink = feast
Maya	Madrid	16	Food, drink = feast
Maya	Madrid	16	Food, drink = feast
Maya	Madrid	16	Food, drink = feast
Maya	Madrid	19	Food, drink = feast
Maya	Madrid	20	Food, drink = feast
Maya	Madrid	21	Food, drink = feast

Maya	Madrid	21	Food, drink = feast
Maya	Madrid	21	Food, drink = feast
Maya	Madrid	21	Food, drink = feast
Maya	Madrid	22	Food, drink = feast
Maya	Madrid	22	Food, drink = feast
Maya	Madrid	22	Flowers, songs = poetry
Maya	Madrid	22	Food, drink = feast
Maya	Madrid	22	Food, drink = feast
Maya	Madrid	23	Flowers, songs = poetry
Maya	Madrid	23	Food, drink = feast
Maya	Madrid	24	Food, drink = feast
Maya	Madrid	25	Food, drink = feast
Maya	Madrid	26	Food, drink = feast
Maya	Madrid	26	Day, night = to comply
Maya	Madrid	27	Food, drink = feast
Maya	Madrid	27	Food, drink = feast
Maya	Madrid	27	Food, drink = feast
Maya	Madrid	28	Green, yellow = to comply
Maya	Madrid	28	Food, food = feast
Maya	Madrid	28	Food, drink = feast
Maya	Madrid	29	Food, drink = feast
Maya	Madrid	29	Food, drink = feast
Maya	Madrid	29	Food, drink = feast
Maya	Madrid	32	Flint, shield = war
Maya	Madrid	33	Flint, shield = war
Maya	Madrid	33	Fire, flint = war
Maya	Madrid	34	Day, night = to comply
Maya	Madrid	34	Food, food = feast
Maya	Madrid	34	Food, food = feast
Maya	Madrid	35	Food, drink = feast
Maya	Madrid	35	Food, drink = feast
Maya	Madrid	35	Food, food = feast
Maya	Madrid	35	Food, drink = feast
Maya	Madrid	35	Food, food = feast
Maya	Madrid	35	Food, food = feast
Maya	Madrid	36	Food, food = feast
Maya	Madrid	36	Food, food = feast
Maya	Madrid	36	Food, food = feast
Maya	Madrid	37	Food, drink = feast
Maya	Madrid	37	Food, food = feast
Maya	Madrid	37	Food, food = feast

Maya	Madrid	43	Flint, shield = war
Maya	Madrid	43	Flint, shield = war
Maya	Madrid	48	Food, drink = feast
Maya	Madrid	51	Food, drink = feast
Maya	Madrid	52	Food, drink = feast
Maya	Madrid	53	Food, drink = feast
Maya	Madrid	55	Food, drink = feast
Maya	Madrid	57	Food, food = feast
Maya	Madrid	57	Food, food = feast
Maya	Madrid	58	Food, drink = feast
Maya	Madrid	60	Food, drink = feast
Maya	Madrid	61	Food, drink = feast
Maya	Madrid	62	Food, drink = feast
Maya	Madrid	62	Food, drink = feast
Maya	Madrid	62	Food, drink = feast
Maya	Madrid	63	Food, drink = feast
Maya	Madrid	68	Food, drink = feast
Maya	Madrid	68	Food, food = feast
Maya	Madrid	68	Food, food = feast
Maya	Madrid	68	Food, food = feast
Maya	Madrid	69	Food, food = feast
Maya	Madrid	79	Food, food = feast
Maya	Madrid	79	Food, drink = feast
Maya	Madrid	82	Food, drink = feast
Maya	Madrid	86	Food, drink = feast
Maya	Madrid	86	Food, drink = feast
Maya	Madrid	86	Fire, flint = war
Maya	Madrid	88	Food, drink = feast
Maya	Madrid	88	Assorted body parts = body
Maya	Madrid	88	Food, drink = feast
Maya	Madrid	88	Food, drink = feast
Maya	Madrid	88	Mat, throne = rulership
Maya	Madrid	89	Mat, throne = rulership
Maya	Madrid	89	Food, drink = feast
Maya	Madrid	89	Food, drink = feast
Maya	Madrid	90	Food, drink = feast
Maya	Madrid	91	Food, drink = feast
Maya	Madrid	91	Food, drink = feast
Maya	Madrid	92	Food, drink = feast
Maya	Madrid	92	Food, drink = feast
Maya	Madrid	92	Food, drink = feast

Maya	Madrid	92	Food, drink = feast
Maya	Madrid	92	Food, drink = feast
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	93	Assorted body parts = body
Maya	Madrid	93	Assorted body parts = body
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	93	Food, drink = feast
Maya	Madrid	94	Food, drink = feast
Maya	Madrid	94	Food, drink = feast
Maya	Madrid	94	Food, drink = feast
Maya	Madrid	94	Food, drink = feast
Maya	Madrid	94	Assorted body parts = body
Maya	Madrid	94	Food, drink = feast
Maya	Madrid	95	Food, drink = feast
Maya	Madrid	96	Food, drink = feast
Maya	Madrid	96	Food, drink = feast
Maya	Madrid	96	Food, drink = feast
Maya	Madrid	96	Food, drink = feast
Maya	Madrid	96	Food, drink = feast
Maya	Madrid	97	Food, drink = feast
Maya	Madrid	98	Food, drink = feast
Maya	Madrid	98	Food, drink = feast
Maya	Madrid	99	Food, drink = feast
Maya	Madrid	99	Food, drink = feast
Maya	Madrid	99	Food, drink = feast
Maya	Madrid	99	Food, drink = feast
Maya	Madrid	100	Food, drink = feast
Maya	Madrid	100	Food, drink = feast
Maya	Madrid	100	Food, drink = feast
Maya	Madrid	100	Food, drink = feast
Maya	Madrid	101	Food, drink = feast
Maya	Madrid	101	Food, drink = feast
Maya	Madrid	101	Food, drink = feast
Maya	Madrid	102	Food, drink = feast
Maya	Madrid	102	Food, drink = feast
Maya	Madrid	102	Food, drink = feast
Maya	Madrid	103	Food, food = feast
Maya	Madrid	104	Food, food = feast

Maya	Madrid	104	Food, food = feast
Maya	Madrid	104	Food, food = feast
Maya	Madrid	104	Food, food = feast
Maya	Madrid	105	Food, drink = feast
Maya	Madrid	105	Assorted body parts = body
Maya	Madrid	105	Assorted body parts = body
Maya	Madrid	105	Food, food = feast
Maya	Madrid	105	Food, food = feast
Maya	Madrid	105	Assorted body parts = body
Maya	Madrid	105	Food, drink = feast
Maya	Madrid	106	Food, drink = feast
Maya	Madrid	106	Food, food = feast
Maya	Madrid	106	Food, drink = feast
Maya	Madrid	107	Food, drink = feast
Maya	Madrid	107	Food, food = feast
Maya	Madrid	108	Food, drink = feast
Maya	Madrid	108	Food, drink = feast
Maya	Madrid	108	Food, drink = feast
Maya	Madrid	108	Food, drink = feast
Maya	Madrid	109	Food, drink = feast
Maya	Madrid	110	Food, drink = feast
Maya	Madrid	110	Food, drink = feast
Maya	Madrid	111	Food, drink = feast
Maya	Madrid	112	Food, drink = feast
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	3	Flint, shield = war
Mixtec	Nuttall	4	Flint, shield = war
Mixtec	Nuttall	4	Flint, shield = war
Mixtec	Nuttall	4	Flint, shield = war
Mixtec	Nuttall	4	Flint, shield = war
Mixtec	Nuttall	4	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war

Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	5	Flint, shield = war
Mixtec	Nuttall	6	Mat, throne = rulership
Mixtec	Nuttall	6	Mat, throne = rulership
Mixtec	Nuttall	7	Flint, shield = war
Mixtec	Nuttall	7	Flint, shield = war
Mixtec	Nuttall	7	Flint, shield = war
Mixtec	Nuttall	7	Flint, shield = war
Mixtec	Nuttall	7	Mat, throne = rulership
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	8	Flint, shield = war
Mixtec	Nuttall	10	Flint, shield = war
Mixtec	Nuttall	10	Flint, shield = war
Mixtec	Nuttall	10	Flint, shield = war
Mixtec	Nuttall	10	Mat, throne = rulership
Mixtec	Nuttall	10	Mat, throne = rulership
Mixtec	Nuttall	10	Mat, throne = rulership
Mixtec	Nuttall	10	Mat, throne = rulership
Mixtec	Nuttall	12	Mat, throne = rulership
Mixtec	Nuttall	12	Mat, throne = rulership
Mixtec	Nuttall	13	Flint, shield = war
Mixtec	Nuttall	13	Flint, shield = war
Mixtec	Nuttall	13	Flint, shield = war
Mixtec	Nuttall	13	Flint, shield = war
Mixtec	Nuttall	13	Mat, throne = rulership
Mixtec	Nuttall	13	Mat, throne = rulership
Mixtec	Nuttall	13	Mat, throne = rulership

Mixtec	Nuttall	14	Flint, shield = war
Mixtec	Nuttall	14	Flint, shield = war
Mixtec	Nuttall	18	Flint, shield = war
Mixtec	Nuttall	18	Flint, shield = war
Mixtec	Nuttall	18	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Flint, shield = war
Mixtec	Nuttall	20	Mat, throne = rulership
Mixtec	Nuttall	20	Mat, throne = rulership
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	21	Flint, shield = war
Mixtec	Nuttall	22	Flint, shield = war
Mixtec	Nuttall	22	Flint, shield = war
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	23	Mat, throne = rulership
Mixtec	Nuttall	24	Flint, shield = war
Mixtec	Nuttall	24	Mat, throne = rulership
Mixtec	Nuttall	24	Mat, throne = rulership
Mixtec	Nuttall	24	Mat, throne = rulership
Mixtec	Nuttall	24	Mat, throne = rulership
Mixtec	Nuttall	24	Mat, throne = rulership
Mixtec	Nuttall	25	Mat, throne = rulership
Mixtec	Nuttall	25	Mat, throne = rulership
Mixtec	Nuttall	26	Flint, shield = war
Mixtec	Nuttall	26	Mat, throne = rulership
Mixtec	Nuttall	26	Mat, throne = rulership
Mixtec	Nuttall	27	Mat, throne = rulership

Mixtec	Nuttall	27	Mat, throne = rulership
Mixtec	Nuttall	27	Mat, throne = rulership
Mixtec	Nuttall	28	Flint, shield = war
Mixtec	Nuttall	28	Flint, shield = war
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	28	Mat, throne = rulership
Mixtec	Nuttall	29	Flint, shield = war
Mixtec	Nuttall	29	Mat, throne = rulership
Mixtec	Nuttall	29	Mat, throne = rulership
Mixtec	Nuttall	29	Mat, throne = rulership
Mixtec	Nuttall	30	Flint, shield = war
Mixtec	Nuttall	30	Mat, throne = rulership
Mixtec	Nuttall	30	Mat, throne = rulership
Mixtec	Nuttall	31	Mat, throne = rulership
Mixtec	Nuttall	31	Mat, throne = rulership
Mixtec	Nuttall	31	Mat, throne = rulership
Mixtec	Nuttall	31	Mat, throne = rulership
Mixtec	Nuttall	32	Mat, throne = rulership
Mixtec	Nuttall	32	Mat, throne = rulership
Mixtec	Nuttall	32	Mat, throne = rulership
Mixtec	Nuttall	32	Mat, throne = rulership
Mixtec	Nuttall	33	Flint, shield = war
Mixtec	Nuttall	34	Mat, throne = rulership
Mixtec	Nuttall	34	Mat, throne = rulership
Mixtec	Nuttall	34	Mat, throne = rulership
Mixtec	Nuttall	34	Mat, throne = rulership
Mixtec	Nuttall	35	Mat, throne = rulership
Mixtec	Nuttall	35	Mat, throne = rulership
Mixtec	Nuttall	35	Mat, throne = rulership
Mixtec	Nuttall	35	Mat, throne = rulership
Mixtec	Nuttall	36	Flint, shield = war
Mixtec	Nuttall	42	Flint, shield = war
Mixtec	Nuttall	42	Flint, shield = war
Mixtec	Nuttall	42	Flint, shield = war
Mixtec	Nuttall	42	Mat, throne = rulership
Mixtec	Nuttall	43	Flint, shield = war
Mixtec	Nuttall	43	Flint, shield = war

Mixtec	Nuttall	43	Flint, shield = war
Mixtec	Nuttall	49	Flint, shield = war
Mixtec	Nuttall	51	Water, hill = town
Maya	Paris	2	Food, food = feast
Maya	Paris	2	Food, drink = feast
Maya	Paris	3	Bad, wind = pestilence
Maya	Paris	3	Food, drink = feast
Maya	Paris	3	Food, food = feast
Maya	Paris	3	Mat, throne = rulership
Maya	Paris	4	Food, food = feast
Maya	Paris	4	Mat, throne = rulership
Maya	Paris	5	Food, food = feast
Maya	Paris	5	Mat, throne = rulership
Maya	Paris	5	Food, drink = feast
Maya	Paris	6	Flint, shield = war
Maya	Paris	6	Food, drink = feast
Maya	Paris	6	Food, food = feast
Maya	Paris	6	Mat, throne = rulership
Maya	Paris	6	Food, drink = feast
Maya	Paris	7	Food, drink = feast
Maya	Paris	7	Food, food = feast
Maya	Paris	7	Green, yellow = to comply
Maya	Paris	8	Food, drink = feast
Maya	Paris	8	Mat, throne = rulership
Maya	Paris	9	Food, drink = feast
Maya	Paris	9	Mat, throne = rulership
Maya	Paris	11	Food, food = feast
Maya	Paris	11	Mat, throne = rulership
Maya	Paris	13	Food, food = feast
Maya	Paris	17	Food, drink = feast
Maya	Paris	17	Food, food = feast
Maya	Paris	18	Food, food = feast
Mixtec	Selden	1	Mat, throne = rulership
Mixtec	Selden	1	Mat, throne = rulership
Mixtec	Selden	1	Mat, throne = rulership
Mixtec	Selden	1	Mat, throne = rulership
Mixtec	Selden	2	Mat, throne = rulership
Mixtec	Selden	2	Mat, throne = rulership
Mixtec	Selden	2	Mat, throne = rulership
Mixtec	Selden	2	Mat, throne = rulership
Mixtec	Selden	3	Mat, throne = rulership

Mixtec	Selden	3	Mat, throne = rulership
Mixtec	Selden	3	Mat, throne = rulership
Mixtec	Selden	3	Mat, throne = rulership
Mixtec	Selden	3	Mat, throne = rulership
Mixtec	Selden	3	Mat, throne = rulership
Mixtec	Selden	4	Flint, shield = war
Mixtec	Selden	4	Mat, throne = rulership
Mixtec	Selden	4	Mat, throne = rulership
Mixtec	Selden	4	Mat, throne = rulership
Mixtec	Selden	4	Mat, throne = rulership
Mixtec	Selden	4	Mat, throne = rulership
Mixtec	Selden	5	Mat, throne = rulership
Mixtec	Selden	5	Mat, throne = rulership
Mixtec	Selden	5	Mat, throne = rulership
Mixtec	Selden	5	Mat, throne = rulership
Mixtec	Selden	5	Mat, throne = rulership
Mixtec	Selden	6	Flint, shield = war
Mixtec	Selden	6	Mat, throne = rulership
Mixtec	Selden	7	Mat, throne = rulership
Mixtec	Selden	8	Flint, shield = war
Mixtec	Selden	8	Flint, shield = war
Mixtec	Selden	8	Mat, throne = rulership
Mixtec	Selden	8	Mat, throne = rulership
Mixtec	Selden	8	Mat, throne = rulership
Mixtec	Selden	8	Mat, throne = rulership
Mixtec	Selden	9	Flint, shield = war
Mixtec	Selden	9	Flint, shield = war
Mixtec	Selden	9	Flint, shield = war
Mixtec	Selden	9	Flint, shield = war
Mixtec	Selden	10	Flint, shield = war
Mixtec	Selden	10	Mat, throne = rulership
Mixtec	Selden	10	Mat, throne = rulership
Mixtec	Selden	11	Mat, throne = rulership
Mixtec	Selden	11	Mat, throne = rulership
Mixtec	Selden	11	Water, hill = town
Mixtec	Selden	12	Mat, throne = rulership
Mixtec	Selden	12	Mat, throne = rulership
Mixtec	Selden	12	Mat, throne = rulership
Mixtec	Selden	12	Mat, throne = rulership
Mixtec	Selden	12	Water, hill = town
Mixtec	Selden	13	Flint, shield = war

Mixtec	Selden	13	Flint, shield = war
Mixtec	Selden	13	Flint, shield = war
Mixtec	Selden	13	Flint, shield = war
Mixtec	Selden	13	Mat, throne = rulership
Mixtec	Selden	13	Mat, throne = rulership
Mixtec	Selden	14	Flint, shield = war
Mixtec	Selden	14	Mat, throne = rulership
Mixtec	Selden	15	Flint, shield = war
Mixtec	Selden	15	Flint, shield = war
Mixtec	Selden	15	Flint, shield = war
Mixtec	Selden	15	Mat, throne = rulership
Mixtec	Selden	15	Mat, throne = rulership
Mixtec	Selden	15	Mat, throne = rulership
Mixtec	Selden	15	Mat, throne = rulership
Mixtec	Selden	16	Mat, throne = rulership
Mixtec	Selden	16	Mat, throne = rulership
Mixtec	Selden	16	Mat, throne = rulership
Mixtec	Selden	18	Flint, shield = war
Mixtec	Selden	19	Mat, throne = rulership
Mixtec	Selden	19	Mat, throne = rulership
Mixtec	Selden	20	Flint, shield = war
Mixtec	Selden	20	Flint, shield = war
Central Mexican	Vaticanus B	7	Assorted body parts = body
Central Mexican	Vaticanus B	17	Mat, throne = rulership
Central Mexican	Vaticanus B	17	Mat, throne = rulership
Central Mexican	Vaticanus B	19	Flint, shield = war
Central Mexican	Vaticanus B	19	Flint, shield = war
Central Mexican	Vaticanus B	19	Flint, shield = war
Central Mexican	Vaticanus B	21	Day, night = to comply
Central Mexican	Vaticanus B	29	Mat, throne = rulership
Central Mexican	Vaticanus B	35	Mat, throne = rulership
Central Mexican	Vaticanus B	35	Mat, throne = rulership
Central Mexican	Vaticanus B	37	Flint, shield = war
Central Mexican	Vaticanus B	37	Mat, throne = rulership
Central Mexican	Vaticanus B	37	Mat, throne = rulership
Central Mexican	Vaticanus B	37	Mat, throne = rulership
Central Mexican	Vaticanus B	41	Mat, throne = rulership
Central Mexican	Vaticanus B	51	Flint, shield = war
Central Mexican	Vaticanus B	51	Flint, shield = war
Central Mexican	Vaticanus B	55	Flint, shield = war
Central Mexican	Vaticanus B	83	Mat, throne = rulership

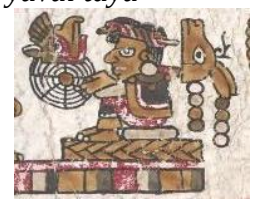
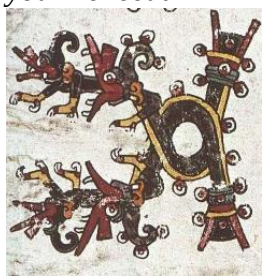
Central Mexican	Vaticanus B	85	Flint, shield = war
Central Mexican	Vaticanus B	85	Flint, shield = war
Central Mexican	Vaticanus B	85	Mat, throne = rulership
Central Mexican	Vaticanus B	85	Mat, throne = rulership
Mixtec	Vindobonensis	13	Flint, shield = war
Mixtec	Vindobonensis	13	Flint, shield = war
Mixtec	Vindobonensis	16	Water, hill = town
Mixtec	Vindobonensis	16	Water, hill = town
Mixtec	Vindobonensis	16	Water, hill = town
Mixtec	Vindobonensis	17	Water, hill = town
Mixtec	Vindobonensis	20	Flint, shield = war
Mixtec	Vindobonensis	20	Flint, shield = war
Mixtec	Vindobonensis	23	Day, night = to comply
Mixtec	Vindobonensis	23	Day, night = to comply
Mixtec	Vindobonensis	25	Mat, throne = rulership
Mixtec	Vindobonensis	25	Mat, throne = rulership
Mixtec	Vindobonensis	42	Mat, throne = rulership
Mixtec	Vindobonensis	43	Flint, shield = war
Mixtec	Vindobonensis	45	Water, hill = town
Mixtec	Vindobonensis	46	Water, hill = town
Mixtec	Vindobonensis	48	Flint, shield = war
Mixtec	Vindobonensis	50	Flint, shield = war
Mixtec	Vindobonensis	iii	Flint, shield = war
Mixtec	Vindobonensis	iv	Flint, shield = war

APPENDIX 3: GUIDE TO IDENTIFYING DIFRASISMO

The following table outlines a number of difrasismo encountered in the investigation of this thesis. When possible, the corresponding phrase in Maya, Mixtec, and/or Nahuatl is included as well as a visual representation of the difrasismo through images from the codices. The citation provided indicates the reference for the phonetic element of the difrasismo but does not necessarily indicate the identification of the pictorial example included, the majority of which were done by myself following the guidelines in literature. Additionally, not all of the following difrasismo have been identified in the codices. It is hoped that this synthesis can provide a starting point for further studies of difrasismo in Mesoamerica.

Difrasismo	**Maya**	**Mixtec**	**Nahuatl**
Ahuehuete, ceiba = authority, protection			*in ahuehuetl in pochotl* Lopez Austin 2003, 145
Arrow, fire = war		*nduvua ñuhu* Jansen & Pérez Jiménez 2009a, 117	
Arrow/flint/spear, shield = war	*to'k pakal*  Dresden p. 46 Helmke 2013, 4	*tatnu yusa*  Colombino p. 19 Jansen & Pérez Jiménez 2010, 56	*mitl chimalli*  Borgia p. 60 Helmke 2013, 4
Bad/dust, wind = pestilence			*in ehecatl in temoxtli* Lopez Austin 2003, 145
Black, red (ink) = writing			*tlilli tlapalli* Montes de Oca 2009, 230

Blood, heart = child, kinship, sustenance		*neñe ini* Jansen & Pérez Jiménez 2010, 64	
Bone, meat = body		*iki kuñu* Nieves 2012, 7	*in omitl in nacatl* Mikulska Dąbrowska 2007, 21
Constitution, form = nature (of something)			*iujqui yeliztli* Lopez Austin 2003, 155
Day, night = completeness	*k'in ak'ab'*  Madrid p. 26 Hull 2012, 84	*ntuu ñuu*  Vindobonensis I p. 23 Nieves 2012, 8	*cemilhuitl cenyohual*  Borgia p. 62 de Molina 1571, f. 164. col. 1
Dirt, mud = the Earth, the body	*luumil pitziil kabal pitziil* Helmke 2013, 4		
Dust, wind = illness			*in temoxtli in ehecatl* Kettunnen 2004, 8
Fog, smoke = fame, reputation			*in ayahuitl in poctli* Lopez Austin 2003, 146
Flower, song = poetry			*xochitl in cuicatl* Baca 2006, 125
Green/blue, yellow = completeness	*yax k'an*  Dresden p. 18 Stuart 2003, 1		
Hand, foot = the body, physical strength	*k'ab' ok'* Kettunen 2005, 8	*ndaha saha* de Hollenbach 2007, 168	*in maitl in icxitl* Mikulska Dąbrowska 2007, 21
Half man, half woman = moral greatness, strong spirit		*dawa tsei dawa nade'e* Lopez Garcia 2008, 411-412	
In the cyan water, in the yellow water			*in matlalac in tozpalac* Lopez Austin 2003, 145

= the beginning, the center			
Jade, quetzal = beauty			*in chalchihuitl in quetzalli* Kettunnen 2004, 8
Jaguar, eagle = military			*in cuauhtli in ocelotl* Lopez Austin 2003, 145
Jewel, gold = the precious one		*dzeque dziñuhu* Jansen & Pérez Jiménez 2010, 56	
Land/earth, cave = city	*ukab' uch'e'en* Kettunnen 2004, 7		
Mat, throne = nation, authority	*pohp tzam*  Paris p. 5 Helmke 2013, 4	*yuvui tayu*  Bodley p. 22 Jansen and Broekhoven 2008, 2	*petlatl icpalli*  Borgia p. 12 Jansen & Pérez Jiménez 2009, 15
Night, wind = invisible, mysterious, religious		*yoalli ehecatl*  Borgia p. 29 Mikulska Dąbrowska 2010, 339	
One's face, one's heart = emotion, spirit			*ix yolloh* Hull 2003, 412
Penance, darkness = autosacrifice	*ch'ab ak'ab* Hoppan and Jacquemot 2012, 1		
Rabbit, deer = lazy			*in tochtli in mazatl* Lopez Austin 2003, 145
Skirt, shirt = woman (sexual)			*in chalchihuitl in quetzalli* Kettunnen 2004, 8

Sky, cave = population center	*chan ch'e'en* Kettunen 2005, 7		
Star, moon = divination	*ek' uj* Knowlton 2002, 12		
Stone, stick = punishment	*tunich chei* Knowlton 2002, 9	*nduta ndecu* Jansen & Pérez Jiménez 2009a, 15	*tetl quahuitl* Jansen & Pérez Jiménez 2009a, 15
Tortilla/food, water = feast, meal, fate	*waj ha'*  Madrid p. 16 Kettunnen 2005, 8		
Water, fire/burning = war		*nduta ndecu* Jansen & Pérez Jiménez 2009a, 15	*atl tlachinōlli* Montes de Oca 2009, 234
Water, hill/mountain = town, community, pueblo		*yuca nduta*  Vindobonensis p. 16 Jansen & Pérez Jiménez 2009a, 15	*in atl in tepetl*  Cospi p. 10 Jansen & Pérez Jiménez 2009a, 15
Water, metate = woman			*in atl in metlatl* Kettunnen 2004, 8
What is above us, the region of the dead = the metaphysical beyond			*topan, mictlan* Knowlton 2002, 9
(with) one lip, (with) two lips = speaking indirectly			*cententli ontentli* Bright 1990, 440
(with) truth, harmony = justice, social peace		*vindaa vinene* Jansen & Pérez Jiménez 2009a, 15	
Word, voice = word (given from the gods)		*tu'un ntusu* Nieves 2012, 7	

Year, day = time		*quevui cuiya* Jansen & Pérez Jiménez 2010, 55	