INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600
The Ballgame at Baking Pot, Belize:
An Analysis of the Ballcourts at a Maya Civic Centre

A Thesis Submitted to the Committee on Graduate Studies
in Partial Fulfillment of the Requirements for the
Degree of Masters of Arts
in the Faculty of Arts and Science

TRENT UNIVERSITY
Peterborough, Ontario, Canada

© Copyright Josalyn Ferguson 1999

Anthropology M.A. Program

June 1999
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

L’auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-40469-2
ABSTRACT

The Ballcourts at Baking Pot:
Analysis of the Ballgame at a Maya Civic Centre

Josalyn Ferguson

While interest in the Maya ballgame continues to develop, the role or purpose of the ballcourts and, hence, the ballgame within Precolombian Maya society remains somewhat elusive. Investigators have traditionally concentrated on ethnohistoric, epigraphic and iconographic data for clues, often overlooking the available architectural evidence. Recently, archaeologists conducting regional analyses have begun to consider these data. The Maya civic centre of Baking Pot in Belize, Central America, presents an unusual opportunity to examine the role of the ballgame, as it possesses three masonry ballcourts. Each is unique and has features distinct from those associated with other sites in the Belize Valley. Additionally, the distribution of ballcourts at Baking Pot appears to be fundamental to the role(s) of the ballcourts. This thesis presents an overview of the Mesoamerican and Maya ballgame, as well as a discussion of the Belize Valley and those sites which possess ballcourts. A detailed examination of the excavated ballcourts at Baking Pot is provided. The thesis culminates in a discussion of the meaning and roles of the ballcourts and ballgame at Baking Pot. It is argued that by examining the architectural and spatial dynamics of the ballcourts at Baking Pot, while considering notions of Maya ideology and socio-political complexity, decipherment of the meaning and role of the ballcourts at Baking Pot is possible.
ACKNOWLEDGEMENTS

All of my field work conducted since 1995 on ballcourts within the Belize Valley could not have been undertaken without the consent of the Belize Department of Archaeology, and project directors Paul Healy and Jaime Awe (1995 excavations of the EBC at Cahal Pech); Gyles Iannone (1996/97 excavations at X-ual-canil); and Jaime Awe (1997 excavations of the NBC at Baking Pot).

I would like to thank the many wonderful people who have assisted me with my ballcourt research over the years, from the field school students who helped me excavate to all of my supervisors. I have worked with Jaime Awe for 8 years now. Jaime’s enthusiasm and love for archaeology and of the Maya enticed me to follow in his footsteps. Thank you for your patience, leadership, and support. I will never be able to thank you enough for everything.

I worked in the field for Gyles Iannone for three years, during which time I learned the logistics of being involved in an archaeological project. Gyles was perhaps the most influential on my academic career in the classroom, where he taught me all I know about theory. I promise to continue to be provoked by theory in my future. Thank you for being a wonderful "sound-board" and advisor.

Special thanks goes to Julia Harrison for agreeing to be on my examining committee, and for contributing her cultural anthropological views and helping broaden my research perspectives and otherwise archaeologically specific avenues.

My utmost respect and gratitude goes out to Elizabeth Graham for agreeing to be my external examiner, especially during a particularly hectic time. I owe a great deal to Liz, as I would not be where I am today without her introduction to archaeology, encouragement
and assistance over the years. Thank you!!

Finally, I would like to thank Paul Healy who, despite the hardships of holding an administrative position, agreed to supervise me during my M.A. Thank you for your continual direction, guidance, support and understanding during an occasionally rocky, but always challenging, educational experience.

The friendly people of Belize, including my many good friends and colleagues there, also deserve special thanks for their continued generosity and tolerance of our yearly treks. Of particular mention are Joe Martinez, David “Ciego” Valencia, Everald Tut and family, Pete “Pacz” Zubrycki, Bob and Nettie Jones, Ms. Lucky Kamica, Mr. and Mrs. Dan Silva and all the wonderful staff at the Cahal Pech Village.

I would like to thank all of my wonderful friends and colleagues in the Maya area and at Trent University, whose advice, comments and support have been invaluable, most especially: Sonja Schwake, Tina “My Pillar of Strength” Christensen, Cameron Griffith, Nadine “Beaner” Gray, Sherry Gibbs, Christophe “Mappus” Helmke, Jim Aimers, David F. Lee, Jen Piehl, “Big” Jim Conlon, Rhanju “Wizard” Song, Norbert Stanchly, Keith Prufer, Sam Connell, David Cruz, Mike Mirror and Vanessa Owen, Jason Yaeger, Minette Penados, Allan Moore, and all of the other graduate students and professors at Trent, and especially the most wonderful secretary ever, Sandi Carr.

I would also like to make special mention and thanks to those whose research and advice helped contribute to my own, including: David Driver, Steven McDougal, Jim McGovern, Chris Hartman, Joseph Ball, Richard Leventhal and Wendy Ashmore, Jim Garber, Anabel Ford, and Elizabeth Graham.

Last, and definitely not least, I would like to thank the truly most encouraging and loving
family around, most especially My Dad, Mark Ferguson, my Stepmother Cherrel Campbell, and my brother, Matthew Ferguson. Thank you for your support and for being there for me. I love you.
# TABLE OF CONTENTS

ABSTRACT .................................................................................. i  
ACKNOWLEDGEMENTS ............................................................. ii  
TABLE OF CONTENTS ............................................................... v  
LIST OF FIGURES ....................................................................... viii  
LIST OF TABLES .......................................................................... x  

CHAPTER 1  
INTRODUCTION  
Introduction ................................................................................ 1  
The Ballgame ................................................................................ 2  
The Architecture and Setting .......................................................... 5  
Origins ...................................................................................... 13  
The Game ................................................................................... 16  
Discussion .................................................................................. 21  
Summary .................................................................................... 22  

CHAPTER 2  
THE BELIZE VALLEY, ITS SITES AND BALLCOURTS  
Introduction ................................................................................ 27  
Contextual Framework ................................................................. 27  
Precolumbian Maya and Settlement in the Belize Valley .................. 28  
The Belize Valley Sites and Their Ballcourts ................................. 32
CHAPTER 3

THE MAYA CIVIC CENTRE OF BAKING POT AND ITS BALLCOURTS

Introduction ................................................................. 71

Baking Pot .................................................................. 71

History of Archaeological Investigations at Baking Pot .................. 74

O.G. Ricketson .............................................................. 74

A.H. Anderson ............................................................. 76

G.R. Willey, W. Bullard, J.B. Glass and J. Gifford ...................... 76

W. Bullard and M. Ricketson Bullard ................................. 77

J.J. Awe and the Belize Valley Archaeological
Reconnaissance Project .................................................. 78

The Ballcourts at Baking Pot ............................................. 79
CHAPTER 4
DISCUSSION
Introduction .................................................. 114
Maya Ideology and the Ballgame ......................... 114
Socio-Political Complexity and Ballcourts in the Belize Valley .............. 122
Architecture and the Maya of the Belize Valley ........... 134
Settlement Patterns and the Maya ....................... 136
Summary .................................................. 141

CHAPTER 5
CONCLUSIONS
Introduction .................................................. 143
Baking Pot and Its Ballcourts ............................. 143
Summary .................................................. 151

REFERENCES CITED ...................................... 154
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Ballcourt Structural Features</td>
<td>24</td>
</tr>
<tr>
<td>1.2</td>
<td>Early Ballplayer Figurines</td>
<td>25</td>
</tr>
<tr>
<td>1.3</td>
<td>Bench Relief from the Great Ballcourt, Chichén Itzá</td>
<td>26</td>
</tr>
<tr>
<td>2.1</td>
<td>Map of the Maya Subarea</td>
<td>55</td>
</tr>
<tr>
<td>2.2</td>
<td>Map Showing the Location of Major sites in Belize</td>
<td>56</td>
</tr>
<tr>
<td>2.3</td>
<td>Map of Archaeological Sites in the Belize Valley</td>
<td>57</td>
</tr>
<tr>
<td>2.4</td>
<td>Map of Actuncan Illustrating the Ballcourt</td>
<td>58</td>
</tr>
<tr>
<td>2.5</td>
<td>Map of Blackman Eddy Illustrating Ballcourt</td>
<td>59</td>
</tr>
<tr>
<td>2.6</td>
<td>Map of Buenavista Illustrating Ballcourts</td>
<td>60</td>
</tr>
<tr>
<td>2.7</td>
<td>Map of Cahal Pech Illustrating Ballcourts</td>
<td>61</td>
</tr>
<tr>
<td>2.8</td>
<td>Map of El Pilar Illustrating Ballcourts</td>
<td>62</td>
</tr>
<tr>
<td>2.9</td>
<td>Map of Las Ruinas Illustrating the Ballcourt</td>
<td>63</td>
</tr>
<tr>
<td>2.10</td>
<td>Map of Ontario Village Illustrating the Ballcourt</td>
<td>64</td>
</tr>
<tr>
<td>2.11</td>
<td>Map of Pacbitun Illustrating Ballcourt</td>
<td>65</td>
</tr>
<tr>
<td>2.12</td>
<td>Map of X-ual-canil Illustrating Ballcourt</td>
<td>66</td>
</tr>
<tr>
<td>2.13</td>
<td>Map of Xunantunich Illustrating Ballcourts</td>
<td>67</td>
</tr>
<tr>
<td>2.14</td>
<td>Map of Belize Valley Sites With Ballcourts</td>
<td>68</td>
</tr>
<tr>
<td>3.1</td>
<td>Map of Archaeological sites in the Belize Valley</td>
<td>101</td>
</tr>
<tr>
<td>3.2</td>
<td>Map of Baking Pot</td>
<td>102</td>
</tr>
<tr>
<td>3.3</td>
<td>Map of Group II Illustrating Structure II-D Ballcourt Complex</td>
<td>103</td>
</tr>
<tr>
<td>3.4</td>
<td>Plan and Profile of Structure II-D Ballcourt</td>
<td>104</td>
</tr>
<tr>
<td>3.5</td>
<td>Map of Group I, Plaza II Ballcourt</td>
<td>105</td>
</tr>
<tr>
<td>Figure</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>3.6</td>
<td>Group I, Plaza II Playing Alley Excavation Units</td>
<td>106</td>
</tr>
<tr>
<td>3.7</td>
<td>Group I, Plaza II Excavation Units</td>
<td>107</td>
</tr>
<tr>
<td>3.8</td>
<td>Profile of Group I, Plaza II Eastern Ballcourt Structure</td>
<td>108</td>
</tr>
<tr>
<td>3.9</td>
<td>a) Photograph of NBC; b) Photograph of Fragmented Marker and Depression</td>
<td>109</td>
</tr>
<tr>
<td>3.10</td>
<td>Map of NBC</td>
<td>110</td>
</tr>
<tr>
<td>3.11</td>
<td>Map NBC Excavation Units</td>
<td>111</td>
</tr>
<tr>
<td>3.12</td>
<td>Structural Profile of the North Ballcourt</td>
<td>112</td>
</tr>
<tr>
<td>3.13</td>
<td>a) Illustration of Ceramic Netsinkers; b) Illustration of Jute Shells</td>
<td>113</td>
</tr>
<tr>
<td>4.1</td>
<td>Map of Alignments of Ceremonial Centres with Ballcourts in the Belize Valley</td>
<td>142</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 2.1 Belize Valley Ballcourts ........................................ 69
Chapter 1

INTRODUCTION

This thesis will examine the meaning and role of the ballcourts, and hence ballgame, at the Maya civic centre of Baking Pot, in the Belize River Valley of Belize, Central America. An understanding will be derived from the architectural and spatial evidence exhibited at the site, and by consideration of notions of Maya ritual, ideology and sociopolitical complexity, particularly within the Belize Valley in the Late Classic period (A.D. 700-900). The ballgame throughout Mesoamerica has been the topic of much discussion by scholars and lay-people alike for many years. Whereas epigraphic, iconographic, and ethnohistoric data have been the focus of evidence in most discussions, less attention has been placed on the available architectural evidence, perhaps the most prolific testimony of the ballgame available. In fact, architectural evidence is the only evidence of the ballgame in the Belize Valley, and for many other regions of the Maya Lowlands.

The literature currently available on the Maya ballgame discusses the perceived purpose(s) of the game, but pays relatively little attention to variations in ballcourts in a given region, or at a specific site. Some of the publications in which ballcourt architecture has been considered include discussions involving symbolic, ideological, social and political roles (Ritman 1968:47-4; Cohodas 1975:129; Ashmore 1989, 1991, 1992; De Montmollin 1989; Gillespie 1991:341; Scarborough 1991b; Santley et al. 1991; Scarborough and Wilcox 1991; Freidel et al. 1993:384). Since the Maya site of Baking Pot possesses multiple ballcourts, it presents an interesting case study to examine the ballgame and, in effect, test some of the proposed roles of the ballgame. The site has three distinct ballcourts, an unusual phenomenon in the region. This thesis will examine the ballcourts of Baking Pot, while considering contextual data specific to the site and surrounding region. Additionally,
I will take into account what archaeologists claim to know about the Maya ballgame.

**THE BALLGAME**

Various ballgames have been documented throughout the Americas for over 2000 years, from the Hohokam culture area in the southwest United States, to the Caribbean, and into the Amazon Drainage and Orinoco Basin of South America (Stern 1948; Clune 1963:18; Kemrer 1968:1; Gillespie 1991:317; Scarborough and Wilcox 1991:vii, Whalen and Minnis 1996:732). Variants of the ancient games continue to be played even today in some areas of Mexico (Miller and Houston 1987:48; Scarborough and Wilcox 1991; Taladoire and Colsenet 1991:162; Leyenaar 1992:132; Whalen and Minnis 1996:732). Despite the fact that hundreds of ballcourts have been recorded within the Maya subarea, very little is actually known about the Maya ballgame and how it was played. Most of what archaeologists profess to know comes from iconographic sources, such as carved monuments and architectural panels (Schele and Miller 1986:250; Gillespie 1991:340; Taladoire and Colsenet 1991:164), from scenes illustrated on vessels, and from the representations of ballplayers in the form of ceramic figurines (Alegria 1983:145; Taladoire and Colsenet 1991:164; Garber 1994:37). Additional sources of information include epigraphic data (Houston 1983:27; Schele and Miller 1986; Miller and Houston 1987; Boot 1991:233-235; Taladoire and Colsenet 1991:164), the myth-historical text the *Popol Vuh* (Clune 1963:66; Tedlock 1985; Miller and Houston 1987:52; van Bussel 1991:247-250; Freidel et al. 1993:345), as well as codices (Ritman 1968:30-31; Garber 1994:37).

Ethnohistoric documents have also proven informative in describing various aspects of "the" ballgame. Such documents relate information on the Mexican and, more often than not, the Aztec ballgame at the time of European contact. Since no such chronicles exist for the Maya ballgame, and the noted documents postdate by centuries the Classic period
ballgame, they must be utilized with some caution (Clarkson 1978:90; Alegria 1983:137; Cohodas 1991:283; Robertson 1991:99; Garber 1994:37). As de Borhegyi (1975:499) aptly notes: “any Colonial period, foreign eye-witness account describes an already grossly altered form of these games once played by many and various ethnic and linguistic groups under constantly changing social, political and economic conditions”. Thus, interpretations on how and why the Maya played the ballgame must remain in the realm of speculation.

While scholars have been able to consult ethnohistoric and ethnographic accounts and analyze iconographic data and ballgame paraphernalia, architectural evidence remains the least studied aspect of the game. This absence has proven problematic in attempts to contextualize the ballgame in such regions as the Belize Valley, where the only evidence archaeologists have is architectural. As such, discussions involving who played the game, how, and why the Maya played the ballgame in the Belize Valley must remain to a certain degree, conjectural. Until scholars in the Valley unearth such revealing media as elaborately painted vessels and carved monuments depicting local ballgame imagery, it remains uncertain how much of the data gleaned from sources outside of the Belize Valley are directly transferable.

Known as pok-ta-pok in Maya (Blom 1932; Lowe and Ries 1948:33; Ritman 1968:30-31), or tlachti, or olamaliztliullamaliztli in Nahua (Lowe and Ries 1948:33; Ritman 1968:30-31; Alegria 1983:134; Leyenaar and Parsons 1988:11; Santley et al. 1991:3), the ballgame of the Pre-Columbian Maya, and of Mesoamerica in general, was more than a mere sport. Although only incidentally mentioned as such in ethnohistoric accounts, and not necessarily recognized as such by all chroniclers (Alegria 1983:4), the ballgame held profound religious and ritual significance (Oviedo 1851-55, 1:471 in Alegria 1983:11; Tezozómoc 1878:228, 229 in Leyenaar 1978:13 in van Bussel 1991:246-7; Ritman 1968:31; Pasztory
1972; Cohodas 1975, 1978, 1991; Leyenaar and Parsons 1988:74; van Bussel 1991:246; Healy 1992; Freidel et al. 1993; Garber 1994; Fox 1996; Ferguson et al. 1996:53; Ferguson 1997:48). While archaeologists and art historians have come to agree on the ritual essence of the ballgame, there are varying opinions with regard to its ultimate purpose or full meaning for the Maya. Some of the theories put forth about functionality have included a cult tied to trade (Pasztory 1972; Cohodas 1975, 1978:87); a symbolic manifestation of the ancient Maya political system (Kowalewski et al. 1983); representation of Maya social structure and power relations (Fox 1991; Santley et al. 1991; Garber 1994:37; Fox 1996; De Montmollin 1997); a manifestation of a shared ideology and group solidarity (Scarborough 1991b:143); a mechanism “for social integration” (Fox 1996:484); a forum for ending disputes (Robertson 1991:92); a representation of a boundary between earth and Xibalba (Gillespie: 1991:341; Freidel et al. 1993:355; Garber 1994:37); an entranceway to, or mediating force between, the Middle- and Underworlds (Tedlock 1985:105-160; Miller and Houston 1987:52; Ashmore 1989:279; van Bussel 1991:247-250, 256-257; Freidel et al. 1993:345; Garber 1994:37); an astronomical or cosmological metaphor, with the ball representing the sun or moon (Pasztory 1972:445; Stern 1948:68-69; Clarkson 1978:90; Ritman 1968:49; Gillespie 1991:317); and/or a game that functioned as a “symbolic renewal of agricultural fertility” (Stern 1948:95-96; Parsons 1969:103; Pasztory 1972 in Pasztory 1978:131; Cohodas 1975:108-110, 1991; Taladoire and Colsenet 1991:163; Scarborough 1991b; Gillespie 1991:317, 320; Fox 1996:483); or it was a ritual reenactment of the those played by the Hero Twins and their father and uncle in the Popol Vuh (Freidel et al. 1993:341). Just as the meaning behind the ballgame could have been any one of these, it could also have been a combination of some or all of them. It should, however, be recognized that just as the manner in which the game was played likely changed over time and between regions, the reason for playing the game also likely changed over time, and potentially even from ballcourt to ballcourt.
THE ARCHITECTURE AND SETTING

Many scholars suggest that the earliest Mesoamerican and Maya ballgames were probably not played within an architectural setting, and thus left very little archaeological evidence (Stern 1949:18-23, 32; Piña Chan 1955 and Covarrubias 1957 in Clune 1963:3; Alegria 1983:5; Leyenaar and Parsons 1988:25-26; Hill et al. 1998:878). Ethnographic accounts have left archaeologists confident in their identifications of ballcourt complexes as the arenas for the playing of the Maya ballgame (Jones 1985:44). Additionally, the presence of carved stelae with representations of ballgame imagery on them in association with ballcourts, as well as the in situ discovery of ballcourt markers and tenon rings in ballcourt complexes, further attests to their identification as such (Miller and Houston 1987:54-55). Moreover, one of the hieroglyphs for the ballcourt is a profile of a ballcourt with a ball (for illustration see Schele and Friedel 1990:Fig. 2:2; Friedel et al. 1993:Fig. 351).

The ballcourt is essentially an architectural complex that comprises two parallel structures of either earthen or masonry construction of relatively equal size and height, with the playing alley between them. The architectural features of a ballcourt are specific to the inner faces of the complex and include: a) bench face or wall; b) bench; c) playing wall; d) upper apron or top surface; e) the range structure; and, of course, f) the playing alley (Figure 1.1) (after Stern 1949; Smith 1961:Fig. 8; Clune 1963:90). These features were not simply architectural embellishments. They functioned as part of the court, and had a role in the play of the game since the ball likely was not simply bounced up and down the court, but also off the benches and playing walls (Freidel et al. 1993:341; Leyenaar and Parsons 1988:73). Variability in the individual architectural features has been noted across the Maya subarea, specifically in the presence/absence of the upper apron or top surface, and in the angle of the bench faces, benches, and playing walls (Stern 1949:36-37; Smith 1961:Fig.
8; Clune 1963:6; Ritman 1968:40; Cohodas 1978:91; Scarborough 1991b:137). The variability between the angle of these structural features is as extreme as horizontal versus vertical, with a spectrum of inclined angles in between (Stern 1949:36-37; Cohodas 1978:91; Miller and Houston 1987:53; Robertson 1991:92; Scarborough 1991b:137). It has been suggested that the variability in angle of the features likely made a court "faster" or "slower" (Scarborough 1991b:137).

The bulk of the range structures, like many architectural constructions among the Maya, is composed of a variety of fill, including aggregate and core fill. Ballast layers are typically encountered beneath plastered surfaces, including the playing alley and bench surfaces. The outer facade of the structure is nicely tailored with facing stones and plaster coatings or surfaces. Immediately behind the facing stones, and yet considered part of the facing, is a layer of material referred to as backing masonry (Loten and Pendergast 1984:4). Backing masonry is often prevalent in ballcourts, as it helps cushion the potentially damaging blows of the solid rubber ball on the architecture.

The playing alley also varies in dimensions, both in terms of width and length, as well as in design (see Figure 1.1). The playing alley is formed by the open space between the range structures, and often includes what has been termed an "end zone" at either extreme of the alley. The end zone typically reaches beyond the range structures, and is usually as wide as the range structures and alleyway are together, giving the playing alley the shape of a capital "I". The end zones are often defined by paving, by flanking structures, by low walls which enclose the end zones, or by the excavation of a sunken court (Stern 1949:36; Clune 1963:13; Durán 1971:313-215 in Jones 1985:45; Leventhal 1990, 1992; Robertson 1991:92; Freidel et al. 1993:341).

In an attempt to categorize the variations in Mesoamerican ballcourts, and identify
temporally and/or geographically specific architectural features, scholars have created ballcourt typologies (Smith 1961; Clune 1963; Taladoire 1981). Traditionally, these types have been defined by the alleyway, and include varieties of open and closed courts. Clune (1963) and Smith (1961) have identified five basic court types. The original assessment of court types did not focus solely on the playing alley, but included the presence and absence of benches and angles of playing walls. Scholars continue to use the Smith - Clune typologies, but have expanded on their categorization, using the playing alley designations as the common denominator, rather than the other architectural features (Taladoire 1981; Scarborough 1991b; Taladoire and Colsenet 1991). It would appear that this is a result of the increased recognition of the extreme variability of these features, and their lack of association with specific playing alley designations. Perhaps the greatest downfall of research on ballcourts has been a lack of agreement as to the important features to consider when excavating, analyzing and describing a ballcourt, as well as inconsistencies of the terminology used in such instances (Taladoire and Colsenet 1991:163).

The first type of ballcourt in the Smith - Clune typology is the open-ended court. This court comprises two parallel structures, and a central playing alley. There are no constructions at either end of the court demarcating the end zone. However, structures sometimes flank the open-end of the playing alley. The playing walls associated with the open-ended variety consist of shallow angles, and benches may or may not be present (Clune 1963:11; Scarborough 1991b:134; Awe 1992:156). It has been suggested that the earliest courts in the Maya region were likely of the open-ended variety (Clune 1963:31, 185). Most ballcourts in the southern Maya Lowlands are noted as being open-ended courts (Leyenaar and Parsons 1988:71; Scarborough 1991b:137). These courts may represent a more public-oriented game, as they are not as visually or physically restricted as are some other types (Scarborough 1991b:134). Perhaps the "openness" of this type of
court also allowed greater mobility of the players during the game.

The second type of court identified was designated by Smith (1961:103) as the open-ended-
A assemblage. This court was said to be specific to Guatemala, and differed from the
open-ended variety in that one end opened into a courtyard in which a small platform, or
shrine is centred. The shrine is also seen as an entrance to a major plaza.

The third type of court is called an intermediate court. The intermediate court is considered
the most common in Mesoamerica, and consists of two parallel range structures with low
walls delineating one or both of the end zones. It is suspected that the intermediate court
was a pre-cursor to the next type of ballcourt complex, the enclosed-court (Smith 1961:103;

The enclosed court is characterized by a playing alley in which the end zones are clearly
delineated, often by an enclosure comprised of mounds, or by an excavation (a variety of
the enclosed court is the sunken court ). The enclosed court is typified by a capital “I”
shaped playing alley (Clune 1963:13; Scarborough 1991b:134). The enclosed-court is
suggested to have been the earliest court in Mesoamerica and yet it, or the intermediate
court, are understood to have been the type of court encountered by the Spaniards during
the conquest (Clune 1963:185).

The final class of ballcourt complex is the palangana court (Smith 1961:116; Clune
1963:13; Scarborough 1991b:134). The palangana court is a completely enclosed court,
much like a wash basin, from which it derives its Spanish name. While the end zones are
not clearly defined, a rectangular playing alley is defined by high walls and, in part, by
benches at either end of the playing field (Smith 1961:116; Clune 1963:13; Scarborough
1991b:134). The palangana court is noted as mainly occurring in the Guatemalan highlands
during the Late Classic period (Clune 1963:13).

While there is an assumed chronological order to the Smith - Clune based typology, no ballcourt complex has revealed an in situ chronological transition through any or all of these types (Clune 1963:31), despite the fact that ballcourts experienced periods of use and reuse (Scarborough 1991b:130). Archaeologists have come to recognize that ballcourt types are not temporally sensitive, as there appears to be little or no chronological or distributional relevance to these typologies (Leyenaar and Parsons 1988:71).

It should be noted that while the Smith - Clune typology is still used as a template, variations between ballcourts are extreme. From differences in playing alley “types”, to the presence/absence of architectural components, to variations in the sizes of the alleys and architectural features, most ballcourts do not fit well into any one type. Recognizing that there are more varieties of ballcourts than have been typologically defined, and that they do not seem to be regionally or temporally sensitive regularities in ballcourt features, there seems little the advantage in using such typologies. Additionally, I see an inherent flaw in these typological designations, because they do not consider the presence or absence of the various forms of markers, nor artifactual materials from the complexes, the orientation of the complexes, their locations at a given site, the number of ballcourts at a site, or within the immediate vicinity. A more expansive typology would required to examine these features as well as variations and disparities in ballcourt architecture from a diachronic and synchronic perspective.

Ballcourts throughout Mesoamerica are traditionally located in association with site centres, specifically among other public and ceremonial architecture, or adjacent to main plaza areas (Clune 1963:69; Stern 1949:36; Thompson 1965:353; Ritman 1968:43-44, 47-48; Hammond 1972:83; Cohodas 1975:129; Miller and Houston 1987:53; Leyenaar and

The Maya central precinct, in which nearly all recorded ballcourts rest, was an imposing setting with at least somewhat closed access to certain areas.....The disposition of sunken plazas, raised acropolises, and directed causeways could cordon off access to privileged zones. The ballcourt, however, occupied open courtyard space. Courts were seldom found in traffic-restricted areas (once access to the central precinct was made) and never on top of the broad expanse of an acropolis. Although courts were centrally located in the core of a community, less restricted access to the game seems apparent.

The explicit association of ballcourts and easily accessible site core areas is indicative of their civic nature. As such, their presence, absence or proliferation, as well as their orientation, construction and specific locale within a site, should help archaeologists understand their potential meaning to, and role at, a particular site, and perhaps within a given region (Ritman 1968:47-4; Cohodas 1975:129; Gillespie 1991:341; Scarborough 1991b:137; Freidel et al. 1993:384).

The repeated placement of ballcourt complexes along the primary or central axis of many Lowland Maya sites (Stern 1949:36; Clune 1963:69; Leyenaar and Parsons 1988:71; Ashmore 1989, 1991, 1992; Scarborough 1991b:138) likely attests to their ritual and symbolic importance. If so, ballcourts can be seen as housing a game that symbolically functioned as a transitional force. If we accept this viewpoint, as many archaeologists have, then we may surmise that ballcourts functioned as intermediaries. Ballcourts mediated between site precincts, between natural and cultural space, private and public space, and/or between the north and south, or the earthly- and under- worlds, and also served as foci for mediation between intra- and inter-site polities (Schele 1987:12; Leyenaar and Parsons 1988:71; Ashmore 1991:199-200; Gillespie 1991:341; Scarborough 1991b:138; van Bussel
1991:256-257; Freidel et al. 1993:350-351; Fox 1996; de Montmollin 1997). For instance, the Copan ballcourt, a north-south oriented complex, is located between the acropolis in the north and the great plaza in the south, both of which are interpreted as representing supernatural spheres (Ashmore 1989:273). The ballcourt is thus understood to have symbolically represented the surface of the earth (Cohodas 1975:129; Schele 1987:12; Freidel et al. 1993:247). and as such mediates between the secular and sacred realms, or the earthly- and under-worlds. The notion that ballcourts and the ballgame functioned as a mediating or transitional force, and that ballcourts were seen as actual and symbolic entrances to the otherworld, and as surface of the earth, is best understood and illustrated by the Maya themselves in the Popol Vuh (Tedlock 1985) and from textual data taken from a stair tread of Temple 33 at Yaxchilan (Freidel et al. 1993:351).

In the Popol Vuh, the Hero Twins (inhabitants of the earthly, or middle world) are challenged by the Lords of Darkness (the inhabitants of the Underworld) to play the ballgame (mediating force between the "worlds") (Tedlock 1985:105-160; Miller and Houston 1987:52; Ashmore 1989:279; van Bussel 1991:247-250, 256-257; Freidel et al. 1993:345; Garber 1994:37). The road to the Underworld leads to and from a ballcourt and is thus part of the gate- or entrance-way (Tedlock 1985:109, 358; Ashmore 1989:279; Gillespie 1991; van Bussel 1991:247; Freidel et al. 1993:355). The interpretations of textual data from Yaxchilan by Freidel et al (1993:351) concur with this premise by noting that one "entered the road" (och bih)" to the underworld via a ballcourt. The ritual importance of a ballcourt can be further recognized through the fact that rarely was a ballcourt complex replaced by a different architectural complex, in contrast to other ceremonial or ritually oriented structures (Scarborough 1991b:130).

It has been argued that the number and distribution of ballcourts within a given site, and/or
region. is contingent on the degree of political centralization at a given locus. whether at the micro or macro level (Santley et al. 1991:3-4). For example, Santley et al. (1991:17-18) suggest:

On a regional level, highly centralized political systems should lack ballcourts, whereas in decentralized settings courts should be present at most centers because the game was politicized as an alternative way of acquiring additional revenue or territory at minimum expense. The number of ballcourts at the capital in turn should be an ordered response to local political conditions, with more courts occurring at centers whose decision making apparatus was more centralized and competitive. This variability is closely related to the scale and diversity of the resource base dominated by the early states.

Following this line of reasoning, ballcourts function as boundary markers within a region, signaling site socio-political autonomy, and potentially familial or ethnic boundaries as well (Gillespie 1991:341). Garber (1994:44), on the other hand, has suggested that the regional distribution of ballcourt complexes in the Belize Valley “mimics the partitioning of an altar and serves as a cosmogram or map of the universe as they [the Maya] perceived it.”

A pattern of Late Classic, east-west running ballcourts has been identified from the Coastal Lowlands of Mexico (Leyenaar and Parsons 1988:37). A similar pattern has been recognized during the seventh century in the Valley of Guatemala, and in the highlands of Chiapas (Agrinier n.d. in Leyenaar and Parsons 1988:38) and Guatemala, including at Kaminaljuyu (Smith 1961; Leyenaar and Parsons 1988:38). The ballgame is said to have begun its full expansion in the Maya area during the Middle Classic period. However, it is not until the Late Classic period that ballcourts begin to appear at almost every major site (Leyenaar and Parsons 1988:62), with the majority of ballcourts in the Maya Lowlands at that time being north-south oriented (Leyenaar and Parsons 1988:71).
While there may be geographical associations with ballcourt orientations, there appear to be potentially deeper meanings behind their directionality. The Maya were preoccupied with juxtapositions, and central axes. As such, directionality is understood as a driving force in many principles of Maya astronomy and cosmology, ideology and site planning (Cohodas 1975; Aveni and Hartung 1986:3-6; Ashmore 1989, 1991, 1992; Schele and Freidel 1990:66-67; Demarest 1992:147; Freidel et al. 1993:53; Garber 1994). It is believed that the north-south oriented ballcourts represent the surface of the earth, while east-west running ballcourts symbolize the underworld (Cohodas 1975:118).

**ORIGINS**

Despite the fact that the Mesoamerican ballgame has been a topic of much attention and discussion in recent years, the origins of the ancient game remain elusive. As mentioned earlier, it is suspected that the earliest Mesoamerican ballgames were not necessarily played within an architectural setting (Stern 1949:18-23, 32; Piña Chan 1955 and Covarrubias 1957 in Clune 1963:3; Alegria 1983:5; Leyenaar and Parsons 1988:25-26; Hill et al. 1998:878). Moreover, since the ballgame did not begin to gain its full height or popularity until the Middle Classic period (around 400 A.D.), few sites contain archaeological evidence of the earliest game. Consequentially, the documentation of the history of the ballgame and its origins has been problematic.

As noted earlier, “ballgames” have a wide distribution across the Americas (Lowe and Ries 1948:36; Stern 1950:32; Kemrer 1968:1; Jones 1985:44; Robertson 1991:91-91). These games vary in their forms of play, scoring, rules, paraphernalia and architecture. Such a wide distribution and variation in the game has added to the difficulty of pinpointing the ballgame’s origin. Discussions of the ballgames associated with these various regions are
found in de Borhegyi (1975); Clune (1963); Algeria (1983); Scarborough and Wilcox 1991; Fox (1996); Whalen and Minnis (1996) and Stern (1949). Such studies, paired with archaeological data have allowed scholars to formulate hypotheses as to the origins of the Mesoamerican, and Maya, ballgame.

Some scholars formerly held that the ballgame had been introduced to the Maya area after the invasion of the Toltecs (Stern 1949:74). Blom (1932) felt that the ballgame was a Lowland Maya invention that spread to Mexico, citing the fact that at the time of his study, the majority of courts, and the earliest known courts, were found in the Maya subarea. Clune (1964:5), amongst others (Nordenskrold and Lothrop in Lowe and Ries 1948:36; Jones 1985:44), believed that the game spread north from South America, with the introduction of the ballcourt being a Mesoamerican addition or development. Another plausible theory is that the ballgame originated in the areas in which the latex producing rubber tree is indigenous. This idea is supported by the fact that the geographical dispersement of ballcourts largely mirrors that of the distribution of rubber producing plants from the tropical rain forests (Stern 1949:7; Kemrer 1988:14). Those who adhere to the belief that the Olmec were the Cultura Madre of Mesoamerican civilization tend to support such a hypothesis, as the Olmec (also known as the rubber people) inhabited a region of Mesoamerica known for its rubber producing plants (Coe 1965:741; Ritman 1968:29; Alegria 1983:145). The Olmec area has also produced one of the only artifactual rubber playing balls known at this time (Stuart 1993:101). Others have suggested that the rubber ball may have been introduced to a previously existing game, perhaps one played with a wooden ball (Stern 1949:4; Ritman 1968:28). Leyenaar and Parsons (1988:84), on the other hand, have suggested that a Mexicanized ballgame disseminated to the Maya area via the coastal Lowlans and adjacent highlands.
The earliest evidence of the ballgame is represented by a collection of figurines dating to 1500-1200 B.C. The figurines are from the sites of Xochipala and Tlatilco in Mexico, and are dressed in costumes recognized as that associated with ballplayers (Figure 1.2). Additionally, these figurines hold what are believed to be rubber balls (Alegria 1983:145; Leyenaar and Parsons 1988:25-26; Robertson 1991:91-92).

The earliest evidence of the ballgame was originally said to be from the Gulf Coast, at the Olmec site of San Lorenzo in Veracruz, Mexico, dating to 1000 B.C. (Miller and Houston 1987:48). Recently, an even earlier ballcourt dating to approximately 1400 B.C. was unearthed on the Pacific Coast, at the site of Paso de la Amada in the Soconusco region of Chiapas, Mexico (Hill et al. 1998). This ballcourt may in fact date as early as 1600 B.C. (M. Blake, personal communication 1999). Either way, the Paso de la Amada ballcourt represents the earliest architectural evidence of the ballgame in Mesoamerica. Other early ballcourts dating to the terminal Formative period (200 B.C.-A.D. 200) are recorded at Tonina in northern Chiapas (Becquelin and Baudez 1975; Leyenaar and Parsons 1988:72), Cerros, Colha (Scarborough 1991b:132), El Pilar (A. Ford, personal communication, 1998), and Pacbitun (Healy 1990:253; 1992:237) in Belize. The identification of a “simple” early form of ballcourt at Snaketown in the Hohokam subarea of the southwest United States has suggested the likelihood of a similar but unrecognized form of ballcourt existing in Mesoamerica (Stern 1949:75). A possible, “simple” form of ballcourt dating to approximately 5000-4000 B.C., has been identified at the site of Gheo Shih in Oaxaca (Miller and Taube 1993:27). While these courts differ greatly architecturally from those most commonly associated with Mesoamerica and the Maya, they may in fact represent precursors to the more formal and elaborate ballcourt complexes.
THE GAME

Our knowledge about how the ballgame was played mainly derives from ethnohistoric documents, and in many instances has been confirmed by artistic renditions of the ball and players in action. The exact methods and rules of play and scoring for the Classic period Maya ballgame are unknown (Leyenaar and Parsons 1988:73). It needs to be stressed that eyewitness accounts by the Colonial period Spaniards were of a Mexican version of the ballgame played more than 500 years later than that played by the Classic period Belize Valley Maya. The Spaniards were very subjective in their “appraisal” and documentation of the ballgame. They viewed it as an amusing sport, recognizing little of its ritual and ideological significance (Blom 1932:492-4; Ritman 1968:32). Moreover, the game observed by the Spaniards had most likely changed since the Classic period and, in all probability, had been influenced by contact with both Mexican (Toltec and Nahua) and European culture contact (Stern 1949:34-5) seeing as how culture is not static. Therefore, the information relayed through these chronicles should be utilized as a cultural analog of a potentially similar game.

The object of the Preclassic Mesoamerican ballgame was to hit a rubber ball back and forth across, and up and down, the court using the benches and playing walls to propel the ball and keep it in perpetual motion (Jones 1985:45; Humphrey 1981:140; Leyenaar and Parsons 1988:73). These actions had to be accomplished without the use of the players’ hands or feet, restricting all contact with the ball to the buttocks, hips, torso, knees, legs, elbows and shoulders (Stern 1949; Clune 1963:16-17; Durán 1971:313-315 in Jones 1985:45; Humphrey 1981:140; Alegria 1983:149; Leyenaar and Parsons 1988:11, 73; Robertson 1991:91-2; Freidel et al. 1993:345).
Different methods of scoring have been recorded for the ballgame. These methods appear to have been specific to different regions, ballcourts, and presumably to the variety of game being played. Scoring was accomplished in some instances when the "ball fell to the ground and could not be returned, when the ball entered the opponents' end-zone...Points were apparently lost if the hands or feet came actively into play" (Lowe and Ries 1948:33; Kemrer 1968:11; Hellmuth 1975:11; Humphrey 1981:40; Freidel et al. 1993:345). It is likely that this form of scoring was used in concert with the different forms of scoring markers, however, it appears to have typically been used in conjunction with complexes that had a black or green line centrally painted on the playing alley (Clune 1963:186-187; Durán 1971:313-315 in Jones 1985:45). These lines identified the opponents respective sides, similar to many modern games. The ball had to pass this centre mark in order to win the game. If it did not pass the line the play was considered foul (Durán 1971:313-315 in Jones 1985:45). These painted lines may have been the earliest type of scoring marker (Clune 1963:186).

Some courts had tenon rings, the second type of marker, through which the ball had to pass in order to score, as seen at the Great Ballcourt at Chichén Itzá. (Lowe and Ries 1948:33; Stern 1949:37; Smith 1961:119; Clune 1963:186-187; Kemrer 1968:17; Ritman 1968:47; Humphrey 1981:138). There are usually two rings mounted into the centre of each range structure's playing wall, parallel to the playing alley. This form of ballcourt marker or "goal" is common to the northern Maya Lowlands (Leyenaar and Parsons 1988:74), and is suspected to have been Classic period Mexican introduction (Ritman 1968:42; Humphrey 1981:138).

A third form of scoring or ballcourt marker was the tenon effigy head. It is suspected that tenon effigy heads, as seen at the site of Copan, also played a role similar to that of the
stone rings in scoring, as they are located in positions coinciding with the tenon rings mounted to the playing walls of some ballcourts (Stern 1949:37; Stromsvik 1952; Clune 1963:186-187; Kemrer 1968:17). The effigies are often representations of human captives, jaguars and bird, often macaw, heads.

The fourth form of marker utilized for scoring purposes was a triad of centrally-placed stone disks along the alley's central axis. The markers are laid flush with the playing alley, and some are carved with ballplaying scenes (Leyenaar and Parsons 1988:74; Fash 1992). It is postulated from chronicles (Ritman 1968:30-31), ethnohistoric, ethnographic and iconographic sources that when the ball hit these disks, a "goal" was scored (Stern 1949:37; Clune 1963:186-187; Kemrer 1968:17; Durán 1971:313-315 in Jones 1987:45; Hellmuth 1975:11; Humphrey 1981:138; Miller and Houston 1987:56). Many of these markers convey dates, typically of the Late- and Post-Classic periods (Clune 1963:187). It has been inferred that these markers may have also functioned as altars for offerings (Clune 1963:187). While such alley markers are the most prolific of the markers, and are supposedly common throughout the Central Maya Lowlands (Leyenaar and Parsons 1988:74), this has not been the case in the Belize Valley. In fact, until 1997 no markers of any sort had been unearthed in courts there. In areas with, and sometimes without, the triad of markers, cached offerings had been found beneath the alley floor (Ferguson et al. 1996). In some courts, alley disks or markers were also used in concert with tenon rings (Humphrey 1981:138).

The Mesoamerican ballgame was played with a solid rubber ball, estimates for the size of which range from 8-10 cm in diameter (Lowe and Ries 1948:33); 15-24 cm if you consider the size of the rings found in the northern Lowlands (Kemrer 1968:14); and even 30 cm (Ritman 1968:36) to 60 cm if representations from El Tajín and Cancun are taken to be true.
to scale (Kemrer 1968:14). A preliminary analysis of imagery in Maya art has found that on average, objects represented in relation to humans are 10 to 25% larger than their true sizes (C. Helmke, personal communication, 1999), and thus these last measurements may in fact be larger than the ball actually used in the game. The weight of the ball is estimated to have been approximately three kilos (Clune 1963:16-17; Kemrer 1968:14).

Estimates for the number of players on a team have been as low as one or two people per side (Blom 1932:497; Lowe and Ries 1948:34; Stern 1949:40; Kemrer 1968:11; Ritman 1968:34; Jones 1985:48), to eleven or twelve people on a team (Stern 1949:9; Humphrey 1981:140; Robertson 1991:92), to even thirty players per team (Alegría 1983:149). Perhaps the number of players was unimportant, or was specific to a particular game. In all accounts, the opposing teams were always an equal number of players (Lowe and Ries 1948:34; Stern 1949:9, 40; Ritman 1968:34). The majority of players were said to have been positioned in the centre of the court, while the end zones were guarded by additional players (Blom 1932:492; Ritman 1968:33).

Accounts of who played the ballgame also vary considerably. It is said that the game was popular with the elite and commoners alike (Blom 1932:492; Clune 1963:66). The fact that the ballcourts are located in civic space attests to the probable accessibility of the game to many members of society. Both the written accounts and the iconographic representations of ball players seem to indicate that the players generally were men (Ritman 1968:34), although in South America both men and women are noted as having played a variety of ballgame (Stern 1949:8, 9). Based on imagery associated with the ballgame, and ethnohistoric data, indications are that some players were nobles, enacting the ritual of kingship through the playing of the ceremonial game (Jones 1985:48; Miller and Houston 1987:60).
Chroniclers also noted that it was a commonly held belief among Native peoples that both Mexican and Maya gods played the ancient ballgame (Sahagun 1929, 1:258 in Lowe and Ries 1948:35-6). The Hero Twins, as well as their father and uncle, are also well noted as having been champion ballplayers (Tedlock 1985). There are accounts among the Aztecs of “celebrity” games between rulers (Jones 1985:48). For instance, Montezuma’s father Axayacatl is said to have challenged the king of Xochimilco to a ballgame, wagering large tribute collections and towns as the prize. Evidently Axayacatl lost and was sacrificed (Jones 1985:48). There are also reports of both amateur and professional teams organized to represent towns in regional matches (Lowe and Ries 1948:33). There is an account by Oviedo (1851-55, 1:471 in Alegria 1983:11) that tells of an occasion in Puerto Rico in which a group of Spanish individuals were commanded to play a ballgame after having had one of their youth captured and used as the prize. Of course, the winners of the game were expected to sacrifice the “prize”.

The sacrificial component of the ballgame received comparatively little attention in Spanish accounts. A sacrificial victim, evidently a player, perhaps the captain from the losing team, was slain at the end of the game by having his heart cut out as an offering to the gods (Cohodas 1975, 1991; Alegria 1983:144). This practice is best documented and revealed for Central Mexican ballgames, but not so for the Classic Maya in the Lowlands (Clarkson 1978:90). In fact, one scholar has noted that it may have been the winner that was sacrificed (Westheim 1957 in Alegria 1983:144). Many of the scenes depicted on ceramic vessels, elaborately carved altars and panels illustrate sacrifices associated with the ballgame (Figure 1.3) (Clune 1963:71; Cohodas 1975, 1991; Hellmuth 1975:5; Alegria 1983:144; Baudez 1984; Miller and Houston 1987:52, 55, 60; Leyenaar and Parsons 1988:74; Schele and Freidel 1991; van Bussel 1991: 246; Fox 1996). Additionally, the myth-history the Popol Vuh (Tedlock 1985) elaborately discusses the sacrifice of the first
set of Hero Twins. *Hun-Hunahpu* and *Vucub-Hunahpu* after losing the ballgame, and the "supposed", and unjust, sacrifice of the second set of hero twins. *Hunahpu* and *Xbalanque* by the *Xibalbans*. It is suggested that much of the "perceived" sacrificial theme of the Maya ballgame is related to the sacrifice and resurrection of the Hero Twins, who are said to have manifested the Sun and the Moon, as well as the Maize god (Pasztory 1972:445; Cohodas 1975:108-110; 1991; Miller and Houston 1987:52; Leyenaar and Parsons 1988:74; Gillespie 1991:321; Schele and Freidel 1991:309; van Bussel 1991: 247; Freidel et al. 1993:341, 350).

Extent accounts and scenes involving sacrifices are more specific to the Aztec, Toltec and ancient Veracruz cultures rather than to the Classic period Maya culture. Unfortunately, imagery associated with these Mexican cultures and the atypical Maya sites of Chichén Itzá and Tonina have come to be presented as commonplace in discussions involving sacrifice, the Maya ballgame and ballcourts (Hellmuth 1975:5).

**DISCUSSION**

For the purposes of my own research, I have chosen to adopt only the very basic characteristics from standard ballcourt typologies, and to discuss the sites and courts on an individual basis, although I note whether or not the court is: open-ended (meaning there are no end structures or walls enclosing it); or enclosed (meaning it has one or more structures enclosing the playing alley, or has a wall surrounding the playing alley giving the impression of a sunken ballcourt). Where possible, I have noted whether the alley has defined end zones that extend beyond the range structures, or whether the alleyway terminates at the ends of the structures. Additionally, I have included data pertaining to the playing walls, benches and bench faces where permitted, the presence/absence of markers,
as well as orientation, location, and number of courts at a given site.

There are a number of research questions I wish to address in this thesis. Why does Baking Pot have three ballcourts, whereas most sites have only one, or none? Why does the Belize Valley boast so many ballcourts in such a relatively small area? Why was there an increase in ballcourt construction in the Valley during the Late Classic period? What is the meaning behind the variation in the ballcourt complexes of Baking Pot and the Belize Valley? Could these differences, or the increases in ballcourt numbers in the Late Classic denote societal change? Do they represent different types of games, or changes in the traditional game? Are the locations of the ballcourts at Baking Pot significant? Is the architectural evidence sufficient to base an analysis of the ballgame?

By examining the architectural and spacial dynamics of ballcourts while considering notions of Maya ritual, ideology and sociopolitical complexity as it appears to have existed in the Belize Valley, a start can be made in defining the meaning and role of the ballgame at the Maya civic centre of Baking Pot.

**SUMMARY**

In this chapter, a brief overview of the Mesoamerican ballgame has been presented. A review of previous research devoted to the Mesoamerican and Maya ballgame, from ethnohistoric accounts to compilations focusing on the iconography and interpretations of ballcourts and the ballgame, has furnished a synopsis of the ballgame and of its architectural setting. Key components to this chapter involved a discussion of some of the potential origins for the ballgame; descriptions of where the game was played, including an outline of the general architectural features of the ballcourt, orientation and location within a
given site; how the game was played; who played the game, as well as speculations on the significance and purpose of the game. This chapter concludes with the identification of some of the key research questions to be addressed in the thesis, as these pertain to the Maya civic centre of Baking Pot.
Figure 1.1: Ballcourt Structural Features (after Smith 1961:Fig. 8 and 9). A) Schematic of ballcourt characteristics: a) Playing Alley; b) Bench Face; c) Bench top; d) Playing Wall; e) Range Structure; f) End Zone; g) Tenon Feature (if present); h) Apron (if present); B) Variations in Structures.
Figure 1.2: Early Ballplayer Figurines  a) From Xochipala, Mexico, 1200-900 B.C.; b) From Tlatilco, Mexico, 1000-500 B.C. (Leyenaar and Parsons 1988:Fig. 1 and 2)
Figure 1.3: Bench Relief from the Great Ballcourt, Chichén Itzá. Depiction of a rubber ball with skull (Greene 1967:Fig. 69)
Chapter 2

THE BELIZE VALLEY, ITS SITES AND THEIR BALLCOURTS

INTRODUCTION

This chapter is primarily concerned with examining the Belize Valley and the occurrences of ballcourts at sites within the region. The chapter begins with a brief review of the geographical and geological data of the Belize Valley. Following this, a brief summary of what is known about the history of the Maya in the Belize Valley is outlined. Finally, a description of relevant sites and their associated ballcourts is provided. The inclusion of these data is intended to complement research at Baking Pot, the focus of this thesis, by providing information that will facilitate contextual and comparative analyses.

CONTEXTUAL FRAMEWORK

The Maya subarea (Figure 2.1) comprises portions of those areas known today as Mexico, Guatemala, El Salvador, western Honduras, and Belize. The country of Belize (known as British Honduras until its independence in 1981) is located within the southern Maya Lowlands on the Caribbean coast of the Yucatán Peninsula. Bordered by Guatemala on the south and west, and by the Mexican state of Quintana Roo on the north, Belize can be divided into two main geographical regions, as defined by the Belize River basin (Hammond 1981:159), (Figure 2.2). The northern half of the country is predominately defined by coastal lowlands and swamps, while the southern half is dominated by a hilly zone, rising to the Maya Mountains in central and southern Belize (Dobson 1973:4; Hammond and Ashmore 1981:23).
Belize exhibits a variable geological foundation, whose karst platform provides a diversity of soils, chert outcrops, and granite, quartz and metamorphosed sandstones (Dobson 1973:4; Hammond 1981:159; Hammond and Ashmore 1981:21-22; Furley and Crosbie 1974 in Wernecke 1994:5). Based on such features, the two main geographical zones identified above can be further divided into six topographic zones. These zones include: “1) the northern lowlands; 2) the coastal plains; 3) the karst country; 4) the Maya Mountains; 5) the southern lowlands; 6) the cays” (Furley and Crosbie 1974 in Wernecke 1994:5).

Paired with the relative accessibility of the Caribbean coast (the furthest point to the coast is approximately 186 km), its variable flora and fauna, and an array of navigable and rich river systems, the area and all of its associated resources proved to be very attractive to the ancient Maya. This is perhaps best demonstrated by its expansive Precolumbian settlement.

**PRECOLUMBIAN MAYA AND SETTLEMENT IN THE BELIZE VALLEY**

Situated at the confluences of the Belize River and its Mopán and Macal tributaries, the Belize Valley is located within the foothills of the Maya Mountains in western Belize (Thompson 1931:224; Willey et al. 1965:23; Willey 1973:94; Ford 1991:36). Three divergent environmental resource zones have been specified within the Belize River Valley, and are defined as 1) the uplands; 2) the alluvial valley; and 3) the intervening foothills (Fedick 1989:245; Ford 1991:35). Whereas the Belize Valley today has generally been cleared for pasture and agricultural land, it once accommodated “a high forest vegetation in which the cohune or corozo palm...[was] particularly characteristic”. Other forms of vegetation to which the Maya likely had access, and which can still be found in the Valley included: ceiba, mahogany, strangler fig, sapodilla (*zapote*) and breadnut (*ramón*) trees, the
Spanish cedar and bamboo (Willey et al. 1965:23). The diversity of vegetation mirrors that of the variable soils present in the Belize Valley.

Soils in the Valley derive from three parent materials, including: “alluvium of the valley bottom, gravels and marls of the surrounding limestone platform, and pockets of Pleistocene coastal deposits found within the lower elevations of the limestone platform” (Fedick 1989:217, 1995:19; Birchall and Jenkin 1979, and Darch and Furley 1983 in Fedick 1995). Within a 5 kilometer distance of the river, the hills reach a height of over 300 metres above the Valley floor (Fedick 1995:18), with the river itself flowing at approximately 60 metres above sea level (Willey et al. 1965:23). The Belize Valley experiences seasonal rainfall, with explicit wet and dry seasons occurring from June to January, and February to May, respectively (Fedick 1995:18).

The accessibility of diverse environments and associated resources made the Belize Valley a favored settlement locale. It allowed access to water, which benefitted the Maya in terms of transportation, communication, and such resources as fish, turtles, fowl, shellfish, fertile alluvial soils and drinking water (Willey et al. 1965:573-574; Fedick 1989:219). Additionally, construction and raw materials and ritual items from the Maya Mountains, such as slate (Healy et al. 1995), and foodstuffs, such as armadillo, deer, peccary, tapir and jaguar were also easily acquired. The diverse environmental zones allowed for the manipulation of a variety of crops and cultivation strategies (Willey et al. 1965:573-574; Fedick 1989:219).

It has been suggested that the first settlers to the Valley arrived during the Cunil phase or Early Formative period (1200-900 B.C.) and were the first to clear the primary forest (Healy and Awe 1995b). Around 100 B.C, the Valley began to experience significant
increases in the number of households and changes in ceramic styles and techniques (Willey et al. 1965:564). While occupation in the Belize River region is noted by Willey and Bullard (1965:366) to stretch over an airline distance of 60 kilometres, the area currently identified as the Belize Valley encompasses the region spanning the Guatemalan border and the confluence of the Belize River and Roaring Creek (Figure 2.3). Despite the fact that rivers associated with the Valley are subject to seasonal flooding, with rises recorded as high as 12 meters from the norm (Willey et al. 1965:23), the alluvial river terraces and the Valley itself evidently supported a relatively high settlement density, as is evident from the numerous settlements along its course (Willey and Bullard 1965:364-365; Willey et al. 1965:309; Fedick 1989:245; Ford 1991:38; Driver and McWilliams 1995:47). Studies by members of the BRASS project have found the uplands and alluvial valley zones to have been preferred for settlement; they note that 87 percent of settlement within the Valley occurs within these zones (Fedick 1989:245; Ford 1991:39-40).

There are a total of 28 sites recorded in the Belize Valley, 10 of which are considered major or civic centres, the rest are designated as either secondary or minor centres. Minor centres, as defined by Bullard (1960:360), are noted as consisting of:

only one large building...but ordinarily they included one or more pyramidal structures, which are assumed to have been small temples, arranged around one, two, or three adjacent plazas....Only rarely are the plazas so separated that the center can be considered as having more than one group. Small vaulted buildings of “palace” type may be present....None of the many Minor Centers explored during the survey contained stelae, altars, or ballcourts.

Civic centres in the Belize Valley are generally regarded as small in comparison to such Petén area sites as Tikal or Uaxactun (Ball and Taschek 1991:149). Nonetheless, the
Valley civic centres do possess features considered typical of such sites, including: substantial populations; site planning and large scale public architecture (i.e., E-groups, sucbeob); evidence of administrative activities and controlling polities (i.e., elaborate monuments); and the likelihood of other sites being subordinate to the civic centre in question (Chase et al. 1990:499). The Belize Valley area appears to have accommodated a different form of sociopolitical complexity than the Petén “core area” of Classic Maya civilization, as is suggested by its regional settlement pattern (see below) (Willey et al 1965:16; Ford 1991:38; Golden and Conlon 1996:30). Alliances with the Maya from the central Petén region would have been easily facilitated by the Belize River system, as the Mopán branch is “the major drainage for the southwestern Maya Mountains and a series of swamps in the eastern section of the Department of Petén, Guatemala” (Willey et al. 1965:21; Awe 1992:47). However, based on the lack of such cultural expressions as carved stelae, elaborate iconographic and hieroglyphic representations, and “grand” sites such as those in the Petén region, Willey et al. (1965:16; Willey 1973:103) have suggested that the Belize Valley’s relationship to the Petén was likely marginal.

The existence of numerous civic, and peripheral minor, centres within a restricted area and the apparent lack of a regional centre, suggests a less hierarchically defined existence within the Valley than in the Pétén (Ball and Taschek 1991:149; Golden and Conlon 1996:30). As has been mentioned by Garber (1994:39):

> despite the variability in size, these centres are positioned at extremely regular intervals along the valley. The distance between large centers in the west is the same as the distance between significantly smaller centers in the east - the interval being approximately 9.9 km. The regularity of this spacing strongly suggests that it was intentional.

Garber goes on to note that the only exception to this is the “major” centre of Buenavista,
which lies between Cahal Pech and Xunantunich. The lack of an acknowledged principal
centre, or power infrastructure, in the Belize Valley seems to have prevailed until the Late
Classic period (A.D. 600-900), when sociopolitical disparities in the Petén region incited
the differentiation and centralization of wealth and authority as far as the Valley (Ford
1991:35; Leventhal et al. 1993 in Golden and Conlon 1996:30). While some sites in the
Valley have occupations that date as far back as the late Early Formative period (1200 B.C.)
(i.e., Cahal Pech, see Healy and Awe 1995b:203), the majority of sites in the Valley
predominately have occupations that date to the Late Classic period (A.D. 600-900).

THE BELIZE VALLEY SITES AND THEIR BALLCOURTS

The following section will describe the sites within the Belize Valley that possess ballcourts
and provide information on the ballcourts.

**Actuncan (Cahal Xux)**

Actuncan was originally observed by Thomas Gann, who gave the site the name of
"Snake’s Cave" or Actuncan (Gann 1925:78 in Willey et al. 1965:316). The site was later
visited by Michael Stewart who evidently did not recognize its previous discovery, and
named it Cahal Xux (Place of the Wasps) (Willey et al. 1965:316). The site is located
approximately 1.5 to 2 kilometres north of Xunantunich, on a low hill near the Mopán
River (Willey et al. 1965:316; Leventhal 1994:3). Occupation on the Actuncan hilltop began
in the Middle Formative (900-300 B.C.), as is evident by massive construction episodes at
this locale. The majority of the site appears to have been abandoned around the close of the
Late Classic (A.D. 850), however, "occupation" of the "ritual acropolis" of Actuncan South
continued until sometime in the Terminal Classic period (A.D. 850-1000) (Leventhal
While considered a "minor" centre under Bullard's (1960) classification system, Actuncan more correctly falls under the class of a small to medium sized civic centre. Such an assessment is based on the existence of a series of features otherwise considered unusual for a "minor" centre. These features include several open plazas, large monumental architecture, carved (Willey et al. 1965:316) and plain stelae, a possible E-group, an elite residence compound (J. McGovern, personal communication, 1999), large Late Formative and Early Classic painted stucco masks and sculptured facades; and a ballcourt (McGovern 1994:121).

The Actuncan North Ballcourt is centrally located in Plaza C, within the site’s central precinct (Figure 2.4). The ballcourt complex runs on a north-south axis, and comprises Structures 13 and 14 (McGovern 1993:110; McGovern 1994:Fig. 1). The structures measure approximately 15 x 10 x 3 metres, with the playing alley measuring roughly 6-7 metres wide (after McGovern 1994:Fig. 1).

Excavations have revealed that the complex was erected in the Protoclassic period, with structural modifications involving the constriction of the playing alley occurring between A.D. 600-675 and again between A.D. 700-830 (McGovern 1994:114). Six floors were encountered in the playing alley area, dating between the Late Formative (300 B.C. - A.D. 1) and the Late Classic (A.D. 700-850). An earlier Middle Formative platform was located beneath the earliest floor (McGovern 1993:110). A cache associated with the final plastering of the playing alley was encountered in the centre of the alleyway, and intruded through the five earlier floors. The cache contained “at least two ceramic pots, perhaps heirlooms which dated to the Late Formative/Protoclassic, as well as a single bone which....may be of marine origin” (McGovern 1993:110). No ballcourt markers were identified in these excavations. Due to the absence of end structures, and the lack of
evidence suggesting a sunken court, the investigator has designated the Actuncan ballcourt as being of the open-ended variety (J. McGovern, personal communication, 1999).

While the playing wall was badly damaged prior to excavation and was thus not able to be securely assessed, the investigator believes that it was vertical, while the angle of the bench top was modified over time from a horizontal plane to a sloped one (J. McGovern, personal communication, 1999).

**Blackman Eddy**

Blackman Eddy (named after the neighbouring village of Blackman Eddy) is located 9.76 kilometres northeast of Baking Pot (Garber 1994:41), south of the Belize River on a hill overlooking an alluvial terrace (Garber et al. 1994:4). While considered a major site, Blackman Eddy is significantly smaller than the majority of such sites in the Valley (Garber 1994:39). Blackman Eddy was discovered in 1985 when a construction crew bulldozed a section of Group B (Garber et al. 1992:4). Despite its relatively small size, Blackman Eddy possesses many features typical of larger ceremonial or civic centres, including a site core that comprises twin plaza groups (Plazas A and B); an E-group complex; two 10 metre high structures; range structures; plain altar and stelae monuments, a portion of one which is carved; as well as a ballcourt (Garber et al. 1992:4-5; Garber et al. 1994:4) (Figure 2.5).

The Blackman Eddy ballcourt is composed of Structures A8 and A9, and is located in the southwest corner of Plaza A (Garber et al. 1994:Fig. 2). The western structure, Structure A8, is slightly larger than the eastern structure, measuring approximately 18 x 12 metres, while Structure A9 measures approximately 16 x 12 metres. The playing alley is roughly 6 metres wide (Garber et al. 1994: Fig. 2). The structures have been extensively looted. Excavations have been limited to the playing alley. No evidence of a playing surface was
detected nor a ballcourt marker or cached offerings (Garber et al. 1992:16). The architectural format of the range structures are unknown, as is its type. However, due to the presence of a structure (Structure A7) at the south end of the ballcourt, it is likely that this complex was a variant of the open-ended court. Dates for this complex have yet to be determined.

**Buenavista del Cayo**

The major site of Buenavista del Cayo (hereafter referred to as Buenavista) is located on the Valley floor, approximately half a kilometer east of the Mopán River. The site has been described as a “multi functional” centre that encompassed public and/or ritual protocols, as well as administrative and economic duties (Ball and Taschek 1991:151). It is perceived to have had a public orientation as characterized by its apparent “unrestricted access, open plazas, and easy internal circulation” (Ball and Taschek 1991:151) (Figure 2.6). While an elite-residential compound has been identified within the site core, additional residential data suggest that persons of lower tier elite, middle and low-status persons also inhabited the site (Ball and Taschek 1991:151).

Two ballcourts have been confirmed within the site core of Buenavista. The possible existence of a third ballcourt has been suggested by A. Chase based on a cursory examination of the mounds (J. Ball, personal communication, 1998). However, testing of this “structure” has revealed no indicative ballcourt features (J. Ball, personal communication, 1998). Ballcourt 1 is a north-south running, “I” shaped complex, located at the southeast corner of the main plaza. The structures measure approximately 22 x 10 metres, with the playing alley being roughly 7 metres wide (Ball and Taschek 1991:Fig. 2). The structures were made up of a vertical playing wall, and a sloping bench, both of which would have been plastered over. Due to erosion, ancient resurfacing episodes were not
detectable. Ballcourt 1 was erected in one phase of construction in the terminal Late Formative period (B.C. 50 - A.D. 100), and continued to be utilized until approximately A.D. 640-660 (as per radiocarbon dates) (J. Ball, personal communication, 1998).

A massive termination ritual concluded its use, with the complex being burned and vessels being smashed. Additionally, the central cache in the playing alley was evidently removed at this time (J. Ball, personal communication, 1998). The termination of the south ballcourt coincides with the erection of a pyramidal structure to its immediate north which appears to have served to “seal off” the ballcourt from the rest of the site core. Ballcourt 2 was also erected at this time and came to be the focus of ballcourt activities at Buenavista (J. Ball, personal communication, 1998).

Ballcourt 2 is a sunken “I” shaped ballcourt complex, located at the northeast corner of the site core. This complex was also erected in one phase of construction, has vertical playing walls, sloped benches, and runs on a north-south axis. An inset staircase was identified in the south end of the structures. The structures measure approximately 22 x 10 metres, with the playing alley measuring roughly 4–5 metres wide and 35-40 metres long (Ball and Taschek 1991:Fig. 2).

An unsealed central axis cache was located within the playing alley and was found to contain: two unslipped Hewlett Bank dishes placed lip to lip: jadeite ear flares: shell, slate and obsidian figures or silhouettes; and obsidian bloodletters. The silhouettes are apparently early in style, and some of the ceramic sherds included in the cache match a remnant sherd located in Ballcourt 1’s alley centre. This has led investigators to suggest that some of the objects in the Ballcourt 2 cache originally came from the central cache in Ballcourt 1, but which were then redeposited in the Ballcourt 2 cache upon its dedication. This latter cache was evidently reopened periodically, as obsidian hydration dates of some of the objects
within it range from A.D. 700 to 850 (J. Ball. personal communication, 1998). The ceramics from the core of the structures indicate that the complex was erected between A.D. 680 and 720, with obsidian hydration dates from the centre cache indicating dates between A.D. 700 and 720 (J. Ball. personal communication, 1998).

As was mentioned above, a third possible ballcourt exists at Buenavista. This complex is located in the centre of the site core and is composed of two north-south running parallel mounds, the eastern of which is significantly more rectangular than the squarish western structure. The structures measure approximately 22 x 10 metres and 20 x 20 metres respectively, with the area in between the structures measuring roughly 5 metres wide (Ball and Taschek 1991:Fig. 2). While many of the overt features of these structures, such as their distribution and their association with the site core, can be considered typical of most ballcourt complexes, the unusual differences in the size of the structures paired with the fact that test excavations revealed no obvious indication that the structures were components of a ballcourt complex, suggests that this was probably not a ballcourt (J. Ball, personal communication, 1998).

**Cahal Pech**

Cahal Pech is located on a limestone hilltop, proximate to the modern town of San Ignacio and roughly 1 kilometre from the Macal River. Occupation of Cahal Pech began as a hamlet during the close of the Early Formative period (1200-900 B.C.), and continued into the Late Classic period, by which time it had expanded into a civic-ceremonial centre (Ball and Taschek 1991:151; Healy and Awe 1995a:3; Cheetham 1996:1). The site is composed of seven plazas encircled by both high-level elite residences and public-oriented structures of socio-ceremonial, funerary and devotional natures and is comparable in size to Baking Pot (Figure 2.7) (Ball and Taschek 1991:151; Healy and Awe 1995a:3). A number of plain
*stelae* have also been identified at the site.

There are two ballcourts at Cahal Pech, each of which is located along the site's east-west axis, at the site perimeter. The western ballcourt (WBC) is situated at a recessed locale off the main acropolis, while the eastern ballcourt (EBC) is located in Plaza C. The EBC is the larger of the two courts, and is composed of two parallel 15.9 x 12 x 4.5 metre range structures (Structures C4 and C5), and an approximately 22 x 4 metre wide playing alley (Awe 1992:150; Ferguson et al. 1996:Fig. 1, 36). Based on the absence of opposing end structures or a sunken court, the EBC has been designated as an open ended ballcourt (Ferguson et al. 1996:36). Nonetheless, it is possible that the EBC may represent an enclosed court. Plaza C, in which the complex is centrally housed, defines the area of the complex fairly specifically. Structure C6 defines the south end of the plaza, and may define the south end of the playing field or end zone. Plaza D to the north is at an elevated height, and thus its sides may have served to define the north end of the playing field, and thus the complex may have been a variant of the enclosed "I" court type. Further excavations are required to substantiate this hypothesis.

Excavations of Structure C5 revealed a clear profile of the EBC, and found that it consisted of a low sloping bench face, a slightly sloping, roughly 2.6 metre wide bench top, and a playing wall that was at an approximately 80 degree angle. Ceramic and architectural data indicated that the EBC was built in the Late Classic period, in one phase of construction. Four bench replastering events were recognized, indicating that the complex was heavily used (Ferguson et al. 1996:Fig. 2, 38-40). Unfortunately, data retrieval was hindered at the upper reaches and summit zone of Structure C5 due to excessive root destruction and a large looter's trench. Thus, the existence of a masonry or perishable superstructure could not be determined (Ferguson et al. 1996:36, 40). One playing alley floor that extended
beyond the range structures was identified (Ferguson et al. 1996:42). The EBC appears to be an open-ended "I" type of ballcourt complex.

The WBC is located at the western base of the main acropolis, and is composed of Structures H1 and H2. The ballcourt playing alley is noted as measuring 21.6 x 3 metres, with the structures measuring approximately 2 metres high (J. Ball, personal communication. 1995). Map based measurements suggest the WBC's structures are approximately 15 metres in length, and roughly 8 metres wide (Ferguson et al. 1996:Fig. 1). A sketch plan of one of the WBC's structures indicates that the bench face was vertical, with a more-or-less horizontal bench top, and a more or less vertical playing wall (sketch map in possession of author). Excavations revealed that the WBC was erected in one phase of construction around 800-850 A.D (J. Ball, personal communication, 1995). The WBC excavations have not yet been published. Based on the absence of structures at either end of the playing alley, it is likely that the WBC is an open-ended court.

While no ballcourt markers were unearthed from either ballcourt at Cahal Pech, the EBC did have cached offerings within the alley in the areas where markers are normally located, i.e., the centre and end zones. Cached objects included a dense concentration of ceramic sherds and chert objects, mainly tools, at the north and central locales. In addition, the central offering included five obsidian eccentrics, a small collection of marine and freshwater shells, and the remains of two sacrificed children (Ferguson et al. 1996:47).

**El Pilar**

El Pilar is located approximately 12 kilometres north of San Ignacio, approximately 340 m a.s.l. (Ford 1998, http://alishaw.sscf.ucsb.edu/~ford/siteback.html). The centre is composed of three main groups, two of which are connected by a *sacbe*, similar to that at
Baking Pot. El Pilar has a large number of courtyards, 25 in total (Figure 2.8) (Ford 1991: Wernecke 1994:27; Ford 1998, http://alishaw.sscf.ucsb.edu/~ford/siteback.html). and is said to be two or three times the size of Baking Pot, making it possibly the largest site recorded in the Belize Valley (Ford 1991:40; Wernecke 1994:29; Ford 1998, http://alishaw.sscf.ucsb.edu/~ford/siteback.html). The site straddles the Belize/Guatemalan border, with one of the site’s groups, Pilar Poniente, located in Guatemala, while the Xaman Pilar (in the north) and Nohol Pilar (in the south) groups are located on the Belizean side. Dating of the site is understood to span from its initial occupation in the Middle Formative into the Early Postclassic (Wernecke 1994:29; Ford 1998, http://alishaw.sscf.ucsb.edu/~ford/siteback.html). Both Nohol Pilar and Pilar Poniente contain ballcourts. However, very little is known about either, especially of the court located in Pilar Poniente. Both of the El Pilar ballcourts are north-south oriented and the playing alleys are sunken (A. Ford, personal communication, 1997).

The ballcourt located in Plaza Copal of the Nohol Pilar group is relatively small, and is said to be similar in size to that located next to Temple 1 at Tikal (A. Ford, personal communication. 1997). The complex is composed of Structures EP5 and EP6, and the central playing alley. The structures measure approximately 19 x 7 metres (Ford 1995 in Scarborough 1991b:Fig. 7.3), with the playing alley measuring roughly 10 metres wide (Trail Guide map). While the range structures of this complex have not been excavated, evidence from a looter’s pit did suggest its inception was sometime during the Formative period. Evidently this early court featured a vertical playing wall. While refurbishings were visible, no major subsequent changes in the architecture were able to be recognized, although the area continued to be used throughout the terminal Classic period (A. Ford, personal communication, 1997; Scarborough 1991:Fig. 7.1). Excavations in the centre of the playing alley revealed four plaster flooring episodes, and the recognition that this
complex possessed a sunken playing alley, the final surface of which was 1 metre below its associated architecture (Ford et al. 1996:14-15). Excavations also revealed a Middle Formative structure predating the ballcourt complex below the first playing alley floor (Ford et al. 1996:14-15; A. Ford, personal communication, 1997). No centrally cached offerings or ballcourt markers were unearthed here.

The ballcourt at Pilar Poniente is the larger of the two courts at El Pilar. Because this complex has not been excavated or looted, virtually nothing is known about its temporal position or its architectural profile. However, it is understood to be a sunken “I” shaped court, with the southern end molding into the natural topography (A. Ford 1997, personal communication, 1998). The playing alley measurements of this court are noted as being approximately 8 metres wide by 54 metres long from the furthest extent of the I. The north end of the I is approximately 28 metres wide. The structures are said to be roughly 10 metres long (A. Ford, personal communication, 1998).

**Las Ruinas de Arenal**

Nothing has been officially published on Las Ruinas de Arenal, and information on this site and its ballcourt is very limited. The site is located approximately 3.5 kilometres south-west of the modern town of Benque Viejo, in the foothills of the Vaca Plateau (Ball and Taschek n.d.:1). The site is composed of four apparent groups, three of which are connected by *sacbeob*, and a peripheral scattering of household type structures. While distinguished as a major centre by the most recent investigators (Ball and Taschek n.d.:1). Las Ruinas is in my estimation better defined as a small, or medium-sized centre. It possesses four uncaved *stelae* and altars, *sacbeob*, an *audiencia*, an elite-status residential group, two pyramidal platforms and a ballcourt (Ball and Taschek n.d.:2) (see Figure 2.9). Excavations and looter’s trenches have indicated that the site’s occupation appears to have been continuous,
spanning from the Middle Formative period to the Terminal Classic period (Ball and Taschek n.d.:5 and 9).

The ballcourt at Las Ruinas de Arenal is located in Group A, and is composed of Structures 10a and 10b. While the complex has yet to be excavated, large looter's trenches (which have essentially gutted the structures) have furnished an assortment of ceramics encompassing the Classic period (J. Ball, personal communication, 1998). Evidently the complex was first erected in the Early Classic (A.D. 420-540) at the time of a major rebuilding episode. While the complex is said to have undergone a second phase of construction during the Late Classic (A.D. 730-900) (J. Ball, personal communication, 1998), the structural details of either phase construction are not known at this time. The Las Ruinas complex is a north-south running court. Due to the absence of structures at either end of the playing alley, it is likely that this complex is of the open-ended type.

**North Caracol Farm**

The "minor" site of North Caracol Farm (hereafter referred to as NCF) is located approximately 2 kilometres east of Baking Pot on the southern bank of the Belize River. The site has yet to be the subject of extensive examination and has, unfortunately, recently undergone disturbance due to current agricultural practices and general deterioration (Conlon 1995b:97; Golden and Conlon 1996:19). Excavations have not yet been conducted at NCF. Surface collections from the site include ceramic wares dating as early as the late Middle Formative period (B.C. 900-A.D. 300) all the way through the late facet of the Postclassic period (1150-1500 A.D.) (Golden and Conlon 1996:30). The site is peculiar in that it possesses architectural structures not considered typical of a minor centre, such as a *sachbe* and a ballcourt.
The site of North Caracol Farm is composed of a grouping of approximately 30 mounds, at the northern end of which are Structures NCF-M12 and NCF-M13, two parallel mounds understood to be those of a north-south running ballcourt (Golden and Conlon 1996:20). The dimensions of the ballcourt are quite small, as the alley way is only 2 metres wide, and the structures measure approximately 5 x 3 metres. However, their roughly 2 metre height is typical of larger ballcourts (Golden and Conlon 1996:25). Based on the absence of end structures, and no visible indications that the playing alley was sunken, this complex is postulated to have been of the open-ended type (J. Conlon, personal communication, 1998). A surface collection of ceramic sherds has indicated to investigators that the NCF-M12 and NCF-M13 “date almost exclusively to the Late and Terminal Classic periods” (Golden and Conlon 1996:25). The small size of the complex, and the predominance of Late Classic ceramic sherds associated with NCF-M12 and NCF-M13, has suggested to investigators that the ballcourt was likely erected in one phase of construction.

**Ontario Village**

The Ontario Village site is another of the minor centres within the Belize Valley that contains a ballcourt. The site is located roughly 14 kilometres downstream from Baking Pot, on a flood plain on the southern bank of the Belize River (Ball and Taschek 1991:161; Driver and McWilliams 1995:27). Whether or not Ontario Village was subordinate to another site in the Valley or was an autonomous community is unknown. However, the site is located equidistant between the major site of Blackman Eddy and the large centre of Camelote (Driver and McWilliams 1995:43). It is apparent that the site had a relatively short existence, as ceramic evidence indicates the site was constructed sometime in the Late Classic period and abandoned in the Terminal Classic or early Postclassic (Garber et al. 1994:10; Driver and McWilliams 1995:43, 42).
The central precinct of Ontario Village comprises two plaza groups, Plazas A and B. Plaza A is defined by several range-type structures, and possesses a 5.5 metre high eastern shrine structure (Figure 2.10) (Driver and McWilliams 1995:27). The ballcourt complex defines the western end of Plaza A, with the eastern structure (Structure A3) abutting Plaza A and essentially serving as a physical barrier between plazas (Garber et al. 1994:13; Driver and McWilliams 1995:35). A low platform abuts Structure B1 on its north end (Structure B2), but does not form an end structure to the complex. Structure B1 is taller than A3, measuring 2.8 metres above the alley floor, while Structure A3 measures 2 metres above the alley (Garber et al. 1994:13; Driver and McWilliams 1995:35). Measurements of Structures A3 and B1 taken from a map of the site core indicate that Str. A3 is about 15 metres long and 8.1 metres wide, while Structure B1 measures approximately 15 x 9.4 metres (after Driver and McWilliams 1995:Fig. 3.1). The playing alley measures roughly 5 metres wide, while its full length is unknown. The ballcourt runs on a north-south axis and, due to the absence of end-structures, it is suggested that this court is of the open-ended variety.

Excavations revealed that the Ontario Village ballcourt consisted of a sloped bench, and vertical playing and apron walls (Driver and McWilliams 1995:36-37). Excavations of the summit of Structure B1 did not reveal a masonry or perishable superstructure (Garber et al. 1994:13; Driver and McWilliams 1995:35). The complex was built in one phase of construction during the Late Classic period, and only had one 2 cm thick replastering event occurring throughout its history (Driver and McWilliams 1995:37). No central cached offering or marker was unearthed during excavations.

**Pacbitun**

Pacbitun is located approximately 8 kilometres from the Macal River, and roughly 3
kilometres east of the modern Maya village of San Antonio. The site is unique in that it is positioned at the interface of two ecological zones, the upland Pine Ridge and the Lowland tropical forest. The fortunate location of the site allowed the community in ancient times to have access to a diversity of natural resources, ranging from agriculturally fertile soils to calcareous limestone deposits (Healy 1990:247). Consisting of three major, centralized plazas (Plazas A, B and C), and two adjacent plazas (Plazas D and E), Pacbitun is considered a medium-sized civic centre. The site core consists of at least 40 structures, including an E-group complex, vaulted superstructures, elite residences, plain and carved stelae and altars, two sacheob, and a ballcourt (Figure 2.11) (Healy 1990).

The ballcourt at Pacbitun is situated in Plaza E, north of Plaza A, and is composed of Structures 14 and 15 (Healy 1990:Fig. 3, 252-253; Healy 1992:229, Fig. 2). The ballcourt complex is understood to be an open ended court. Structures at the south and northern ends, however, could potentially have had a role in the ballgame played here. The structures measure approximately 17.5 x 10.3 x 3.5, with the alley way being roughly 4.8 metres wide (Healy 1992:229). Excavations revealed that the Pacbitun ballcourt had four major construction episodes, and a series of replastering events.

The first phase of ballcourt construction was the erection of the range structures in the Late Formative period (100 B.C. - A.D. 300) (Healy 1992:233). Modifications to the structures in the Early Classic period (A.D. 300-550) included a series of thick replasterings that subsequently raised the structures an additional 20 centimetres (Healy 1992:234). The structural profile of the ballcourt during both of these phases of construction consisted of a relatively high sloping bench face, a horizontal bench top, and a sloping playing wall (Healy 1992:Fig. 4). The third phase of construction took place between A.D. 550-700. This involved raising the summit of the structures through a series of replasterings, as well
as a radical modification of the morphology of the playing wall. A roughly 1 metre high vertical wall was built at this time, replacing the earlier sloped playing wall (Healy 1990:253; Healy 1992:234). The final phase of construction occurred in the Late Classic period between A.D. 700 and 900, and involved the addition of a platform on the summit of the structure. It has been hypothesized that these platforms supported a superstructure which unfortunately was undetectable during excavations. Spectators may have observed the game from the north edge of adjacent, elevated Plaza A (Healy 1992:235).

Three alleyway floors were identified during excavations (Healy 1992:Fig. 4). While no cached offerings or ballcourt markers were unearthed in the centre of the playing alley, a cached offering was located east of Structure 15, below Plaza E, floor 2 that dated to the Early Classic period. The cache consisted of two vessels placed lip to lip and containing: 184 unaltered jute shells; lithic, bone and shell objects, including a jade bead, a green obsidian bipoint, a basalt celt, a stingray spine, and objects of thorny oyster and Strombus shells (Healy 1992:234).

X-ual-canil

The large "minor" centre of X-ual-canil is situated high on a limestone ridge in the foothill zone, on the east side of the Macal River, near Monkey Falls, approximately 3 to 4 km east of the major centre of Cahal Pech (Iannone 1995b:9; 1997:4). X-ual-canil was initially visited and named Cayo Y, by Willey et al. (1965:313) in the mid 1950s. The Belize Department of Archaeology later changed the name of the site to X-ual-canil, which in Yucatec Maya means "fly-brush" (Roys 1931:291), a plant which today covers the site (Iannone 1995a:29). Willey et al. (1965) were also the first to label the site a "minor ceremonial centre". The site is composed of two plaza groups and includes a 363 metre long sacbe which leads to a solitary eastern structure (Figure 2.12) (Schwake 1997:63). X-
ual-canil is unusual in that residential structures are virtually absent, and yet it possesses such features typical of major centres as: monumental architecture; *sacbe*; a *stela/altar/shrine complex, and a ballcourt (Ferguson 1997:39).

Designation of the ballcourt complex at X-ual-canil was tentatively made during reconnaissance at the site in 1995 (Iannone 1995a; Ferguson 1997:39). The complex is recessed from the 3.5 metre high central plaza at its southeast corner. Structure 8A measures approximately 14 x 5 x .99 metres, while Structure 7A measures roughly 12 x 7 x 1.05 metres (Ferguson 1997:39, fig. 4). The playing alley measures about 5 metres wide. Due to the virtual absence of playing alley evidence (bedrock was encountered directly below the humus layer), it was impossible to determine what type of court this complex possessed. No cached offerings or ballcourt markers were unearthed (Ferguson 1997:44). The north end of the complex abuts the acropolis and, thereby, serves to terminate the playing alley rather abruptly, similar to that of Ballcourt 1 at Xunantunich. It is likely that this ballcourt was a variant of the open-ended type.

Despite severe preservation problems, excavations determined that the complex was built in one phase of construction in the Late Classic (Ferguson 1997:51). A profile of the X-ual-canil ballcourt structures revealed a vertical bench face, a 70 degree angle bench top, and a relatively low, or short, vertical playing wall (only two or three courses high) (Ferguson 1997:44). Due to the low height of the structures, it is unlikely that masonry or perishable superstructures were located atop the structures. No evidence of perishable superstructures in the form of postholes or daub was identified. It is likely that spectators instead viewed the game from the edges of the adjacent elevated plaza (Ferguson 1997:46).
Xunantunich

Xunantunich is located on a high, culturally modified hilltop along the Mopán River, approximately 1 to 2 kilometres from the Guatemalan border. Ceramic evidence from Xunantunich indicates that the occupation of the hilltop began as early as the Middle Formative period, however, no in situ early architecture has been unearthed (Ball and Taschek 1991:151; LeCount 1994:170; Leventhal 1994:2). Intermittent occupation of the hilltop continued until sometime in the Late Classic period (between A.D. 650-830) when a series of major construction episodes were first initiated. These construction events proceeded into the Terminal Classic (A.D. 830-1000), transforming the hilltop community into a large "civic" centre. Gradually the site came to be the focus of administrative, socio-political, and ritual activities, as well as a residence for elites (Ball and Taschek 1991:151; Leventhal 1994:3). The central precinct of Xunantunich comprises a large central plaza (Plaza A) which was divided by the erection of Structure A-1. The architectural character of the site core includes: an E-group, palace and pyramidal structures, including a massive 50 metre high building; range-type structures; sacbeob; plain and carved stelae and altars. and two ballcourts (Figure 2.13).

Leventhal et al. (1993) and Ashmore (1993:13) (both in LeCount 1994:171) suggest that Xunantunich’s zenith was the result of increased instability and competition in the Valley during the Late Classic. They further propose that the instability was due in part to the decline of Buenavista. Xunantunich may have had connections with northern Yucatán in the Terminal Classic - Early Postclassic period, as Structure 20 exhibits columns executed in a style associated with the Puuc region. While the affiliation with the north is significant on its own, it also indicates that Xunantunich was occupied for an extended period, and during a time when most sites in the Belize Valley, and the Maya Lowlands in general, had been
abandoned (Leventhal 1994:2).

The “main” ballcourt complex at Xunantunich is located just west of the southern half of Plaza A. and comprises Structures A-19 on the west, and A-18 on the east. Structure A-18 abuts Structure A-7, which faces onto the main plaza. Another structure (whose designation is unknown) abuts the entire complex at its northern end. The playing alley measures approximately 4 metres wide, while the eastern structure measures roughly 10 x 8.5 metres, and the west measures 10 x 7 metres. Additionally, it runs slightly west of north-south axis (Jamison and Wolf 1994:Fig. 1). An investigation of this complex was initiated in 1978, however, excavations revealed that most of the architecture had been destroyed. A thin playing alley floor was detected directly over a culturally modified bedrock foundation. No centrally placed marker or cached offering was unearthed (Graham 1978:7). The structural profile of the complex remains uncertain. Due to the presence of the structure abutting the complex at its north end, it is likely that this ballcourt was a variant of the open-ended type, similar to the ballcourt at X-ual-canil.

The second ballcourt at Xunantunich is located within Plaza A and is composed of Structures A17 and A22. Both structures are attached to other structures. Structure A22 is attached to the backside of Structure A1, while Structure A17 abuts Structure A8 at its south end. Structure A22 was not recognized initially. It was only through the recent recognition of the odd shape of Structure A1’s western side that Structure A22 was identified, and considered to have been an addition to Structure A1 (Leventhal 1994:4). Excavations revealed that it was not Structure A22 that was the addition, but rather Structure A1. Evidently, between A.D 700-830, the inhabitants of Xunantunich decided to divide the main plaza in two, thereby restricting access to the southern half of the plaza by erecting a massive new structure. The erection of Structure A1 also turned the Structure
A17 and Structure A22 ballcourt complex into a viable entrance way (Jamison and Wolff 1994:29).

Structures A22 and A17 are approximately 15 metres long, 10 metres wide, and 4.5 metres high, with the playing alley measuring approximately 5.5-6 metres wide (Jamison and Wolff 1994:Figs. 1 and 2. 32-33). The ballcourt was defined by a sloping bench face which met with an approximately 3 metre wide, likely level, bench top (Jamison and Wolff 1994:32-33). The form of the playing wall, unfortunately, remains uncertain, due to erosion. The number of playing alley floors is also uncertain, though there definitely was more than one. In the absence of defined end zones, and a sunken court, it would appear as though this ballcourt complex was of the “open ended type”.

No ballcourt markers were discovered during excavations of either court. A cached offering consisting of fragments of unworked slate, an abundance of jute shells, and a collection of poorly preserved human skeletal remains, presumably associated with a burial, was unearthed in the Str. A22 and Str. A17 complex. Ceramics from the burial date from the Middle Formative to Late Classic periods (Jamison and Wolff 1994:32). While the majority of sherds from this ballcourt complex are associated with the Middle Formative period, some Late Classic sherds were encountered within the earliest levels (Jamison and Wolff 1994:31). Evidently this complex was erected in a late phase of construction.

DISCUSSION

While investigations at many of the Belize Valley sites have been limited, and ballcourt architectural data and/or site maps are not necessarily available, a brief synopsis of the ballcourts within the Belize Valley can be offered.
There are a total of 28 centres recorded in the Belize Valley. Of these, 12 sites reportedly have one or more ballcourts associated with them (Figure 2.14). Only two of the 11 major sites in the valley, Tipu and Camelote, do not have ballcourts. Additionally, three of the minor sites have ballcourts, an uncommon feature within the Maya Subarea. In total, 18 ballcourts, a fairly large number, are known from the Belize Valley. Despite the presence of centres within the Belize Valley with early origins, relatively few have ballcourts that date earlier than the Late Classic (see Table 2.1).

Of those sites in the Belize Valley for which dates are known, El Pilar (A. Ford, personal communication. 1997), Pacbitun (Healy 1990, 1992), Actuncan (McGovern 1993, 1994) and Buenavista (J. Ball, personal communication, 1998) have ballcourts with a Late Formative component (300 B.C.-A.D. 300). Of the remaining courts for which age determinations have been made, all are said to have been built in the Late Classic period (A.D. 600-900), or have construction phases that date to the Late Classic. The fact that only one ballcourt in the Valley, that of the Las Ruinas Ballcourt, is confirmed to have begun in the Early Classic Period (A.D. 300-600) coincides with a recognized construction hiatus elsewhere in the Valley at this time (Ferguson 1995:83; J. Ball, personal communication 1998). This reinforces the suggestion that the ballgame did not reach its florescence in the Maya Lowlands until the Late Classic (Smith 1961:104; Cohodas 1978:87; Leyenaar and Parsons 1988:72; Scarborough 1991a:125; Ferguson 1996:50).

In terms of the architectural format of ballcourts in the Belize Valley, there does not seem to be a norm. Some courts have vertical playing walls: the Late Classic component of the ballcourt at Pacbitun (Healy 1992); Actuncan (J. McGovern, personal communication, 1999); Ontario Village (Driver and McWilliams 1995:36-37); El Pilar (A. Ford, personal communication, 1997); X-ual-canil (Ferguson 1997); WBC at Cahal Pech (J. Ball,
personal communication, 1995); Buenavista (J. Ball, personal communication, 1998); and the two earliest phases of the Group I ballcourt at Baking Pot (see chapter 3). Other Valley courts possess sloping playing walls: EBC at Cahal Pech (Ferguson et al. 1996); Structures A17 and A22 at Xunantunich (Wolff and Jamison 1994:31); NBC at Cahal Pech: terminal phase Plaza I and Group II ballcourts at Baking Pot (see chapter 3); and the Late Formative component of the Pacbitun ballcourt (Healy 1992). Benches also differ in morphology. Some have horizontal tops: WBC at Cahal Pech (J. Ball, personal communication, 1995), and the Pacbitun ballcourt (Healy 1992). The majority of ballcourts in the Valley have sloping bench tops of varying inclines. The format of benches and playing walls of the ballcourts within the Valley does not seem to be temporally sensitive, as both types of playing walls appear during the Late Formative and Late Classic periods.

Because few ballcourts in the Belize Valley have actually been excavated, the classification of many, if not most, Valley ballcourts remains difficult. This is in part because some of them do not conform to the standard court typologies created by Smith (1961), Clune (1963) or Taladoire and Colsenet (1991). Nonetheless, in most cases researchers can determine basic type-forms, such as whether or not a court was open-ended or enclosed. Ballcourts in the Maya Lowlands are typically open-ended (Scarborough 1991b:134, 137). This seems to be the case in the Belize Valley, judging from the lack of end zone structures. However, other types do exist as well. For instance, ballcourts at both El Pilar (A. Ford, personal communication, 1997) and Buenavista (J. Ball, personal communication, 1998) are sunken courts, a type which is considered a variant of the enclosed court category (Clune 1963:13). The X-ual-canil ballcourt and Ballcourt No. 1 at Xunantunich do not match court types in Clune’s (1963), Smith’s (1961) or Taladoire and Colsenet’s (1991) typology, as the north ends of both of these courts have structures abutting them. Such courts may represent a variant of the open-ended ballcourt type. All of these data are
displayed in Table 2.1.

Whereas some of the variability between courts from the Valley and elsewhere in the Maya subarea may simply reflect local preferences, some of the differences noted may reflect different forms of play, different types of games, or even different reasons for playing (Stern 1949:35; Ritman 1968:40; Taladoire and Colsenet 1991:162; Acosta 1940 in Clune 1963:6; Healy 1992).

Santley et al. (1991:17-18) have suggested that the number of ballcourts within a centre may reflect the socio-political situation within an area. Following their thinking, the more centres with ballcourts located within a restricted area, the more politically decentralized was the area. Because not all sites have ballcourts, and some “minor” Belize Valley sites have courts, “it would seem logical to assume that the presence or absence of a ballcourt, as well as the number of ballcourts at a given site reflects that community’s place in the socio-political hierarchy of the region” (van Tuerenhout 1991:65).

The orientation norm for ballcourts in the Belize Valley, and in the Maya Lowlands in general, is north-south. Examples of east-west oriented ballcourts have been found at: Seibal, Quiriguá, Río Bec and Balakbal, Kohnunlich and Baking Pot (Scarborough 1991b:138). Courts from the coastal Lowlands, the Valley of Guatemala, and in Highland Chiapas and Guatemala do, however, predominantly run east-west (Leyenaar and Parsons 1988:37, 38). Cohodas (1975:117, 118) has suggested that north-south oriented ballcourts may symbolize the surface of the earth, while east-west running courts may represent Xibalba, or the underworld. He further notes that each of the cardinal directions has an association with either an equinox (east and west) or a solstice (north and south), and that south is associated with day, north with night, west with sunset, and east with sunrise (Cohodas 1975:105). When considering the role of the ballgame, these symbolic
associations are important to recognize in terms of the orientation of a given ballcourt, but also in terms of the locale of the ballcourt at a site.

Despite the variations in court types and design, regularities do exist in their construction profiles, relative measurements, placement at a site, and in their cardinal orientation. Such customary features suggests some form of game standardization (Stern 1949:35; Leyenaar and Parsons 1988:71; Scarborough 1991b:137; Healy 1992:237). Thus, ballcourts that stray from even some of these basic regularities, as do the courts at Baking Pot (see chapter 3), add another dimension to the question of the role of the ballgame within Precolumbian Maya society.

**SUMMARY**

This chapter has provided a brief examination of the geographical and geological setting of the Belize Valley. Additionally, a brief overview of what is known about the history of the ancient Maya in the Valley is given and 12 of the known archaeological centres and their ballcourts are described. The data in this chapter have shown that while there may be consistency in the location (both at the inter- and intra-site level) and general composition of ballcourt complexes, variations in the numbers of courts, dimensions, architectural composition and temporal sequence between sites in the Belize Valley are conspicuous. Recognition of these continuities and variations will serve to complement and facilitate an examination of the ballgame at the civic centre of Baking Pot, as evidenced through the analysis of its ballcourts.
Figure 2.1 Map of the Maya Subarea.
Figure 2.2. Map Showing the Location of Major Sites in Belize (after Awe 1992).
Figure 2.3: Archaeological Sites in the Belize Valley
Figure 2.4. Map of Actuncan Illustrating the Ballcourt (after McGovern 1993:Fig. 1).
Figure 2.5. Map of Blackman Eddy Illustrating the Ballcourt (after Garber et al. 1993:Fig. 2).
Figure 2.6. Map of Buenavista Illustrating the Ballcourts (after Ball and Taschek 1991:Fig. 2).
Figure 2.8. Map of El Pilar Illustrating Ballcourts (map provided by A. Ford 1998).
Figure 2.9. Map of Las Ruinas de Arenal Illustrating the Ballcourt (map provided by J. Ball 1998).
Figure 2.10. Map of Ontario Village Illustrating the Ballcourt (after Driver and McWilliams 1995:3.1).
Figure 2.11. Map of Pacbitun Illustrating the Ballcourt (after Healy 1992:Fig. 2).
Figure 2.12. Map of X-ual-canil Illustrating the Ballcourt (after Ferguson 1997:Fig. 2).
Figure 2.13. Map of Xunantunich Illustrating Ballcourts (after Jamison and Wolff 1994:1).
Figure 2.14: Belize Valley Sites With Ballcourts.
<table>
<thead>
<tr>
<th>Major Sites</th>
<th># of Courts</th>
<th>Range Dimensions</th>
<th>Alley Dimensions</th>
<th>Date</th>
<th>Bench</th>
<th>Bench Face</th>
<th>Playing Wall</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuncan</td>
<td>1</td>
<td>15x10x3.3m</td>
<td>7x7m</td>
<td>ProC-L.C</td>
<td>SI.</td>
<td>??</td>
<td>V</td>
<td>Open</td>
</tr>
<tr>
<td>Baking Pot</td>
<td>3</td>
<td>1) 19x10x3.4m</td>
<td>19x3.15m</td>
<td>L.C</td>
<td>SI.</td>
<td>SI.</td>
<td>SI. SI.</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2a) 19x-x2m</td>
<td>?</td>
<td>?</td>
<td>II</td>
<td>V</td>
<td>V</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2b) 19x-x2m</td>
<td>?</td>
<td>?</td>
<td>SI.SI.</td>
<td>V</td>
<td>SI.SI.</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2c) 19x-x2m</td>
<td>?x4.5m</td>
<td>L.C</td>
<td>SI.</td>
<td>?</td>
<td>SI.</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) 20x10x1.64m</td>
<td>20x12.5x1.57m</td>
<td>?x5.5m</td>
<td>L.C</td>
<td>SI.SI.</td>
<td>SI.SI.</td>
<td>Open</td>
</tr>
<tr>
<td>Blackman Eddy</td>
<td>1</td>
<td>18x12x7m</td>
<td>?x6m</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Open variant (?)</td>
<td></td>
</tr>
<tr>
<td>Buena Vista</td>
<td>2</td>
<td>1) 22x10x7m</td>
<td>?x7m</td>
<td>L.F-L.C</td>
<td>SI.</td>
<td>?</td>
<td>V</td>
<td>Open &quot;I&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) 22x10x7m</td>
<td>35-40x4-5m</td>
<td>L.C</td>
<td>?</td>
<td>?</td>
<td>Encl/Sunken &quot;I&quot;</td>
<td></td>
</tr>
<tr>
<td>Cahal Pech</td>
<td>2</td>
<td>1) 15.9x12x4.5m</td>
<td>22x4m</td>
<td>L.C</td>
<td>SI.</td>
<td>SI.</td>
<td>SI.SI.</td>
<td>Open, (Encl?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) 15x8x2m</td>
<td>21.6x3m</td>
<td>L.C</td>
<td>H</td>
<td>V</td>
<td>V</td>
<td>Open</td>
</tr>
<tr>
<td>El Pilor</td>
<td>2</td>
<td>1) 19x7x7m</td>
<td>?x7m</td>
<td>F-T.C</td>
<td>?</td>
<td>?</td>
<td>V</td>
<td>Encl/Sunken</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) 10x2x7m</td>
<td>54x8m</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Encl/Sunken 1</td>
<td></td>
</tr>
<tr>
<td>Las Ruinas</td>
<td>1</td>
<td>12.5x10x2m</td>
<td>?</td>
<td>H.C-L.C</td>
<td>?</td>
<td>?</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Pachitun</td>
<td>1</td>
<td>1a) 17.5x10.3x2.8m</td>
<td>?x4.8m</td>
<td>L.F-E.C</td>
<td>H</td>
<td>SI.</td>
<td>SI.</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1b) 17.5x10.3x3.5m</td>
<td>?x4.8m</td>
<td>E.C-L.C</td>
<td>H</td>
<td>SI.</td>
<td>V</td>
<td>Open</td>
</tr>
<tr>
<td>Xunantunich</td>
<td>2</td>
<td>1) 10x8.5x7m</td>
<td>?x4m</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Open variant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10x7mx7m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) 15x10x4.5m</td>
<td>?x5.5-6m</td>
<td>MF-L.C</td>
<td>H</td>
<td>SI.</td>
<td>?</td>
<td>Open</td>
</tr>
</tbody>
</table>
### Table 2.1: Belize Valley Ballcourt Data (continued)

<table>
<thead>
<tr>
<th>Minor Sites</th>
<th># of Courts</th>
<th>Range Dimensions</th>
<th>Dimensions</th>
<th>Alley Date</th>
<th>Bench</th>
<th>Bench Face</th>
<th>Playing Wall</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC'F</td>
<td>1</td>
<td>5x3x2m</td>
<td>?x2m</td>
<td>LC/TC (?)</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Open</td>
</tr>
<tr>
<td>Ontario Village</td>
<td>1</td>
<td>15x8.1x2m</td>
<td>?x5m 15x9.4x2.8m</td>
<td>LC</td>
<td>SL</td>
<td>V</td>
<td>V</td>
<td>Open</td>
</tr>
<tr>
<td>X-ul-canil</td>
<td>1</td>
<td>14x5x.99m 12x7x1.05m</td>
<td>?x5m</td>
<td>LC</td>
<td>SL</td>
<td>V</td>
<td>V</td>
<td>Open variant</td>
</tr>
</tbody>
</table>

**Legend**

*Open* = Open-ended 
*Encl.* = Enclosed court 
*"I"* = "I" shaped playing alley  
*SL = Sloped*  
*SLS/L = Slightly Sloped*  
*V = Vertical*  
*H = Horizontal*  
*MF = Middle Formative*  
*LF = Late Formative*  
*I* = Formative  
*ProCl = Protodassic*  
*EC = Early Classic*  
*L'C = Late Classic*  
*TC = Terminal Classic*
Chapter 3

THE MAYA CIVIC CENTRE OF BAKING POT AND ITS BALLCOURTS

INTRODUCTION

While not necessarily unique in its general configuration in comparison to other "major" sites in the Belize River area, Baking Pot is unusual in that it possesses three ballcourts. One of these ballcourts is recognized as the only east-west running court identified in the Valley, while another possesses evidence for the only ballcourt marker presently known in the Belize Valley. This chapter will explore the Maya civic centre of Baking Pot, and will examine the characteristics of its ballcourts and the excavations initiated in each complex.

BAKING POT

The site of Baking Pot is located in the Cayo District of Belize, approximately 8 to 10 kilometres east of the town of San Ignacio, between the Precolombian major centres of Cahal Pech and Blackman Eddy (Figure 3.1). Situated about 250 meters from the southern bank of the Belize River (Ricketson 1931:3, 24; Bullard and Bullard 1965:7; Moore 1997:47), the site is easily accessible by riverine travel, and is only 20 kilometers downstream from Cahal Pech, and between 170-200 kilometers west of the Caribbean sea via the river (Moore 1997:47; Willey et al. 1965:23). Baking Pot is located on lands presently owned and utilized as open pasture by the Belize Department of Agriculture (Bullard and Bullard 1965:7). As a result of its current use as pasture land, few treed areas occur at the site, and thus recent damage to the structures has been minimal. It appears that the site's location on government property, in addition to its close proximity to a modern
military base, has aided in protecting the site, because looting has not yet been reported.

Having been classified as a “regal-ritual” (Ball and Taschek 1991:158), “ceremonial” or “major” centre (Willey et al. 1965:309; Aimers 1997:21; Conlon 1995a:31) by various scholars, Baking Pot is recognized as one of the more elaborate and impressive sites in the Belize Valley (Willey et al. 1965:309). An abundance of what are thought to be solitary housemounds and plazuela groups surround the site, suggest that Baking Pot was densely settled (Ricketson 1931:3; Willey et al. 1965:309; Ball and Taschek 1991:158; Aimers 1997:21). Jaime Awe (1997, personal communication) has suggested that at its height in the Late Classic period (A.D. 700 - A.D. 900), approximately 10,000 people lived in and around the vicinity of Baking Pot, with the “site core” having accommodated approximately 1,267 people (Conlon 1997:Table 2). While perhaps less elaborate than the more renowned Classic period sites of the Pékèn area, or of the Postclassic northern Lowland region, Baking Pot does possess many of the characteristics regarded as typical of a “major” or “civic” centre based on such features as its size, dense population and settlement estimates, as well as the presence of such features as multiple plazas, stelae, monumental architecture, including an E-group, sacbeob and ballcourts which are understood to have “public” uses or associations (Bullard 1960:359-360; Willey and Bullard 1965:368; Willey et al. 1965:309; Hammond 1974:319). Such features can be considered to reflect a highly sophisticated socio-political presence (Ball and Taschek 1991:158), which was likely rooted in a highly symbolic and ritual system.

Ceramic evidence from Baking Pot has demonstrated that components of the site’s occupational history date back as early as the Late Formative (300 B.C. - A.D. 1), and continued into the Early Postclassic period (A.D. 900-A.D. 1000), when the site was effectively abandoned (Willey et al. 1965:308; Bullard and Bullard 1965:9; Aimers 1997:2;
It has been suggested that the extensive settlement at Baking Pot, both spatially and temporally, is reflective of its locale (Aimers 1997:2). The riverine environment was apparently beneficial to Baking Pot residents as it provided fertile soil as well as an easy form of transport and communication. While such a recognition is warranted, it should be noted that many of the other sites in the Belize Valley have similar, if not the same, riverine locations. Therefore the site must have possessed some other "feature" that caused such a comparably dense settlement to arise here.

The site core is composed of two large groups. Group I is located at the site's northern extreme and is connected to Group II to the south by an approximately 290 metre long sacbe (Figure 3.2). It has been suggested that Group I was the first component of the site to be built (J. Awe. personal communication, 1998), with Group II being built around the time of the site's florescence in the Classic period (Ricketson 1931:25). While Late Formative and Early Classic sherds have been found within structures dating to the Late Classic period in both Group I (Conlon 1996:45, 48) and Group II (Bullard 1963:14), they were minimal and do not imply an early construction phase for either group, but simply present evidence for the area, in general, having been occupied by this early date.

Group I is the most northern of the groups, and is closest to the river. The Group comprises three relatively unrestricted plazas, surrounded by ceremonial/monumental structures, including an E-group complex, and two ballcourts (Aimers 1997). In a somewhat isolated northern position, however, still associated with Group I, is the North Ballcourt (NBC). At the south-eastern entrance of the main Plaza (Plaza 2), a second ballcourt has recently been identified. A sacbe leads southward from the Plaza 2 ballcourt across a field, and stream, to the north-west entrance to Group II.
Group II, the smaller of the two groups, is located approximately 250 meters south of Group I (Ricketson 1931:3). The group is concentrated around a large, more confined plaza area and associated pyramidal structures (Aimers 1997:21). A small, highly restricted (and likely residential) plaza is also located in the north-east corner of the group. At the southwestern extreme of this group is Structure II-D, the east-west running ballcourt (Bullard and Bullard 1965). This ballcourt also serves as an entrance way to Group II, and is entered via a sacbe commencing at its western end.

**History Of Archaeological Investigations At Baking Pot**

Archaeological investigations at Baking Pot began in 1924 under the direction of O. G. Ricketson (1931), in connection with the Carnegie Institution of Washington. Further analysis of the site has been conducted by such researchers as A.H. Anderson (Willey et al. 1965:304); William R. Bullard and Mary Ricketson Bullard (1965); Gordon Willey et al. (1965) and, most recently by Jaime Awe and the Belize Valley Archaeological Reconnaissance (B.V.A.R.) Project (Conlon 1993a, 1993b, 1995a, 1995b; Awe 1994; Conlon et al. 1994; Conlon et al. 1995; Cheetham 1995; Powis 1993b; Awe and Conlon 1997). Prior to the B.V.A.R. Project research at Baking Pot, investigations at the site were more or less exploratory, and perfunctory at best.

**O.G. Ricketson**

Ricketson focused his research on Group I, with the excavation of Mound’s G, B and E, and the clearing of the areas around Mound’s J and M (Ricketson 1931:5-7; Bullard 1960:11; Bullard and Bullard 1965:7; Willey et al. 1965:303; Aimers 1997:21-22). Ricketson (1931:24) considered his work a “cursory enumeration of these mounds”, and
was unable to ascertain a date for the group at that time. A number of burials were encountered (Ricketson 1931:5; Aimers 1997:21) and are discussed in some detail in his report. Artifacts recovered during the 1924 excavations were sold to the Peabody Museum by the landowner at that time (Ricketson 1931:3).

Based on the minimal evidence of masonry construction in the form of cut stones, Ricketson (1931:25) proposed that Group I had a “complete absence of buildings”. and that the apparent lack of stelae at Baking Pot, and its comparatively small plaza areas, indicated that the site was never one of great importance. Despite such suggestions, Ricketson (1931:24) did recognize that the site was one of a “fairly dense population [as] is evident from the almost innumerable house-mounds with which the clearing is dotted”. It should be noted that Ricketson’s appraisal of Baking Pot does have some flaws. These appear to be the result of the limited archaeological investigations undertaken at the site, and Ricketson’s expectations as to the materials and methods used in building construction. Since Ricketson’s initial investigations, it has become apparent that the architectural core used in the construction of many buildings at Baking Pot is somewhat atypical (Aimers 1997:30; Bullard and Bullard 1965; see below). This perhaps explains Ricketson’s suggestion that Group I had a “lack of buildings”, as the core of some structures is composed mostly of alluvial soil rather than aggregate-core fill, and the structures can thus be inconspicuous at best. Further, two uncarved stelae have since been located in Group I (Willey et al. 1965:303; Aimers 1997:34, personal communication, 1997) and in Group II (Bullard 1963:13; Bullard and Bullard 1965:37). While Ricketson identified the existence of Mounds K and L during his investigations, he did not excavate them or identify them as components of a ballcourt complex (Ricketson 1931:3). Similarly, while Ricketson only superficially examined Group II, he did not comment on the existence of Structure II-D, the east-west running ballcourt.
A.H. Anderson

In association with his discontinuance of the 1949 quarrying of Structure A in Group II by the Public Works Department for road fill, A. H. Anderson, then the Archaeological Commissioner of British Honduras, conducted a cursory examination of Structure A (Willey et al. 1965:304; Bullard 1963:11; Moore 1997:48). Anderson’s salvage investigations included the removal of quarried debris from the western face of Structure A, the exposure of masonry terraces, a stairway and a small room located at the base of the structure (Willey et al. 1965:304). Luckily, Anderson was able to halt the Public Works quarrying before the damage to Structure A was too severe. Unfortunately, there is no known report on Anderson’s investigations and findings.

G.R. Willey, W. Bullard, J.B. Glass and J. Gifford

The best known and most cited archaeological investigations at Baking Pot were those conducted by Gordon Willey, William Bullard, James B. Glass and James Gifford from 1954 to 1956 in association with the Peabody Museum of Archaeology and Ethnology of Harvard University as part of Willey’s prehistoric Maya settlement survey (Willey et al. 1965:vii; Bullard 1963:11; Moore 1997:48). Minimal test excavations of household-type structures were initiated in an attempt to obtain stratigraphic pottery samples and to develop a clear appreciation of the architectural nature of these buildings (Willey et al. 1965:305). In concert with their own investigations, Willey and colleagues also reanalyzed the ceramics recovered from Ricketson’s 1924 excavations, and noted that they generally could be assigned to one of three chronological phases: 1) Spanish Lookout; 2) Tiger Run; and 3) New Town. Ceramics dating to the Floral Park, Barton Creek and Jenny Creek phases were also identified, however, no sherds were noted as belonging to the Hermitage phase
(Willey et al. 1965:303-304).

The Peabody Museum project also continued with the mapping of Baking Pot first initiated by Ricketson in 1924, adding Group II to it. While the additions to the Ricketson map included the east-west running ballcourt complex, Willey et al. (1965:Fig. 177) did not identify it as such. Further, the descriptions of the site in their report also do not discuss the existence of the north ballcourt (Willey et al. 1965:302).

W. Bullard and M. Ricketson Bullard

Excavations at Baking Pot were once again initiated in 1961 by William Bullard and Mary Ricketson Bullard. Sponsored jointly by the Royal Ontario Museum, the Harvie Foundation and The Globe and Mail, the expedition focused on Group II (Bullard 1963:11; Bullard and Bullard 1965:10; Aimers 1997:23). The goals of the expedition were threefold; 1) the “collection of exhibitable artifacts well documented by provenience”; 2) the investigation of Structure II-A, the principle pyramidal structure within Group II (Bullard 1963:11; Bullard and Bullard 1965:11); and 3) the examination of Structure II-D in an attempt to determine whether or not the mounds represented a ballcourt (Bullard 1963:11; Bullard and Bullard 1965:20).

The Bullards’ inquiries involved the clearing and trenching of Structure II-A, fully exposing two “oratory rooms” at the base of the structure and an “intricate history of major and minor rebuildings” (Bullard 1963:12). Room 1 is noted as having a masonry altar within it, whereas a niche with a plain shaft [a possible re-set stela] inside it was unearthed in Room 2. Collapse at the structure’s summit revealed that it supported a temple. Seven burials and associated offerings were also unearthed (6 adults, one infant), as were three
(potentially four) cached offerings associated with specific construction features, including the altar and the stone shaft. The “butt” of an uncarved stela was located in the plaza in front of Structure II-A (Bullard 1963:13; Bullard and Bullard 1965:37).

A collection of complete or repairable vessels was recovered, as was an assortment of bone, stone and shell ornaments, obsidian objects, eccentric flints, a slate-backed pyrite mosaic mirror, carved jade objects, spindle whorls and bone awls (Bullard 1963:16; Bullard and Bullard 1965:37-38). An assemblage of ceramic sherds were also collected. The Bullards concluded that “most of the construction, burials, and caches [within Group II] were of the middle to late part of the Late Classic period” (Bullard 1963:1; Bullard and Bullard 1965:38; 5).

Excavations of Structure II-D were also undertaken and confirmed its designation as a ballcourt (see below).

J.J. Awe and the Belize Valley Archaeological Reconnaissance Project

Introductory investigations by the Belize Valley Archaeological Reconnaissance (B.V.A.R.) Project at Baking Pot began in 1992 under the direction of Jaime Awe, with the examination of the Bedran Group, a peripheral plazuela group west of the site core (Conlon 1993a, 1993b, 1995a; Powis 1993b; Conlon et al. 1994). These investigations included the excavation of the mounds and the analysis of what were termed corporate group structures as evidenced by the Bedran data set. Bedran was chosen as the focus of the 1992 investigations as an extension of similar peripheral studies being explored by the B.V.A.R. Project at the neighbouring site of Cahal Pech (i.e., Iannone 1993; Powis 1993a; Cheetham et al. 1993). While cursory analysis at Baking Pot by the B.V.A.R. Project
continued over the years (see Cheetham 1995; Conlon et al. 1994; Conlon et al. 1995; Conlon 1996) it was not until 1996, and the completion of research at Cahal Pech, that the project reestablished their operations at Baking Pot (Awe and Conlon 1997; Conlon and Awe 1998). The goals of the B.V.A.R. Project at Baking Pot were to conduct a more thorough analysis of the site than had previously been undertaken and to collect data that would augment the knowledge of social, political, economic organization and variability within the Belize Valley (Conlon 1997:7; Moore 1997; Piehl 1997). Additionally, researchers aimed to address issues of site function and interaction between centres within the Belize River Valley region (Aimers 1997:21).

As will be discussed below, during a 1995 survey of architectural features in Plaza 2. Group I, the potential of a third ballcourt existing at the southern entrance to Plaza 2, and appending Mounds F and E/H was recognized (Conlon 1996:39; Aimers 1997:23). Investigations in 1995 and 1996 addressed this issue, and have confirmed the ballcourt’s existence (Conlon 1996; Aimers 1997). Investigations of the North Ballcourt in Group II were conducted by the author in 1997 in association with thesis research.

THE BALLCOURTS AT BAKING POT

Three ballcourts have positively been identified at Baking Pot. As such, Baking Pot is the only site within the Belize Valley presently known to have more than two courts. The ballcourt complexes are somewhat strategically placed, each one being located at “extremes” of the site, and all seem to serve as “entranceways” to the site core.
Structure II-D Ballcourt Complex

The Structure II-D “complex” was investigated in 1961 by William and Mary Bullard (Bullard 1963; Bullard and Bullard 1965) in order to verify whether or not the mounds constituted a ballcourt. Located at the southwest corner of Group II’s main plaza, the Structure II-D complex comprises two parallel, east-west running mounds and a central alleyway (Figure 3.3). Excavations confirmed that the structures together, along with the central alleyway, comprised a ballcourt, and as such is the only east-west running court recorded in the Belize Valley. Both structures adjoin neighbouring mounds, the northern mound being affixed to Structure II-C, while the southern mound is joined to Structure II-F by a low crest (Bullard and Bullard 1965:20). The structures are of unequal heights, the northern measuring approximately 3.4 metres high and the southern measuring 2.6 meters. The original height of the structures could not be determined as the summits had been subject to root growth and erosion and were thus poorly preserved (Bullard 1963:15; Bullard and Bullard 1965:20). The court measured roughly 19-20 metres long and 3.15 metres wide (Bullard 1963:15; Bullard and Bullard 1965:20; Willey et al. 1965:305; Scarborough 1991b:fig. 7.3). It is understood to have been of the open-ended variety (Bullard and Bullard 1965:20; Willey et al. 1965:305). Paired with a formal causeway at its western end, the complex evidently also functioned as a ceremonial entranceway to the plaza.

Excavations by Bullard and Bullard (1965:20) concentrated on the northern mound, although the southern mound was also investigated. The architectural design of the structures was determined (Figure 3.4). The bench is said to have been 3 meters wide and rose to a height of 1 metre, where it met with a sloping playing wall (Bullard 1963:15; Willey et al. 1965:305). The benches and playing walls were constructed of “squirish
stone blocks laid end to end”, with the playing walls exhibiting additional smaller stones in their construction. The surface of both structures and the playing alley were also covered in a thick plaster coating. The slope of the benches and walls differed slightly, the angle of the playing walls being the steeper of the two (Bullard 1963:15; Bullard and Bullard 1965:20).

Two flooring episodes were identified within the playing alley, although it is suggested that the earlier one may have preceded ballcourt construction, as it continues beneath the bench of the structure. No ballcourt markers, or cached offerings were recorded (Bullard 1963:15; Bullard and Bullard 1965:20; Willey et al. 1965:305). Based on the ceramics recovered from the fill of the structures, a Late Classic date was assigned to the Structure II-D ballcourt complex (Bullard and Bullard 1965:20; Bullard 1963:15; Willey et al. 1965:305).

Bullard and Bullard made no attempt to discuss the significance of the ballcourt in relation to Group II, Baking Pot, or its unique orientation and location. East-west ballcourts are an anomaly in the Maya Lowlands, particularly in the Belize Valley. No other complexes of this directional orientation exist there. The existence of such a court leads one to question why the Baking Pot Maya erected such a court. East-west running ballcourts are typically associated with either Mexican complexes (Leyenaar and Parsons 1988:37; Cohodas 1991:251), or with Terminal-Postclassic ballcourts in the Maya area, particularly in the Guatemalan highlands and in the northern Yucatan region (Leyenaar and Parsons 1988:38; Fox 1991:219; de Montmollin 1997:236). As such the Str. II-D complex may be an attempt to emphasize relations with either of these regions. Further evidence of Baking Pot’s contact if not connections with Mexican groups has been established in the presence of such items as fragments of a scroll-footed grater bowl, wares similar to Yucatecan slateware, the
presence of a central plaza "shrine" structure in Plaza 2 (J. Aimers. personal communication, 1999). Additional evidence for Valley contact with Mexican groups occurs at Barton Ramie where "C-shaped" structures have been noted (Willey et al. 1965: J. Aimers. personal communication, 1999), and at Xunantunich where a Terminal Classic/Early Postclassic structure (Str. 20) exhibits Puuc style columns (Leventhal et al. 1994:2).

**Plaza 2 Ballcourt (Mounds F and H)**

The potential of a ballcourt existing within, and encompassing, the south entranceway to Group I. Plaza 2 (Figure 3.5), was recognized by Jaime Awe during continued reconnaissance at the site in 1995 (Conlon 1996:39). Awe recognized indentations in the modern surface of opposing Mounds F and E/H, that suggested that there were parallel constructions of similar dimensions appending these mounds. These basic features (two opposing constructions of similar dimensions running north-south), are characteristics often attributed to ballcourt complexes.

In an attempt to confirm the existence of a third ballcourt here, exploratory excavations were undertaken by Conlon (1996:39) that same year. Due to time constraints, investigators decided to search for non-architectural evidence of a ballcourt. Thus, two excavation units were initiated in the playing alley in the areas where ballcourt markers and/or cached offerings are commonly found.

Ricketson's original plan of the south entrance way to Group I's Plaza 2 suggested that the entrance way itself measured 8 metres wide, and that the eastern annex of Structure F was 25 metres long. A recent survey of Plaza 2 by the B.V.A.R. Project has corrected these
measurements, and has found the playing alley to measure approximately 4.5 metres wide, while the Structure F extension measures 19 metres long (Conlon 1996:39). These corrections allowed the strategic and accurate axial placement of the alleyway units. A 2 metre x 4 metre excavation (Unit 1) was placed in the centre of the playing alley and extended towards the east to partially encompass the base of Structure H (Conlon 1996:39). After reaching the collapse level, Unit 1 was downsized, and excavations concentrated on the western half of the unit, away from Structure E/H. A second 2 x 2 metre excavation (Unit 2) was commenced at the south end of the proposed alleyway (Figure 3.6) (Conlon 1996:45).

No evidence for veneer or cut stones was encountered in Unit 1, as might be expected with typical ballcourt structural collapse. A poorly preserved plaster surface was encountered approximately 30 centimetres below the surface. While no ballcourt markers were recovered from Unit 1, a circular collection of burnt limestone rocks was found, just below the terminal construction phase’s plastered surface (see Conlon 1996:Fig. 6). Further, a cache of “a partial vessel, inverted of an unknown...type” was also located within the playing alley’s terminal fill above an earlier poorly preserved floor. A layer of river cobbles below the earlier alley floor was exposed, but were found to be restricted to the north half of the western limit of the unit. The penultimate level of alley construction in this unit (flooring episode 2) was, unfortunately not dated as excavations in Unit I were terminated before a sterile level was reached (Conlon 1996:45).

Three fragments of daub were collected from the collapse level, and five were recovered from the fill of the terminal floor. The daub fragments suggest that a superstructure may have once existed on Structure E/H and/or Structure F. Ceramic evidence from Unit 1 indicated that the terminal phase of alley construction dated to the Hermitage Phase (300
B.C. - A.D. 600) (Conlon 1996:45, 48). Evidently the humus/collapse layer from Unit 1 had ceramics dating from the Hermitage to Spanish Lookout Phase (A.D. 300-900). Nonetheless, since the deposits from this uppermost level are not the result of deliberate cultural processes, the dating significance of these sherds is minimal.

The pattern of construction evident in Unit 2 was slightly different than that in Unit 1. Although no markers or cached objects were recovered from this area either, there is some correlation between stratigraphic levels in both units. While an incongruity in the depth of the terminal alley floor in Unit 2 in comparison to that of Unit 1 was evident, Conlon (1996:45) suggested this to be reflection of the alleyway being slightly sloped towards the south. In place of the earliest “flooring” episode identified in Unit 1 above the layer of river cobbles, a lens of silty clay/sand was instead encountered in Unit 2. No artifacts were recovered from this layer.

Whereas the terminal construction flooring episode in Unit 1 dated conclusively to the Early Classic period (A.D. 300-600), ceramics from the corresponding level in Unit 2 include ceramics ranging in date from the Barton Creek to the Spanish Lookout phases (300 B.C. - A.D. 900) and, as such, effectively dates the construction revealed in Unit 2 to the Late Classic period (Conlon 1996:45,48). Moreover, unlike the ceramics collected from the humus and collapse of Unit 1, those collected from this level in Unit 2, included specimens that date as early as the Jenney Creek phase (600 B.C.-100 B.C.). Conlon (1996:45-48) has suggested that “some kind of construction modification may have taken place in the entrance area to Group I around the Spanish Lookout period that may have disturbed an Early Classic component in Unit 2”.

Unlike Unit 1, excavations in Unit 2 continued below the level of the river cobbles
(penultimate level) to sterile. While artifacts from the penultimate fill were relatively few, the ceramics are noted as dating between the Jenney Creek and Barton Creek phases (900 B.C. - 100 B.C.) (Conlon 1996:45). Conlon (1996:48) has proposed that the layer of river cobbles formed some sort of Late Preclassic path. While this proposition may seem feasible from this isolated instance, I suggest that the river cobbles are a method of stabilization used in construction at Baking Pot, perhaps in relation the excessive use of alluvial soil as fill. Such a layer has since been encountered in the fill of Structure’s F and K, and in the alleyway of the North Ballcourt (see below).

While it was not possible to verify the existence of a ballcourt in the southern entrance way to Group I from the 1995 investigations, excavations corroborated the suggestion that a later construction may have been added to the existing architecture at some point in the Late Classic period. Moreover, like the central axis of other ballcourt playing alleys in the Maya Lowlands, the central axis of the proposed ballcourt playing alley at Plaza 2 was evidently also a focus of ritual deposition during the Late Classic period (Conlon 1996:48).

Investigations during the 1996 field season were instigated in the southern entranceway of Plaza 2. Group I by Aimers, in an attempt to determine once and for all whether or not the architectural profile fit that of a ballcourt (Aimers 1997:35-36). Four units were placed within Structure F and five units were placed around the area of the indentation recognized at this locale in 1995, in an attempt to reveal the interface of Structure’s E-South and H (Figure 3.7). While the architecture in Structure F was poorly preserved, that unearthed at the Structure H/E-south confluence was well preserved.

Excavations of Units 5 (1 x 3 metres), 6 (1 x 2 metres), 10 (1 x 2 metres) and 24 (1 x 2 metres) on eastern edge of Structure F are interpreted by Aimers (1997:35) as confirmation
that Structure F formed the western structure of a ballcourt, and that the entranceway to Plaza 2 constituted a ballcourt complex. Architectural evidence for this inference included the identification of a sloped surface constructed with “irregularly shaped slabs of limestone veneer” (Aimers 1997:35). The structural core fill associated with the ballcourt construction was composed of a “fine, reddish alluvial material with few artifacts compared to the fill in other areas” (Aimers 1997:36). The lack of artifacts is typical of other ballcourt constructions in the Belize Valley (see Ferguson et al. 1996: Ferguson 1997 and below). While Aimers (1997:35) suggested that the data revealed in Structure F confirmed the hypothesis that the Plaza 2 entranceway was a ballcourt, additional information revealed in the Structure E/H excavations reinforced its ballcourt classification.

Of particular significance was the caching of a large (approximately 48 x 20 cm) speleothem (either a stalagnite or stalactite), located below a plaster surface and sitting on a cobblesurface within Structure F (Unit 5) (Aimers 1997:36, 1997 personal communication). The significance of the speleothem can only be speculated upon. It is suspected that its inclusion within the western ballcourt structure is symbolic of cave associations because caves, like ballcourts, were and to a large extent still are, considered entranceways to the underworld (Brady and Stone 1986: Stone 1995). The cobbled surface on which the speleothem sits is reminiscent of the “cobbled path” exposed in the playing alley of the Plaza 2 ballcourt during the 1995 excavations (Conlon 1996:45), and of that exposed in the north ballcourt’s western structure (Unit 5) and playing alley (Unit 4) (see below).

The excavation of Units 4 (2 x 3 metres), 9 (1 x 2 metres), 14 (1 x 2 metres), 15 (1 x 1.5 metres), and 21 (.5 x 1 metre) in Structure E/H yielded architectural data that has confirmed Awe’s and Conlon’s (Conlon 1996:39) suspicions that Mounds F and E/H were indeed modified. This modification was evidently in the form of an addition to the previously
existing structure. In viewing the structural profile of the addition’s north wall and its juncture with Structure H (See Figure 3.8), one can determine that Structure H was terraced, and that this addition at the entranceway to Plaza 2, Group I resulted in the creation of a new structure at this locale. This new structure has been identified as a ballcourt complex. The construction of the addition served to constrict the entranceway, thereby restricting access to Plaza 2 (Aimers 1997:37).

Aimers (1997:35) proposes that the "homogenous alluvial fill and small amounts of pottery...[and] lithics suggests that the ballcourt was erected relatively quickly, in one episode". However, the profile indicates that there were actually three phases of construction. Moreover, I contest Aimer's suggestion that the ballcourt's profile resembles that of Structure II-D (Aimers 1997:36), because the angles of the benches and playing walls differ, particularly in the earliest two phases.

The ultimate phase of ballcourt construction comprised a vertical bench face, a slightly sloping bench top, and a vertical playing wall. During the penultimate phase of construction, the height and incline of the bench were raised, as was that of the playing wall, changing the angle of the playing wall from vertical, to slightly sloping. The terminal phase of construction in the Plaza 2 ballcourt was the least well preserved and was only clearly visible in the area of the playing wall where remnants of a plaster surface were detected. This phase incorporated the earlier constructions, with the addition of a thick alluvial fill layer. The alluvial fill served to raise the bench and heighten the playing wall, while extending the breadth of the bench further into the playing alley, and thereby restricting access into the plaza even further. While it can be determined that the slope of the playing wall became less steeply angled than in previous phases, the nature of the bench could not be ascertained due to problems of poor preservation. The surfaces of the
playing wall and bench were evidently plastered over. Because of its position at the entranceway to a plaza, it is suggested that this court was of the open-ended variety.

Specific dates for this ballcourt have not yet been proposed (Aimers, personal communication, 1998), although it has been noted elsewhere that in Plaza 2 construction phases have dated to the Early Classic through to the Late and Terminal Classic periods in the final phases of construction (Aimers 1997:37). Without conducting a thorough investigation of the ceramics from the ballcourt, the dates of the recently identified additional construction phases remain uncertain. However, it seems likely that the terminal phase of ballcourt construction dated to the Late or Terminal Classic period (600 - 900 A.D.).

It should be made clear that the profile provided of the ballcourt is that of the north wall of Structure H and its addition, and that the core of the structure did not mimic that of its face. In fact, the bulk of the core was primarily alluvial fill and no masonry was evident. Thus, the construction phases identified in the north wall are not easily identified within the core itself (C. Helmke, personal communication, 1998). This fact by itself should not affect recognition of this structure as having more than one phase of construction, or from it being a ballcourt. The masonry defining each phase can be understood as construction pens used to retain the alluvial fill used in the core construction. While the fact that there is no apparent backing masonry within this ballcourt may suggest to some that this structure was not a ballcourt, I would disagree. Data from excavations in Structure F further support the identification of a ballcourt at the entranceway to Plaza 2, as the typical backing masonry associated with ballcourts, that of veneer stones, was identified in a limited nature and of varying qualities (Aimers 1997:35).
I am convinced, as are others (C. Helmke, personal communication, 1998) that this court did not necessarily function as an official arena for the playing of the ballgame but was, instead, a symbolic representation of a ballcourt, and all that a ballcourt came to signify to the Maya. If this is the case with the Plaza 2 ballcourt, then the backing masonry typically associated with ballcourts would not necessarily be required here.

**The North Ballcourt (NBC)**

The north ballcourt (NBC) (Figure 3.9a) is located approximately 30-35 metres north of the north entrance to Plaza 2. Group I (See Figure 3.10). While somewhat isolated from the rest of Group I, the NBC’s relative proximity to Group I is close enough for it to be considered part of the site core. None of the previous investigators at Baking Pot identified Structure’s K and L as components of a ballcourt complex, as their typical ballcourt configuration (two north-south running parallel structures and a central alleyway within or close to a main/public plaza), evidently negated a need for explicit identification as a ballcourt complex. While the mounds measure approximately 20 meters in length, the dimensions of the structures themselves have yet to be determined. Mound K measures approximately 10 metres wide and 1.64 metres high, while Mound L measures 12.5 metres wide, and 1.57 metres high. The actual length of the alley, as well as its true type was unable to be determined, as excavations were not conducted at either of the end zones. However, the width of the alley was measured between the bench faces of both structures, and was found to be 5.5 metres wide. In the absence of a depression around the ends of the structures or playing area, or in the existence of structures at either end of the court, it is hypothesized that the NBC was an open-ended ballcourt.

The NBC was excavated by the author and the 1997 field school students from the Belize
Valley Archaeology Reconnaissance Project. Excavations were initiated in order to supplement the sparse database for ballcourts within the Belize Valley, and thereby promote a comprehensive understanding of this specific architectural type as it existed at the site of Baking Pot. A series of six 2 x 2 metre units (Units BC-1 through BC-6) were placed along the central axis of the ballcourt complex from west to east, thereby encompassing sections of Structure K (the western structure), all of the alley, and the lower portion of Structure L (Figure 3.11). One alley unit at the base of Structure K was not excavated (Unit BC-2), as it was not needed. An additional alley unit (Unit BC-7) was later placed adjacent to the most centralized unit's south wall (Unit BC-3), in order to fully expose a very important feature there. All cultural levels were excavated with hand picks and trowels, while all soils were screened through 1/4 inch screens. It should be noted that due to time constraints, excavations were unable to proceed to sterile soil. However, they were terminated at a point in which excavators were confident of the complex's structural composition and method of construction. Because of the lack of vegetation in the area, the architectural preservation was expected to be favorable. Although this was to be the case for Structure K, it was not so for Structure L.

Structure L Excavations

The comparatively poor preservation of Structure L encountered in Unit BC-4 was not immediately evident. In fact, it was not until excavation in Structure K, Unit BC-1, had exposed a thick plastered bench surface that it was recognized that the architecture in Structure L had been disturbed. After excavating through the humus level of Structure L, and approximately 50 cm of a predominantly alluvial deposit, it became quite clear that the periodic flooding of the Belize River over the last 1000 years occasionally reached as far inland as the area of the ballcourt. The river runs from west to east, and when it rose it
flooded what is currently an agricultural field, but what was evidently a settlement area in Precolumbian times, and even reached the ballcourt. As the river continued along its path it was interrupted by Structure L, whose western face it eroded away, carrying with it remnants of the disturbed plastered bench surface. Due to the poor preservation, the divisions between levels 1 (humus) and 2 (collapse) were indeterminable, and thus, levels 1 and 2 in Structure L were excavated together. The series of bench plasterings identified in Structure K were unable to be isolated in Structure L, as they occurred only as a mass of ballast fill.

Despite preservation problems, excavations in Unit BC-4, did reveal that the bench’s backing masonry was composed of cut limestone rocks (see ballcourt structural profile. Figure 3.12). The backing masonry functions to solidify the structure, particularly in the areas likely to receive the most force from the heavy rubber ball during the playing of the ballgame, particularly in the areas of the bench and playing wall (as opposed to the platform of the structure).

Of particular interest was the collection of 18 netsinkers (Figure 3.13a). 167 modified and 91 unmodified Pachychilus glaphyrus shells, 2 modified Pachychilus indiorum shells (Figure 3.13b) and 9 Pomacea flagellata shells from the alluvial and ballast deposit within the eastern structure excavations (Structure L, Unit BC-4, levels 1-3). Large caches of Pachychilus (or jute) shells were also found in ballcourts at Lubaantun (Joyce 1926:21 and Gann 1925:199 in Fox 1996:486-487) and at Pacbitun (Healy et al. 1990; Healy 1992:234).

The netsinkers are fashioned from ceramic sherds and are understood to be used as weights in association with fishing nets (Sanders 1960:261 in Willey et al. 1965:408). Similar
objects of stone and ceramic pellets believed to be fishing net weights also occur in the Maya subarea (Willey et al. 1965; McKillop 1980; Garber 1989). It is possible that the netsinkers were collected by the river as it moved across the field and were eventually deposited at the foot of Structure L as the river eroded Structure L. However, if this was truly the case, then netsinkers could have just as easily been deposited elsewhere in the ballcourt, and not just restricted to the eastern structure. In fact, it is perhaps more plausible to suggest that the netsinkers and shells were intentionally cached, or included in the core fill of the ballcourt’s eastern structure, but were exposed and displaced by the river’s erosion of the eastern structure’s architecture. If this was the case, then the presence of the netsinkers and shells within the ballcourt are of particular significance, in that they may represent, a symbolic manifestation of water. Water has important associations with ballcourts in that ballcourts are perceived to be entranceways to the underworld, which is in turn perceived as a watery realm (Schele and Miller 1986:305; van Bussel 1991:247). The predominant school of thought in Maya research today is that ritually-placed marine shells are metaphors for the primordial sea. It is of further significance that marine shells are recognized as almost always occurring at the base of caches, or served as the foundation for structures (Joyce 1992:498). Perhaps jute shells were an inland variation of this belief and practice.

**Structure K Excavations**

Excavations in Structure K found the preservation to be much better than that in Structure L. It appears, however, that the structure was looted by the Maya in antiquity for its cut stone, a prized commodity in a riverine area where limestone outcrops are not readily accessible. This was most apparent in Units BC-1 and BC-5.
Unit BC-1 encompassed the ballcourt's bench area. Excavations here revealed that the bench surface was plastered a total of 5 times (4 refurbishing). The terminal plastering event was recognized only as a remnant ballast layer (plaster surface 5 (level 3)). However, the previous four plastering episodes (plaster surfaces 1-4 (levels 4 through 7)) were comprised of thick layers of plaster. A clearly defined north-south running cut mark that curved towards the playing wall mid-unit was identified in the plaster of surfaces 1 through 3 along the area of Structure K's bench face. This same cut appeared to have penetrated plaster surfaces 4 and 5, however, due to poorer preservation of the upper levels, it was not as evident with these surfaces. Plaster surface 1 (level 7) was not excavated through and thus the backing masonry of the bench top was not evident. Moreover, the backing masonry of the bench face recognized in Structure L was not evident in Structure K as sections of the masonry were apparently removed by the Maya.

Unit BC-5 exposed Structure K's playing wall, however, only one course of cut stone remained in situ, and thus the original height of the wall could not be ascertained. Nonetheless, the limestone and river cobble fill of the backing masonry was quite evident and higher than the cut stone wall. The additional height of the backing masonry confirmed that there were once additional courses to the playing wall, and that this construction was indeed the playing wall. While all of the bench's plaster surfaces were associated with this playing wall, a plaster "lip" covering the base of the playing wall was recognized in association with surfaces 2 and 3. The scarcity of additional courses of cut stones in the playing wall, and their absence in structural collapse, paired with the cut in the bench's plaster surface, and the absence of cut stones used in the construction of the bench, suggests that these construction materials were scavenged later in antiquity, and likely used as building materials elsewhere.
Excavations in Unit's BC-5 and BC-6 indicated that alluvial soil was predominantly used as fill throughout the structure's constructions, giving them their size and bulk. Construction pens or retaining walls were required to enclose the fill and stabilize the structures. A retaining wall constructed from river cobbles averaging 10-15 x 10 cm in size was exposed in Unit BC-6. While a great portion of this wall was exposed, the foundation of the wall was never revealed. Evidently the wall had slumped towards the east over the years, as can be seen in the profile (see Figure 3.12).

Two different varieties of alluvial fill were recognized in the construction of the structure's platform and were effectively separated by the cobble retaining wall. The fill utilized behind the retaining wall, in the area of the structure's summit, was a clay-like alluvial soil. That used in front of the retaining wall and behind the playing wall, was a mixture of alluvial soil and crushed limestone. A uniform layer of river cobble similar to that of the retaining wall was encountered in between these walls at a depth of approximately 120 cm DBD. I do not believe that this deposit represents collapse from the wall, but is instead a type of construction technique used to stabilize the structures. Such a construction mechanism was employed in the Plaza 2 ballcourt in Structure F, and in its playing alley. Such a "layer" was also identified in the north ballcourt's playing alley.

The surface of Structure K's platform was evidently plastered at one time (level 4) as was indicated by a poorly preserved patch of plaster. Peculiarly, instead of refurbishing this floor at a later date with a new coating of plaster, a tamped earth floor was instead employed (level 3). While evidence for a masonry or perishable structure was not detected in the form of cut stones or post holes, a collection of daub fragments from Structure K in Unit BC-5 and particularly in Unit BC-6 at the structure's summit, suggests that a perishable superstructure once existed here.
Playing Alley Excavations

Excavations in the playing alley (Unit BC-3) proved to be very informative, as 6 flooring episodes were identified (levels 3 through 8), suggesting that the court area was heavily used, as many refurbishing were evidently required. The most exciting discovery of our investigations came from the alley excavations. In the removal of floor 4 (level 5) and exposure of floor 3 (level 6), a centrally placed clustering of “core” or calcified limestone rocks was encountered in a depression within floor 3 (Figure 3.9b). An additional 1 x 1 metre unit (Unit BC-7) was appended to the south end of Unit BC-3 in order to expose this feature more fully (F1-1997). Upon completion of the excavation of F1-1997, it became evident that the feature was a circular indentation, and that some of the rocks were rounded, as markers generally are. The depression was identified as that in which a marker would have been situated, and placed flush with floor 3. The calcified limestone rocks were determined to be the fragmented remains of an apparently uncarved ballcourt marker, ritually killed and deposited back in its hole before being covered by floor 4 and subsequent flooring episodes. Unfortunately, the pieces were so badly fragmented that they could not be fitted back together. The two earlier floors (floors 2 and 1) were also cut through, suggesting that the marker may have once been in use with these flooring episodes as well. More likely, the marker was introduced to the ballcourt at the inauguration of floor 3, and that the two previous floors were simply cut through in order to accommodate the marker effectively. The ballcourt marker is the first recorded from the Belize Valley.

Similar evidence for a ballcourt marker was encountered at the site of Cerros in northern Belize, where investigators came across centrally placed depressions in both of the ballcourts located at the site, but which did not have the marker fragments within them. These holes were interpreted by the investigators at Cerros to be the locations where
ballcourt markers had once been placed (Scarborough 1991a:110). The removal of the Cerros markers from the ballcourt was interpreted as having coincided with the abandonment of the site (Scarborough 1991a:110). This is, however, not the case at the NBC, as the playing alley was replastered three more times before its abandonment. An additional depression, or “prominence” was also cut into floor 3 on the south end of the hole, and appears to have been the area in which a lever was inserted to help hoist the marker out of the ground at the time of its termination.

Since artifacts within the flooring episodes below floor 3 (level 5) were nonexistent, and the earliest floors could be seen in profile in the marker depression, it was deemed unnecessary to excavate Unit BC-3 in its entirety beyond level 7 (floor 2). Moreover, since markers are not traditionally found in ballcourts within the Belize Valley, and cached offerings are, it was decided that we would concentrate on determining whether any such offerings existed beneath the area of the marker. Thus, excavations focused on the area below the 71 x 67 centimetre ballcourt marker orifice.

The fill encountered within the area below the marker (continuation of level 5 [fill]), was quite different than that encountered elsewhere in the ballcourt complex construction. The fill was composed of dirt, with sections of pure marl added mostly in what would be the centre of the hole. At approximately 48 centimetres below the playing alley’s initial floor, a 3 1/2 centimetre thick lens of ceramics intermixed with charcoal and river cobble was encountered (level 9). Initially we labeled this “feature” a cache (F2-1997). However, we later determined that this “feature” was not associated with the marker, and that it was not a cached offering, per se, as it continued beneath the area of the marker hole, into the rest of the playing alley. It is possible that this deposit encompassed a good portion of the alleyway, if not the whole alley, and was not associated with the ballcourt at all. This
ceramic layers is reminiscent of that found in Plaza 2, and may in fact be found throughout Group I. We continued to excavate below the cobble/charcoal/sherd lens (level 9) for approximately an additional 40 centimetres and encountered alluvial soil similar to that met at the onset of the ballcourt excavations. While very small lithic flakes and tiny undiagnostic ceramic sherds were occasionally encountered, it is suspected that this deposit was not cultural, but that the artifacts encountered were likely the result of natural transformation processes (i.e., river flooding).

Despite the axial location of the units, no cached offerings were encountered in the structures or the playing alley, or below the marker. The absence of a cache in the centre alley way is peculiar, given that ballcourts in the Belize Valley often had such deposits placed there (Ferguson et al. 1996; Jamison and Wolf 1994; J. Ball, personal communication. 1998). It is possible that a cached offering once associated with the ballcourt did exist, but was removed at the same time that the marker was removed and ritually killed. The removal of such a cache may, in fact, have consummated the ritual killing of the marker. Instances of similar pits believed to have once accommodated cached offerings but which were empty, the contents likely having been removed in antiquity, have been identified at Xunantunich during the Terminal Classic period (Keller 1995:97; Connell 1994; Yaeger 1994; Keller 1995:97; Connell 1995:201). Joseph Ball (personal communication, 1998) has noted that at the site of Buenavista, the objects of a central cache from one ballcourt playing alley were removed at the time of its termination and redeposited in a second, “new” ballcourt’s alley cache. It is worth mentioning again, however, the possibility that the profusion of netsinkers and modified jute shells (Pachychilus indiorum and Pachychilus glaphyrus) recovered from levels 1-3 in Structure L were objects from a cached offering, which were displaced through erosion caused by the periodic flooding of the Belize River.
Ceramics from the cobble/charcoal/sherd lens below the marker included types dating to the Barton Creek (300 B.C. - 100 B.C.), Floral Park (1 A.D. - A.D. 300) early Hermitage (Tzakol) (A.D. 300 - A.D. 350) and Spanish Lookout (A.D. 700 - A.D. 900) phases. Given the broad range of ceramics included within this deposit, and the lack of ceramics dating to between A.D. 350 and A.D. 700, I cannot help but wonder if the initial deposit was interred in the Early Classic period, between A.D. 300 and A.D. 350, with the removal of the cache, and the ritual killing of the marker, occurring in the Late Classic, between A.D. 700 and A.D. 900.

As seems to be the norm with the fill used in ballcourts in the Valley (Ferguson et al 1996; Ferguson 1997), ceramics from the ballcourt excavations were by no means numerous, with very few coming from the bench refurbishing episodes, and virtually none coming from the playing alley replasterings. Nonetheless, from those sherds that were recovered, it has been possible to date the ballcourt to the Spanish Lookout phase (A.D. 700 - A.D. 900).

Excavation data from the NBC revealed that the ballcourt was erected in one phase of construction, with multiple refurbishing being required in the areas impacted the most during play (the alley, benches and likely the playing walls as well). Seeing as the number of bench and alley floor refurbishing differ only by one episode, it seems plausible that these repairs were performed at the same time. It makes sense, however, that the playing alley would require more refurbishing, as this area would have suffered the most damage from the ballgame. Judging from the numerous reconditioning episodes, it also seems likely that the ballcourt was used frequently.

From these architectural data, we have been able to piece together the structural form of the
north ballcourt. The bench face was sloped slightly as was the bench top. The plastered
bench met with a more angled playing wall, that likely terminated at the structure’s summit,
where a perishable superstructure was located and accommodated elite individuals as they
observed of the playing of the ballgame. The general morphology of the NBC seems to
resemble that of the Structure II-D complex in Group I. in terms of its size, type and
architectural construction.

DISCUSSION

In considering the ballcourts of Baking Pot, a few things should be noted. Chronological
references made in this chapter have been formulated in consultation with James C.
Gifford’s (1976) Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the
Belize Valley. All three ballcourts date to, or have components that date to, the Spanish
Lookout phase (A.D. 700 - A.D. 900). The terminal phases of construction of all three
courts have similar morphologies, with sloping benches and playing walls.

One must recognize the significance of the fact that all three of the ballcourt complexes at
Baking Pot either serve as, or form, entranceways to their associated plazas. Of further
consequence is the fact that the Plaza 2 ballcourt of Group I and the Structure II-D complex
are both located at the northern termini of sacbeob. Whereas it has been widely recognized
that ballcourts are often components of major site core complexes and are traditionally
located in accessible areas, they are “seldom found in traffic-restricted areas” in the Maya
Lowlands (Scarborough 1991b:137). Thus, the existence of a ballcourt at an access point
to a main plaza, which in effect serves to restrict traffic to and from the plaza, is an unusual
feature at Baking Pot. Having three such ballcourts is all the more peculiar. The fact that
two of these ballcourts have traffic channeled to them via designated and elaborate
causeways, is of even further consequence. Perhaps most significant of all is the positioning of the ballcourts across Baking Pot’s site core.

**SUMMARY**

An introduction to the Maya civic centre of Baking Pot, and a brief history of the archaeological investigators who have conducted research at the site has been presented in this chapter. The focus of this chapter was to provide a detailed examination of Baking Pot’s three characteristic ballcourts and the excavations conducted of them. Archaeological evidence from each of the ballcourts was presented and has shown that each of the complexes differs from the others. However, all seem to date to, or have components that date to, the Late Classic period and all act as, or form, entranceways to their associated plazas.
Figure 3.1. Map of Archaeological Sites in the Belize Valley.
Figure 3.2. Map of Baking Pot.
Figure 3.3. Map of Group II Illustrating Structure II-D Ballcourt Complex.
Figure 3.4: Plan and Profile of Structure II-D (after Bullard and Bullard 1965:Fig. 7).
North Ball Court, Group I,
Baking Pot, Belize

Plan by:
James M. Conlon (1993–96)
Survey by:
James M. Conlon (1992–97)
Melissa M. Johnson (1996/97)
Cameron A. Griffith (1994/95)
Shawn M. Britt (1992/94)

Belize Valley
Archaeological Reconnaissance

Revised: 01/12/98
Revised: 08/27/98
Revised: 12/14/98

Figure 3.5. Map of Group I Illustrating Plaza II Ballcourt.
Figure 3.6. 1995 Group I, Plaza II Playing Alley Excavation Units (after Conlon 1996:45).
Figure 3.7. 1996 Group I, Plaza II Excavation Units (Structure's F and E/H) (after Aimers 1997:25).
Figure 3.8. Profile of Eastern Ballcourt Structure (Structure H North Wall, and Playing Alley, Units 9, 14, 15 and 21. Mapped by C. Helmke, Supervised by J. Aimers, Inked by J. Ferguson).
Figure 3.9. a) North Ballcourt; b) Fragmented Marker and Depression (F1-1997).
North Ball Court, Group I, Baking Pot, Belize

Plan by:
James M. Conlon (1993-96)
Survey by:
James M. Conlon (1992-97)
Melissa M. Johnson (1996/97)
Cameron A. Griffith (1994/96)
Shawn M. Breslin (1992/94)

Belize Valley Archaeological Reconnaissance

Rev. 01/13/96
Rev. 04/21/96
Rev. 12/16/95

Figure 3.10. Map of North Ballecourt, Group I.
Figure 3.11. Map of North Ballcourt Excavation Units.
Figure 3.12. Structural Profile of the North Ballecourt (North Wall of Excavation Units BC-1 through BC-6, Structure's K and L, and Playing Alley). Mapped by 1997 BVAR Project Field School Students, Supervised by J. Ferguson).
Figure 3.13. a) Ceramic Netsinkers (BP97-C-006 and -010); b) Jute Shells (Pachychilus indiorum, Pachychilus glaphyrus) (after Keller 1995:Fig. 16).
Chapter 4.

DISCUSSION

INTRODUCTION

Chapter 4 will briefly examine notions of Maya ritual, ideology, sociopolitical complexity, and architectural theory in light of the architectural and spatial dynamics of the ballcourts at Baking Pot. These discussions provide an interesting model through which an interpretation of the meaning and role of the ballcourts at the Maya civic centre of Baking Pot can be postulated.

MAYA IDEOLOGY AND THE BALLGAME

The social identity of a society is in part established by the communally accepted knowledge of ideological, cosmological and religious suppositions. These beliefs assist in the shaping of the society’s social, political, economic and militaristic realms and serve to order and regulate the daily behaviours and routines of its peoples (Carlton 1977:22; Hodder 1986:38-39; Mann 1986; Nielson 1995:51, 65; Lucero 1998). Traditionally, the archaeological record (with the exception of epigraphic and iconographic data when available) was perceived to be inadequate to empirically attest to the importance or relevance of the aforementioned realms within a given ancient society, as such aspects of experience (i.e., ideology, meanings) existed primarily in the cognitive sphere of its members. However, archaeologists have recently recognized that aspects of these cognitive realms can also be detected in the archaeological record through recognition of patterns of ritual expression and architecture - through the “materialization” of these otherwise cognitive

Materialization is the process whereby intangible aspects of a social system, the philosophies, myths, values, etc., are converted into physical reality (DeMarrais et al. 1996a:16). The development of what may be labelled by extension “cognitive materialization” or the “materialization of ideology” (after Glassie 1987; and DeMarrais et al. 1996a), paired with ethnohistoric, epigraphic and iconographic data, has permitted scholars in the Maya subarea to come to a more intelligible understanding of the nature of Maya ideology, cosmology and religion during the Classic period. This knowledge has facilitated discussions about the role these realms played in other aspects of Maya social life.

The terms ideology, cosmology and religion are often interchanged or are used inappropriately by scholars and lay people alike. Thus there is often confusion as to what these terms mean. While the terms are interrelated, they do differ from one another. For the purposes of this thesis, the following explanations will apply. Cosmology refers to the principles that govern a culture’s understanding of the origins and character of the cosmos or universe, and all that it entails across time and space. Cosmology directly affects the religion and larger ideology of a given peoples (Flannery and Marcus 1996:352). Religion refers to the convictions in a divine energy or venerated being who requires compliance. Within the guises of religion are often the tenets of values and behavioural expectations for its advocates (Flannery and Marcus 1996:53). Ideology refers to the all embracing canon that governs a culture or society’s social order, including the behaviours, expectations, mythology and symbolism of that movement, as well as political and ritual practices.
Ideologies also serve to advocate and maintain the principles that bind them, and thereby rationalize and promote the socio-political and economic movement or order of a given culture (Carlton 1977:222, 28-39). Ideology is manifested through symbolic or physical means, such as ritual practices, art, architecture as well as site and/or settlement patterns (Shanks and Tilley 1987:132; Ashmore 1989, 1991; Trigger 1990:128; Joyce and Winter 1996:35; Flannery and Marcus 1996:358; DeMarrais et al. 1996a). Moreover, the distributions and associations of the symbolic and material manifestations of ideologies may further illustrate patterns of expression and meaning (DeMarrais et al. 1996a:16).

Through materialization, ideologically derived suppositions, meanings and actions are able to transcend any and all potential boundaries, whether socio-political, economic, educational, locational or religious (Glassie 1987:231-232; DeMarrais 1996a:16). Public oriented ritual and civic ceremonial architecture afford a community continuity in place and time (Dunleavy and Miracle 1981:121). Through their identification with specific symbolic objects and/or the sharing of experiences through ritualistic acts or ceremonies, a community, despite potential resistance, can claim or promote group solidarity, and support the social order in which they participate (Stern 1949:96; Dunleavy and Miracle 1981:121; Schwartzman 1981:52; Perttierra 1987:206; Hegmon 1989:6; DeMarrais 1996a:17; Fox 1996:484).

The materialization of ideology can also be an effective socio-political “mechanism” (Carlton 1977:22; Dunleavy and Miracle 1981:121; Mann 1986; Perttierra 1987:199-200; Trigger 1990:125; DeMarrais 1996a:15, 17; 1996b:68; Joyce and Winter 1996:35). The Classic period Maya depended heavily on communal ritual, and the physical and symbolic manifestations of their ideology (Demarest 1992:136). It has been argued by many that part
of the reason why the ritualization of ideology was so prevalent among Mesoamerican cultures, particularly the Maya, was because the rulers (or ruling elite) recognized that the manipulation of ideology and ritual was an effective form of socio-political control (Mann 1986:21, 39; Trigger 1990:126; DeMarrais et al. 1996a:15; Joyce and Winter 1996:37; Lucero 1998:6-7). They suggest that by dominating a commonly held belief system, the ruling elite or akaw of a given polity was able to convince its citizens of the leader’s “right” to rule, while at the same time instilling a facade of group cohesion (Carlton 1977:20; McGuire and Schiffer 1983:281; Mann 1986:39; Nielsen 1995:52; DeMarrais et al. 1996a:31; Joyce and Winter 1996:35; Lucero 1998:3). They further suggest that the manipulation of cosmology, ideology and ritual by the ruling class was to promote the differential treatment of themselves with the majority of polity, wealth and power (Mann 1986:21; Joyce and Winter 1996:35, 39; Lucero 1998:3-4).

While one can see how the manipulation of ideology can be used as a mechanism for such purposes, it should not necessarily be regarded solely as a means by which the elite or ruling class holds and maintains power over its “subjects”. I believe that the tendency of scholars to view such use of ideology negatively, as a form of coercion, may have hindered an understanding of Maya socio-politics and power. I suggest that the manipulation of ideology by the ruling class can be understood as a mechanism, but one which maintains power within a community, or gives power to a community particularly during times of change or crises (Dunleavy and Miracle 1981:118; Schwartzman 1981:52; Nielsen 1995:49-50). Power to a community can be expressed through group identity, prestige and honour in association with the construction of an ideologically significant object, or participation in a ritual expression or ceremony associated with an aspect of a group’s ideology (Nielsen 1995:55). The power of such a mechanism was rooted in a shared perception of “reality” that served to promote common ideals, while maintaining the social
structure of the collective, and building and maintaining cultural pride (Dunleavy and Miracle 1981:118; Ashmore 1996:64). The fact that there is no indication that the Maya ruling elite and general population viewed the role of the *ahau* differently, lends support to the idea that the socio-political role of ideology as a cohesive force as well as, or rather than, a coercive tactic (Freidel 1992:128). Nonetheless, in order for it to have been convincing, the media of communication had to be “readable” by all members of society (Schele and Freidel 1990:65). As will be shown, two of the most salient forms of communication are architecture, and community settlement patterns.

The collective conscience of Maya society perceived their world from a predominantly ideologically based paradigm (Schele and Freidel 1990:65; Freidel 1992:117). As such, aspects of their ideology, such as cosmology, transcended many aspects of Classic Maya daily life and experience. In fact, the Maya reacted to and, as will be demonstrated, built the world around them in light of their perception of the cosmos.

The Maya perceived their universe as a three-tier domain, comprised of the Upper-, the Middle- and Underworld (Schele 1987:18; Ashmore 1989:273; Schele and Freidel 1990:66; Demarest 1992:147). The Underworld, or *Xibalba*, was seen as a realm in which the gods lived and through which the dead had to travel. The Upper- or Overworld was seen as the “place” inhabited by the ancestors after they had defeated the Lords of Death in *Xibalba*. The Middleworld was conceived of as the human plane of existence (including plants and animals), that floated in the primordial sea, above *Xibalba* (Schele 1987:12; Schele and Freidel 1990:66).

There are two acts involved in the creation of the cosmos and its central axis. Textual information from Palenque relates that the first act of creation was the centring of the world
by the gods when they lay down the first three hearth stones, one for each of the three “worlds” (Freidel et al. 1993:53; Bassie-Sweet 1996:138). The second act was the creation of the central axis or the partitioning of the worlds when the First Father raised up the sky and separated earth, or the Middleworld, from the Upper- and Underworld, and thereby formed the “landscape of mountains, lakes, and forest that became the world in which their new creatures would live” (Tedlock 1985:73; Freidel et al. 1993:128; Garber 1994:35).

The three “worlds” were not mutually exclusive, but were interconnected by a central axis, also referred to as the Wacah Chan (the “six-” or “raised-up-sky”) which was typically characterized by the world tree (Schele 1987:16; Schele and Freidel 1990:66-67; Demarest 1992:147; Friedel et al. 1993:53, 138; Garber 1994:38). The world tree, materialized as a maize plant or the great Ceiba tree (Schele and Freidel 1990:256; Freidel et al. 1993:53, Fig. 2.12), had its branches in the Upperworld, its trunk in the Middleworld and its roots in Xibalba (Schele and Friedel 1990:66-67; Garber 1994:34, 36). The central axis was also perceived as a path taken by the Vision Serpent. The Maya ruler or Ahau was perceived to have been the incarnation of both the central axis and the path, and thus acted as a mediator of sorts as the Ahau had the ability to communicate directly with the denizens of the otherworlds (Schele 1987:16; Demarest 1992:147; Freidel 1992:128). The partitioning of the worlds, or the creation of the central axis, was not restricted to one specific place, but was materialized in both the natural and “built” environments by the act of ritual (Schele and Freidel 1990:67).

The creation of the central axis is key to Maya cosmology and ideology, for even after the initial creation of the universe, the Maya continue to reenact the partitioning of the worlds, and the creation of their cosmos (Freidel et al. 1993:123-172; Garber 1994:35). The materialization of the concept of partitioning is illustrated in the Madrid Codex and in the
glyphs at the corners and on the sides of a Rio Azul tomb, and through the partitioning of agricultural fields and altars to this day (Freidel et al. 1993:57, 72; Garber 1994:35-36; Bassie-Sweet 1996:197); in the constant utilization of the concept of the World Tree, as best illustrated in the iconography of Palenque (i.e. Temple of the Cross and a depiction on Pacal’s sarcophagus lid) (Schele and Freidel 1990:Fig. 6.3. 256; Freidel et al. 1993:Fig. 2.12); in the construction of houses, temples and ballcourts (as evidenced by the ritual placement of caches along the central axis of the structures (Ashmore 1989, 1991; Joyce 1992:487); and in their settlement patterns (Aveni and Hartung 1986:8; Ashmore 1989, 1991, 1992; Garber 1994:38).

As mentioned briefly in Chapter 1, the ballcourt and the ballgame were also perceived by the ancient Maya as entranceways to the Underworld (Krickberg 1966 in Cohodas 1974:205; Pasztory 1972; Alegria 1983:144; van Bussel 1991; Freidel et al. 1993:355). In his research on ballgames as intermediaries, van Bussel (1991:256-257) notes how in the Popol Vuh the Hero Twins caught the attention of the Lords of the Underworld by playing ball and how, by extension, the playing of the ballgame to the Classic period Maya may have been a reenactment of these initial ballgames, and of the opening of the underworld (Freidel et al. 1993:341). Imagery associated with the ballgame supports this premise, as rulers are illustrated dressed as ballplayers and potentially participated in ballgames. By mimicking the roles of the Hero Twins the rulers are suggested to have aligned themselves with cosmic authority (Gillespie 1991:340).

Textual information received from a stair tread of Temple 33 at Yaxchilan notes another otherworld path or portal. This other portal was a road called the Black Transformer (also known as the Ek’-Way) which led from a ballcourt at the south end of the Raised-up-sky or the central axis, to the place of the last creation (at Six-Shell-in-hand) (Freidel et al.
1993:351). The Popol Vuh also mentions the Black Road in the story of the Hero Twins. In one instance the Twins were playing a ballgame when the Lords of Death sent for them via their owl messengers who follow the Black Road to the ballcourt where the twins are playing the ballgame (Tedlock 1985:109). Later in the mythistory, the Black Road itself calls the Hero Twins to Xibalba (Tedlock 1985: 358). Van Bussel (1991:247) suggests that the road to Xibalba may have been a metaphor for the ballcourt itself. Interestingly, the words for ball in Yucatec Maya, ol and wot, mean hole or entrance (Barrera Vasquez 1980:604, 976 in van Bussel 1991:257), further lending support to the perception that the ballgame and ballcourts were perceived to function as entranceways to the otherworlds.

While the Classic period Maya ballgame exists as a human, and thus Middle World, experience it was intrinsically tied to the Underworld. As such, the ballgame and ballcourts symbolically and iconographically mark the separation of these worlds, their inhabitants, and replicated the creation of the cosmos (Gillespie 1991:339). As related through the story of the Hero Twins in the Popol Vuh, part of the function of the ballgame and ballcourts was to help explain the workings of the Maya cosmos; the place of human beings in the cosmos; and the mysteries of life, including the struggle between life, death and rebirth, which in effect helped to define the social order of their communities (Algeria 1983:145; Leyenaar and Parsons 1988:88; Schele and Freidel 1990:65; Taladoire and Colsenet 1991:163; Freidel et al. 1993:350; Garber 1994:37). The ballcourt came to signify the disjunction between the sacredness of the ruling class and the "secularness" of the masses, while acting as a mediating force between the two (Gillespie 1991:344). Moreover, the ballcourt physically marked the disjunction or boundary between civic and private space within site cores, and thereby delineated the secularness of these precincts (Gillespie 1991:340).

Many aspects of the Maya ballgame and its ballcourts can be considered effective
expressions of materialized ideology. The ritualistic and public display of the ballgame and all its pomp and circumstance combined ideological and social aspects of Maya life together (Scarborough 1991b:143). The construction of a distinct, symbolic and permanent marker of the ballgame allowed this facet of Maya ideology to be “read” by every member of society, daily, and across time and space (DeMarrais 1996a:18). The potency of these materialized elements of ideology is not in their face value, but in the implicit knowledge of their broader associations and meanings (Broadbent and Llorens 1980:ix-x; Richards 1993:175-76). In the case of the ballgame, its profound meaning was rooted in its connections to Maya cosmology and ideology.

SOCIOPOLITICAL COMPLEXITY AND BALLCOURTS IN THE BELIZE VALLEY

Human existence is not a static experience. Human beings are not simply passive puppets who accept and proliferate the conditions of the world around them. Instead, they react to certain conditions, modify their behaviours, and consistently promote change (Nielsen 1995:49-50). While change is inevitable, expected, and often accepted, characteristics of the social system, such as ideology, remain institutionalized. This is not to say, however, that ideology does not change, but that major social change is a slow process, and that its tenets generally remain firmly established. Thus, in times of stress, it seems logical that members of a given culture or society would turn to an established and constant feature of their experience in an attempt to reaffirm what and who they were through the celebration and validation of their shared cultural heritage (Dunleavy and Miracle 1981:118). This in turn could have been used to help stabilize and maintain and otherwise precarious socio-political order.
The socio-political order of the Pre-Columbian Maya was not homogenous across time and space, but was regionalized, with each polity cultivating its own culture history (de Montmollin 1989; Santley et al. 1991; Demarest 1992:141; Fox 1996). The Maya subarea was politically decentralized, and that its lack of centralization worked against unification, or possibility or need for a central authority. This seems to have been the case in the Belize Valley, at least until the Late Classic period (Leventhal et al. 1993; Golden and Conlon 1996:30). Prior to the Late Classic, it appears as though civic centres were essentially equivalent. The apparent profusion of natural resources in the valley likely aided the growth of multiple large centres within close proximity to one another, evidently without inciting competition.

Political stability in the Belize Valley appears to have begun to transform in the Late Classic period as a result of a series of changes that served to cause stress at Baking Pot, and other Valley communities. Change, regardless of whether progressive or regressive, incites stress, as a given community must come to accept or renounce the change, and adjust to the outcome. Stress is felt by a community when a part or whole of the “social organism” feels threatened (Wallace 1956:265). While in some areas of the Maya Lowlands evidence for stress in terms of ecological problems, environmental change, and competition in the form of warfare and defence, is conspicuous (Webster 1977; Freidel 1986; Healy and Pricker 1989; Taladoire and Colsenet 1991:173-174; Demarest 1992; de Montmollin 1997:38), evidence of these conditions is not obvious in the Belize Valley (Leventhal 1996:11). To a large degree, signs of social unrest are also not prevalent in the Belize Valley. Nonetheless, this negative evidence should not be taken for granted, as there is also no direct evidence of the catalyst for the “collapse” in the Belize Valley, and yet it is apparent that around 900 A.D. Baking Pot and the majority of sites in the Valley were abandoned. A series of changes and conditions are evident, however, that together can be seen as the antecedents
for stress in the Belize Valley, and to an eventual communal disillusionment with the cultural “Gestalt”.


Population in the Maya subarea is known to have steadily increased over the Classic period, reaching its apex during the Late Classic period, with population estimates for the central Maya Lowlands estimated at greater than three million (Turner 1990 in McAnany 1993:228). Willey et al. (1965:576-577) suggest that the Belize Valley population during the Late Classic was around 24,000, while Kirke (1980:281) estimated the Valley population to have been around 60,000 people. Population densities in the Belize Valley are

Coinciding with maximum population levels during the Late Classic period was an obvious increase in the need for food resources. With agricultural and land production undoubtedly being taxed and likely unable to meet subsistence demands, the Maya moved to intensify agricultural production throughout the Maya subarea, thereby permitting additional crop production (Willey 1973:420; McAnany 1993:227; White et al. 1993:347). Evidence of intensified forms of agriculture in the Belize Valley include the more than 1300 metres of linear irrigation canals or ditched fields at the Bedran Group of Baking Pot (Kirke 1980:281; Conlon 1993b, 1995a:40). The 700 A.D. inception date for the Bedran Group irrigation system coincides with the onset of the peak population period at Baking Pot and within the Belize Valley (Conlon 1995a:41). While initially expensive in terms of time, construction and labour investment, the ditched field system would have allowed for improved soil fertility, extended growing periods (Fedick and Ford 1990:22), and the farming of an estimated minimum of 8 additional hectares of land in areas otherwise considered too dry and agriculturally less productive (Conlon 1995a:40-41).

The apparent need for additional crop production at Baking Pot and throughout the Belize Valley, as evidenced by the intensified forms of agriculture, supports the proposition that population pressures on the land were extreme during the Late Classic period. Additional evidence of the extreme population levels at Baking Pot is apparent when one considers that the land considered prime and otherwise used for agricultural purposes in and around Baking Pot becomes increasingly encroached upon by household development during the Late Classic period (Willey et al. 1965:291; Willey 1973:99).

While evidence and discussions of subsistence goods other than agricultural production is not as prolific, indications are that animal resources were also being taxed during the Late and Terminal Classic periods. Evidence from Cahal Pech (Stanchly 1995), Zubin (Stanchly 1997:107) and Pacbitun (Hohmann and Powis 1996 in Stanchly 1997:107) indicates that freshwater shell species were not as heavily exploited during the Classic period as they were in the Formative. Despite limited evidence, and while not explicitly indicated, the lack of freshwater shell use in the Classic period may have been the result of over exploitation of these food stuffs due to increases in population and subsistence demands. Norman Hammond (1983:157) has noted a decrease in the size of jute shells at the site of Lubaantun in southern Belize, which may further support the supposition that freshwater species was being over exploited during the Late Classic, as they may have begun to be harvested earlier in their stage of development than they had been in previous time periods.

Isotopic analysis of human remains from Pacbitun indicate that despite the intensification of agricultural practices (terraced hill slopes), maize decreased as a dietary staple during the Terminal Classic, indicating it was becoming increasingly difficult to obtain and was therefore unable to meet the demands of the heighten population (White et al. 1993:366, 370). A growing population would have necessitated the production of a storable staple
crop in order to feed the thriving population. and thus the 10% decrease in maize consumption (an easily stored crop) noted by White et al. (1993:367) at Pacbitun is significant. While evidence is lacking, it is suggested that the Maya began to broaden their resource base through the cultivation of supplementary food crops in attempt to effectively feed the expanding population (White et al. 1993:366). It is speculated that the additional cultigens used to supplement dietary needs included the breadnut or Ramon tree, and that this crop was perhaps grown in the Bedran irrigation fields at Baking Pot (Kirke 1980:281). Alternatively, it has been proposed that cacao was the crop intensively grown along the alluvial terraces of the Belize River (McAnany 1993:Fig. 3; Connell 1993:155; Fedick 1995:29). While this is obviously not a staple food crop, it would have provided a profitable trade item by which needed food items could be obtained.

Skeletal data from Barton Ramie and Baking Pot shows that bone structure was increasingly fragile and slender over time, especially in the Late and Terminal Classic periods (Willey et al. 1965:538; Willey 1973:100). These data indicate that despite efforts to increase crop production, individuals were apparently still unable to effectively meet their nutritional needs.

Instances of poor nutrition are often indicators of stratification amongst community members. as are instances of contrasting burial practices, including types of interments and variations in burial goods. Variations in household types and elaborations are also understood to demonstrate class and status distinctions, all of which are present at Baking Pot (Piehl 1997:67). Fedick (1995:29) notes that within the Belize Valley in general, distinctions in residential architectural types according to the production classification of the land, with Class I lands (alluvial valley bottoms) exhibiting household architecture which is generally larger and more elaborate than in other areas.
Further evidence of increasing social stratification within is apparent at sites within the Belize Valley, including Xunantunich (Leventhal et al. 1993:13), and Cahal Pech (Ball and Taschek 1991:154). As the architecture of these sites in the Late Classic becomes increasingly introverted, and thus less inviting and public oriented. Such changes in spatial and architectural construction indicate the degree of heightened marginality of non-elites from community decisions and functions. and thus in economic, political and social standing.


With the development of economic specialization and the modification of the landscape in order to facilitate intensive forms of agriculture, came the need for land tenure and management (Ashmore 1994:20), as well as systems of social and economic networking
(Connell 1995:195). While evidence of such networking and management is difficult to identify, they are implied and understood to have existed through the level of administrative organization needed to order and maintain such facilities. What have been termed ‘buffer zones’ were established in regions surrounding core areas, and from which raw materials and other resources were extracted in exchange for alliances, status and socio-religious affiliations with the core areas (Willey 1973:425). This may have been the case in the Belize Valley where several peripheral or secondary sites arose during the Late Classic period and which are perceived to have been ‘subordinate’ to larger centres (Ashmore et al. 1994; Driver and McWilliams 1995; Iannone 1995, 1996, 1997, 1998:16; Connell 1993:215, 1995:198; Ashmore 1996:18; Golden and Conlon 1996:30). Some have argued that the Belize Valley region was similarly marginal to the Petén core area (Ball and Taschek 1991; Leventhal et al. 1993:9; Ashmore 1994). It may well have been that the changes and stresses experienced in the Valley during the Late and Terminal Classic period were a corollary of increasing disparities and centralization in the Petén region around this time (Leventhal et al. 1993; Conlon 1996:30).

Further evidence of change and increased marginality in the Belize Valley can be seen in the ceramic industry, as mass production and regional standardization of pottery in the Late Classic period occurs (Gifford 1976:226, 328; Willey 1973:99; Rice 1987a in McAnany 1993:228) This intensification and standardization of pottery production is suggested to have been the result of a great increase in consumer demand due to population increases (Gifford 1976:226). McAnany (1993:228) has suggested that the intensification and mass production of ceramic goods was in response to shortages in agricultural land, as ceramic production was also organized on the household level, and when agriculture production began to fail, households intensified ceramic production to make up for an otherwise insufficient income (McAnany 1993:228). Either way, the regionalization and
standardization of ceramics, paired with the fact that the ash wares associated with the Late Classic were relatively poorly made and more easily prone to breakage, speaks to the stresses related to over population being experienced in the Valley during this time.

While economic specialization by individuals and polities within a given site (i.e., craft or crop specialization, trade) may be seen as a mechanism for promoting intra- and inter-site relations and dependence, it may very well have been that these specializations increased competition, conflicts, and alienation among previously connected groups. Additionally, an increasingly taxed resource base in the Belize Valley during the Late Classic period would have affected the stability of relationships within and between polities in the region and would have become increasingly competitive (de Montmollin 1989:25). It may have been that the sites considered peripheral to the larger centres in the Valley were in fact the result of factioning by members of these different communities (Connell 1994, 1995; Golden and Conlon 1996; Iannone 1997, 1998:16). Moreover, the migration of peoples to the civic centres from the hinterlands would have reached its height (Santley et al. 1991:14), adding further to population densities. Increases in local population densities would have meant decreases in otherwise arable land, and thus in agricultural resources, thereby straining an already and increasingly strained resource base. Extreme population densities may also have caused the over exploitation of other locally obtained food stuffs, including freshwater shellfish, and perhaps other animals. As has been shown, even with intensification of agriculture, the land was unable to meet the subsistence and dietary needs of the Belize Valley population. Such population and land pressures would have led to heightened competition for resources and goods, and the ensuing inter- and intra-site friction, paired with increasing disparities in classes and decreasing health, would have challenged the socio-political structure and stability of the Belize Valley, and the social order of the individual sites (Willey 1973:421). Such factors have been noted and would have created a
highly stressful atmosphere, a disorganization of the socio-cultural system and a potential disillusionment with the cultural “Gestalt” (Wallace 1956:279; Fry 1985:127) at Baking Pot and within the Valley. When a community experiences a “high degree of internal stress...[and personal dissatisfaction with the existing framework” (Fry 1985:127), one of the options sometimes chosen by members of the community in an attempt to consciously modify and manage the ensuing change and stress is the instigation of a revitalization movement.

A revitalization movement “is defined as a deliberate, organized, conscious effort by members of a society to construct a more satisfying culture” (Wallace 1956:265, 1966:30; Fry 1985:127), through the restructuring of an unsatisfactory and failing socio-cultural system. Such restructuring typically includes changes the political and economic structure of the cultural system (Fry 1985:128). Revitalization movements are typically instigated when members of a community/culture are experiencing high degrees of stress and have become disillusioned with, or perceive their cultural system to be unsatisfactory. Members of a community thus take measures to create a new cultural system based upon a combination of an idealized version of a new order and a revival of a traditional culture through the institution of perceived values, customs and views of a past era(s) (Wallace 1956:267, 1966:158; Fry 1985:127). Such movements can be politically or ideologically motivated, and rely on the integrative capabilities of a shared ideology (Wallace 1956:270; 1966:34). Stressful circumstances which may spur revitalization movements include political marginality or factioning, increases in social stratification as evidenced by declines in stature, malnutrition and disease and in disparities in households and artifact assemblages, as well as ecological disaster, war, invasion, oppression and population changes (Fry 1985:127, 129, 136-137). As has been discussed, some of these circumstances have been detected at Baking Pot and within the Belize Valley.
Ritual expressions are noted as often coinciding with changes and resulting stresses in a community (van Gennep [1909] 1960, and Turner 1969 in Dunleavy and Miracle 1981:118). Ritualized actions act as a form of ideological communication, through which the community redefines its direction, harmonizes its viewpoint and re-centres its foci of concern (Wallace 1966:239-242; Dunleavy and Miracle 1981:118). The prominence of the ritually competitive Maya ballgame in the Maya Lowlands coincides with the aforementioned changes. During the Late Classic period the ballgame, its ballcourts and their connections to Maya cosmology, came to be venerated by the community on a previously unprecedented scale in the Belize Valley, and entered wholly into the realm of socio-politics (Smith 1961:104; Scarborough 1991a:125; Ferguson 1997:50). As such, the Maya ballcourt appears to have served as a symbolic and physical manifestation of a shared ideology rooted in a previous or traditional era in Maya history, which was revived, perpetuated and capitalized on to create a more satisfying culture and stabilize and maintain socio-political order. As a salient symbol of Maya culture history, the ballcourts and ballgame served as symbolic capital for, and imported representations of, a previous culture experience and functioned as integrative mechanisms of a revitalization movement. Fry (1985:138) has similarly argued that the re-erection of stelae, and the ‘reuse’ of venerated artifacts and human remains at Tikal after the hiatus may have been the this community’s attempt at a revitalization movement.

The ritualistic nature of the ballgame, the pomp and circumstance that surrounded it, paired with the permanency of its daily architectural presence, made the ballcourt a particularly salient symbol of Maya ideology and unity. It is my interpretation that the resurgence of ballcourts and the proliferation of the ballgame in the Belize Valley during the Late Classic, particularly as exhibited at the civic centre of Baking Pot, was a physical manifestation of the efforts of a revitalization movement, as supported by a traditional culture history
involving the cosmological associations of the Maya ballgame. Revitalization movements are not easily identifiable in the archaeological record, and yet appear to have been a pattern of response to "structural transformations" in the socio-political throughout Maya history (Wallace 1956; Freidel 1992:118). Examples of revitalization movements among the Maya have been demonstrated archaeologically at Tikal (Dahlin 1976; Fry 1985) and in the Uaymil region (Fry 1985:137), as well as during post-contact times among the Chamula and the War of Santa Rosa, Chiapas (1867-1870) (Gossen and Leventhal 1993:193), and the mid- to late nineteenth century "Caste War" in the Yucatan Peninsula (Fry 1985:130).

If a challenge to, or a breakdown of, the cultural system appeared to be imminent due to developing socio-economic crises and increasing political centralization, the members of the community may have turned to the foundation of their social system, to their ideology, to help them contend with changes and challenges to the socio-political framework. I believe that in response to the stresses caused by increasing pressures on the socio-political system due to population pressures, diminishing resources, and increasing competition, polities within the Belize Valley determined that an inspiring way to deal with the stresses and transition, was to instigate a revitalization movement based on the promotion and use the ballgame as a lever to boost group cohesion by reaffirming their culture history. Such an action would have been one of many options exercised in response to such "structural transformations" throughout Maya history. Friedel (1992:118) notes how in response to socially unstable conditions, there is a "redefinition of [the] basic structural building blocks of...Maya" [and for all intensive purposes, Mesoamerican] ideology", and as such the Maya typically "reinvented" or "reinvested" in aspects of their ideology in times of duress. This predilection to redefine one's ideology in response to changing/stressful conditions is best illustrated through the Mexica migration legend. The legend notes that upon arrived at Coatapec, and after the building of their villages and the temple dedicated to Huitzilopochtli,
the Mexica were instructed by Huitzilopochtli to build a ballcourt, and thereby sanctioned the creation of their social and sacred space (Stern 1949:64; Fox 1996:485). As will be seen, triadic principles and concentric dualism are particularly pervasive with Baking Pot’s settlement patterns and the spatial orchestration of its ballcourts.

ARCHITECTURE AND THE MAYA OF THE BELIZE VALLEY

As mentioned in earlier chapters, the only evidence of the Maya ballgame in the Belize Valley is the ballcourts themselves. As such, attempts at discerning the meaning or role of the ballgame within the Belize Valley must rely on the architectural data, specifically on patterns of inter- and intra-site distributions, temporal assignments, and how architecture is understood to relate to, and/or symbolize Maya ideology. For much of the following discussion, the reader needs to see architecture as a form of communication whose function is connotated, not denoted (Eco 1980:41, 1986:64; Aveni and Hartung 1986:57; Glassie 1987:231; Hegmon 1989:8; Rapoport 1990:292; Sanders 1990:45; Tilley 1991:20; DeMarrais et al. 1996a:17).

As a medium for communication, architecture is a very pervasive force, as it holds the ability to relate physical and metaphoric functions, consciously and unconsciously. Additionally, as an enduring example of materialized ideology, its message is continuously transmitted across time and space, visually and physically, and to every member of the community (Gutman 1976:47; Glassie 1987:236; Hegmon 1989:8). Since architecture is also experienced (Rapoport 1990:12), architecture is a particularly “audible” medium through which social integration and order are signified and reinforced (Hegmon 1989:7). Before a structure has a conventional use, it has a cultural significance (Sanders 1990:45) that is drawn from established sociological and likely cosmological principles (Richards
1993:148). As a communicative medium, architecture not only relates a message, but is defined by, and at the same time influences, the social environment and the behaviours of its actors (Rapoport 1980:292; Richards 1993:175-176). As such, architecture can contribute data relating to the socio-political, economic and ideological milieu of a time period, and the expected behaviour and experiential processes involved therein (Trigger 1990:128).

Architecture as a medium is generally aimed at, and accepted by, the masses by building a sense of security, and identity by formulating a sense of place, and by physically affecting behaviours and experiences, and replicating or building upon cultural characteristics. It succeeds by "building" upon prevailing or understood premises of order (Eco 1980:15, 41). Messages conveyed through architecture are not easily challenged or negated, due to their non-verbal and permanent nature (Gutman 1976:47; Jencks 1980:7; Hegmon 1989:8). As such, "architectural media" are more effectively able to retain their original messages, and are affected less by change (Sanders 1990:43). This is particularly so for ballcourts, since they are characterized by continual use and reuse, and are rarely destroyed, or built over (Scarborough 1991b:130). While modifications to ballcourts do occur on occasion, as was the case at Pacbitun (Healy 1990, 1992:234) and Cerros (Scarborough 1991a:109-110), alterations are generally restricted to renovations rather than functional changes. As such, ballcourts act as a communicative medium when paired with their inherent connection between the ballgame, and the Underworld. Moreover, the ability of the ballcourt's architecture to retain its original message, whether consciously or unconsciously intended, symbolically or practically indicated, demonstrates how during a time of stress or change the ballcourt and/or the ballgame may have been used as a unifying or regulatory mechanism.
Traditionally, studies concerning Maya architecture have focused on the function of civic architecture as a socio-political and economic tool in Maya power struggles, with ideology being peripheral to this design (Freidel 1992:120). Given the extensive labour and resource investments required in the construction of monumental architectural projects (such as ballcourts), and their proliferation across time and space, it seems plausible that these structures were erected through a communal pride established in a collective history and belief system, rather than by coercion and valor of a ruling elite (Freidel 1992:129). This suggestion seems particularly feasible when, as discussed earlier, one recognizes that while economic and status disparities between the classes are evident, such disparities were embedded in Maya ideology. All members of Maya society conceded that rulers were agents of their office, whose divine responsibility was to work for the good of the community (Robertson 1974, 1976, 1979 in Freidel 1986:93; Freidel 1992:128; Lucero 1998:7). Thus, differences in wealth and status were reflections of the ruling office. There are no indications that either the ruling elite or the general populous acknowledged the ruling class as having “power over” the general population. I believe scholars need to move away from power-oriented, kinship-centred, mercantile interpretations of ballcourts, and consider further their ideological and symbolic roles, and then relate the use of the ballgame and its ballcourts to the realms of socio-politics and economics.

**SETTLEMENT PATTERNS AND THE MAYA**

The built environment is an expression of design and cognition. The construction of a hamlet, village, or civic centre is never arbitrarily decided (Sanders 1990:45). It is shaped by its builders’ need to order their world (Rapoport 1975a and 1976a and b in Rapoport 1980:284; Fritz 1978:40; Shanks and Tilley 1987:132), as established by social and religious needs and standards (Thompson 1983:116; Kent 1990:127; Locock 1994:5).
Conversely, the ordering of the environment further serves to define social, political, religious, and economic boundaries. It regulates suitable behaviours (Gutman 1976:43; Fritz 1978:40; McGuire and Schiffer 1983:281; Ashmore 1989:272; Hegmon 1989:7; Sanders 1990:45-46; Locock 1994:9), as meanings and expectations are coded in the built environment, revealing and reinforcing aspects of a community’s worldview, identity and culture (Thompson 1983:116; Richards 1993:148). Along the same principles, modification of the built environment can also aid in transforming the social order (Hegmon 1989:5). It has been proposed that during time of stress or crises, the need to communicate information, perhaps symbolically, increases and thus structural investments in the built environment would naturally increase (McGuire and Schiffer 1983:281). During such times, sociological and ideological campaigns gain particular “explanatory relevance” in an attempt to deal with the surrounding stresses (Nielsen 1995:53). Demarest (1992:147) has noted that during the Classic period the Maya utilized ritual, cosmology, public and monumental displays to support and sanction socio-political relations at both the inter- and intra-site level. What better medium to utilize than the ballcourt for such purposes, seeing as how the ballgame and ballcourts penetrate all of these forms of public communication and display?

The Maya world was a locative one (Tate 1992:144), in which the built and socio-political environments encompassed and mimicked the natural and cosmological worlds (Aveni and Hartung 1986:56; Schele 1987; Ashmore 1989, 1991:199; Schele and Freidel 1990:65, 67; Scarborough 1991b:129; Freidel 1992:116; Freidel et al. 1993:138). To the Maya, the built environment served to materialize the creation of the universe. The Maya replicated the principles of their creation myth in the positioning and arranging of their settlements by mimicking the placing of the first three hearth stones and the separation of the three worlds. This was commonly done through the creation of a central axis at the site, or the Wacha

The cardinal directions also have otherworldly associations that seem to come into play in site planning. Typically, a north plaza group or compound is associated with community and ritual or sacred architecture, whereas the south compound is restricted to palace-type structures and/or elite/secular architecture (Coggins 1967 in Ashmore 1989:274; Cohodas 1975:129; Ashmore 1991: Gillespie 1991:341-342; de Montmollin 1997:36). The south is said to be associated with the underworld (Fox 1996:486; de Montmollin 1997:36), whereas the north is representative of "the celestial supernatural sphere" (Ashmore 1989:273). Ballcourts are often used to mark the entrances to plazas, often between the northern "sacred" and southern "private" or "elite" plazas. The placement of ballcourts at these strategic locales is related to their role as intermediary structures, and gateways to the underworld (Cohodas 1975:129; Leyenaar and Parsons 1988:71; Ashmore 1989:273, 279, 1991:200; Gillespie 1991:341-342; de Montmollin 1997:36).

Baking Pot, like many Maya sites, comprises two main architectural compounds, organized along a north-south axis. The north group is primarily composed of civic or ceremonial architecture, while the south group is composed of private, palace-type structures. As discussed in Chapter 3, Baking Pot is unique to the Belize Valley in that it houses three ballcourts each of which is strategically placed, more or less, along the sites north-south central axis. Each ballcourt is either located at, or forms, an entrance way to one of the main plaza groups. The NBC is located at the northern extreme of the site, and of Group I; the Plaza 2 ballcourt forms the southern entrance way to Group I, and in effect mediates
between the northern-sacred, and southern-secular construction complexes: and the Str. II-D ballcourt forms the southern entrance to Group II, and to the site core proper. The two southern ballcourts (Str. II-D ballcourt complex and Plaza 2 complex) both have sacbeoh leading to, or from their southern ends. It is possible that these ballcourt-sacbeoh complexes were intended to mimic, and function as, the Black Transformer Road as noted in the Popol Vuh (see chapter 4) (Tedlock 1985:109; Freidel et al. 1993:351).

All of the Baking Pot ballcourts, but particularly those with the associated sacbe, support the contention that ballcourts were considered entranceways to the Otherworlds, as they physically manifest the gateway to the underworld (Cohodas 1975:129; Tedlock 1985:109; Leyenaar and Parsons 1988:71; Ashmore 1989:273, 279; 1991:200; Cohodas 1991:54; Gillespie 1991:341-34; van Bussel 1991:256-257; Freidel et al. 1993:351; de Montmollin 1997:36). Fox (1991:217) has noted that ballcourts located in the south-west areas of Quiche site centres were particularly identified with the Underworld, seeing as the south is associated with the Underworld, and the west is the direction in which the sun disappears into the Underworld. Similar to the Quiche centres, the Str. II-D ballcourt complex, the most southern ballcourt at Baking Pot, is located in the south-west corner of Group II and constitutes an east-west running court. The erection of an east-west oriented ballcourt, paired with its associated sacbe and south-west location, fully epitomizes the Maya concept of a gateway to the underworld.

The repetitive construction pattern of Maya centres, and the inclusion and location of certain building types contained therein (i.e., temple pyramids and ballcourts) (Hammond 1972:83; Aveni and Hartung 1986:68; Ashmore 1989:279, 1991:200), attests to the importance of cosmology to Maya site planning. The locative facets of Maya site planning principles noted above are all connected to the concept of partitioning and the Precolumbian Maya's
understanding of the creation of the cosmos. The importance of the creation “myth” to the Precolumbian Maya can be detected in both their inter-and intra-site settlement patterns.

A recent study conducted by Jim Garber (1994) has suggested that the uniform distribution pattern of the sites in the Belize Valley, the spacing between Valley centres being approximately 9.9 kilometres, was intentional (Garber 1994:39). Similar distributional regularity of sites with ballcourts has been noted in the western periphery of the Maya subarea, in the Greater Rosario Valley and the Grijalva Basin (de Montmollin 1997:31-32). Garber further proposed that the distribution of “major” centres with ballcourts across the Belize Valley landscape was patterned in sets of three, along roughly straight transects across the Valley (see figure 4.1) (he connects the following sites together: Camelote, Blackman Eddy and Baking Pot; Baking Pot, Cahal Pech and Xunantunich; and El Pilar, Cahal Pech and Pacbitun [it should be noted that Camelote does not in fact have a ballcourt] (Garber 1994:39). Garber (1994:38) contends that the transects created by this distributional pattern mimic that of the Milky Way as seen on the two days of Maya creation [August 13th and February 5, 750 B.C.]. He suggests that this pattern is representative of the Maya’s partitioning of the region, similarly to the partitioning of their centres, agricultural fields, plazas, households and altars, all in an effort to simulate the creation of the cosmos as executed by the gods (Garber 1994:44). Similar tripartite distribution patterns have been identified at Uxmal, “where an alignment that starts at the temple doorway of the Temple of the Magician passes through three structures one of which is a ballcourt” (Garber 1994:39).

While supporting evidence for an astronomical-cosmological template for the Belize Valley site distribution pattern is lacking and the theory certainly debated, the concept of the partitioning of site centres as a metaphor for the creation myth is supported by internal site
schemes. The metaphoric associations of internal settlement patterns are particularly pervasive when one considers the role of the ballcourt in Maya ideology, the prominence of ballcourts across the Maya subarea in the Late Classic period, and particularly in the Belize Valley, and the propensity of the Maya to materialize aspects of their ideology. This concept is especially conspicuous at the civic centre of Baking Pot.

**SUMMARY**

By examining aspects of Maya ideology, specifically tenets of Maya cosmology, and social complexity, and then applying concepts revealed therein to the architectural and spatial dynamics of ballcourts at Baking Pot and within the Belize Valley, an understanding of the role of the ballgame at Baking Pot can be fostered. In this chapter, I argued that during times of crises or stress some communities, including the Precolumbian Maya, often instigated and engaged in revitalization movements. Such movements are initiated in an attempt to mediate transformations and sanctify the socio-political actions of the ruling elite during particularly pervasive periods of stress by championing an aspect of a shared cultural heritage. I have suggested that in during the Late Classic period in the Belize Valley, aspects of Maya cosmology, specifically the ballgame, came to be used as a unifying mechanism, giving power to and within the individual communities by serving to reaffirm or reestablish their sense of community. As a permanent construction, architecture is seen as a permanent expression of Maya ideology. Connections between ballcourts and cosmology allowed the Maya to communicate a common history through which all members of the community could relate.
Figure 4.1: Alignments of Major Centres with Ballcourts in the Belize Valley (after Garber 1994:Fig. 1).
Chapter 5

CONCLUSIONS

INTRODUCTION

By reviewing what is known of the Maya ballgame, and ballcourts, and by exploring what is known of the Belize Valley ballcourts and sites, contextual and comparative data were presented and provided a basis from which an investigation of the ballcourts at Baking Pot could be fostered. In recognizing the oddity of the presence of three, significantly different ballcourts at the site, a number of questions were raised. Why does Baking Pot have three ballcourts, whereas most sites have only one, and still others have none? Are the locations of the ballcourts at Baking Pot significant? What is the meaning behind the variation in the ballcourt complexes of Baking Pot and the Belize Valley? Could these differences, or the increases in ballcourt numbers in the Late Classic denote societal change? Do they represent different types of games, or changes in the traditional game? Is the architectural evidence sufficient to analyze effectively the ballgame at Baking Pot?

BAKING POT AND ITS BALLCOURTS

While ballgames and ballcourts may have been perceived as openings to the Otherworlds, and served to mark sacred ground, their potential role in stabilizing the social system may not have been quite as great prior to the Late Classic period. The obscurity of such a role for the ballcourt and ballgame was likely due to the Valley’s apparently stable, decentralized existence, that was more or less free from the environmental, economic, social, political and population pressures with which the Late Classic Valley community was faced. The
ritualistic nature of the ballgame, the pomp and circumstance that surrounded it, paired with the permanency of its unifying message inherent in its architectural presence, made the ballcourt a particularly salient symbol/mechanism for the communities attempts at stabilizing the socio-political order, and for the instigation of a revitalization movement. Whether these efforts were conscious or unconscious is not known for certain.

It is my interpretation that the regular spacing of the three ballcourts at Baking Pot along the site's central axis, and each at an entrance way to one of the two main architectural groups, is inherent to the role of the ballcourts in the partitioning of the site, as a material metaphor of the creation of the cosmos. Similar to the mythology of the gods having laid down the first three hearth stones and separating the "worlds", I submit that the Maya of Baking Pot erected the three ballcourts with the intention that each court represented a hearth stone. In other words, their construction functioned as a metaphor for the separating of the three Maya worlds. Following this suggestion, I propose that the NBC was meant to represent the Upperworld, where the branches of the World Tree reach; while the Plaza 2 ballcourt represented the middle world or the stalk of the World Tree, whose role it was to mediate between the Middle and other "worlds"; while the Str. II-D complex at the south end of the site core represented the roots of the World Tree, and essentially manifested the Underworld. Support for this proposition is found in the Maya conviction for partitioning their landscape, the credence invested in their creation myth, and the notion that the ballcourt was considered an entranceway to the Otherworlds.

Still remaining is the question of exactly what happened in the Late Classic period in the Belize Valley, and at Baking Pot in particular, to cause an apparent "need" for the erection of three ballcourts at this site? And, what of the degree of variability in the ballcourts? As has been suggested, I submit that the Maya of the Belize Valley were attempting to return to
affirm their cultural identity through the instigation of a revitalization movement, in response to stresses and changes in their socio-political order. As noted by McGuire and Schiffer (1983:281), investments in symbolic or ritual architecture escalate as a mode for promoting unity and integration, in response to increases in group distinctions, as would be the case as polities attempted to deal with stresses and changes in the Belize Valley.

Recognizing the Maya’s propensity to turn to their ideology during times of stress, I propose that the erection of the three strategically placed ballcourts at Baking Pot, as well as the sudden influx in ballcourt construction across the Belize Valley during the Late Classic period, was an attempt to mediate the socio-political transformations taking place by attempting to essentially reestablish the community. Ballcourts are often understood to “reestablish the time and space of a past creation” (Freidel et al. 1993:350). Perhaps each of the three ballcourts at Baking Pot were meant to represent one of the three creation events in the history of the Maya cosmos. By reaffirming their ideology and community identity, the Late Classic Maya ruling class of Baking Pot were attempting to stabilize the social order of the community, by capitalizing on an original and constant feature of Maya ideology. They sought to rely on an element of ideology, which was materialized in a permanent and animate presence, was recognized across the built environment, and which was able to be “read” by every member of Maya society.

It appears that the increase of ballcourts in the Belize Valley in part reflected a change in the role of the ballgame, that was capitalized on in response to changes and stresses that were transforming in the socio-political system at the time. The role of the ballcourt in sanctifying sacred space across the built and social landscape, helped link the community to a territory. While the social landscape may change over time, monuments and architecture served to solidify a community’s association with a particular place and its surrounding environment
(DeMarrais et al. 1996a:18, 19). Some scholars have suggested that the virtual standardization of ballcourts in the Maya subarea during the Late Classic period appears to have been the result of a change in the role of the ballgame at this time (Clune 1963:183).

Throughout Mesoamerican history, ballcourts as representations of community identity and unity have been identified with the establishment of communities (Stern 1950:64; Fox 1996:485). I submit that this change was associated with an alteration in Maya sociopolitics in which the ballgame played a role in "the apogee of site development and ritual florescence" (Leyenaar and Parsons 1988:72; Trigger 1990:127). As noted by de Montmollin (1997:38), the fact that ballcourts are present at sites of varying size and complexity indicates that the ballgame was not an exclusively elite ritual, and that its purpose or meaning was intended to be read by every member of society. As such, the ballgame was a perfect mechanism through which group cohesion and unity could be fostered during a time of stress.

Many centres in the Late Classic Belize Valley were evidently attempting to recapture their culture history by mimicking the recreation of the cosmos with the erection of ballcourts at sites previously with and without ballcourts. Ballcourts were also being erected at sites which had not existed prior to the Late Classic, such as Ontario (Garber et al. 1994; Driver and McWilliams 1995), X-ual-canil (Ferguson 1997), and North Caracol Farm (Conlon 1996). These sites, in particular, speak to the fact that social strife in the Valley was causing fracturing of the larger community, and how these new communities were instituting the perceived need to "begin" again by reestablishing the place and time of past creation (Freidel et al. 1993:350). Or perhaps the fracturing itself was the root of the social strife that caused the larger centres to attempt to reaffirm their position, even magnify their status by building additional ballcourts, or by investing in the modification of existing courts. If
ballcourts were used as forums for, or expressions of, socio-political competition both at the inter- and intra-site level, structural variations in ballcourt complexes may have been intended to emphasize local or polity distinctions (Gillespie 1991:341). I propose that the profusion of ballcourts across the Belize Valley, and the multiplication of ballcourts at Valley sites is also reflective of an individual community’s attempt to reestablish its identity through ballgame ideology, in response to developing socio-political and economic stresses and perhaps growing Late Classic crises.

Despite the fact that the Late Classic ballcourts in the Belize Valley typically maintained their traditional design and structural features, as well as a customary north-south orientation, variations in ballcourts within the Belize Valley, and particularly between those at Baking Pot, attest to the apparent shift in the significance and role of the ballgame in the region in the Late Classic period. When one considers that revitalization movements serve to incite a new cultural system through the combination of a new order and a revival of aspects of a traditional one, the maintenance of the overall traditional structure of the ballcourt, and the manipulation of minimal variations is appreciated. The question that remains unanswered is why the diversity in ballcourt numbers at sites, and in their specific features, sizes and types, not only among the three ballcourt complexes at Baking Pot, but across the Belize Valley, and the Maya subarea? Some have suggested that the variation is related to the degree of socio-political centralization across a region, suggesting the fewer ballcourts there are the higher the degree of centralization, and conversely the more there are, the more decentralized the region, or site is (Hendon and Joyce 1993:30 in Fox 1996:480; Santley et al. 1991:22; de Montmollin 1997:30).

Another suggestion proposed in an attempt to help explain the architectural diversity of the ballcourts, is that the size of the ballcourt mimics the size or importance of the site which
houses it (de Montmollin 1997:32). This is not the case, however, in the Belize Valley. For instance, the Baking Pot ballcourts are relatively small compared to the EBC at the smaller sized site of Cahal Pech, or either of the courts at Xunantunich.

From a construction perspective, the type of raw materials used in the erection of a ballcourt should not necessarily be seen as an indication of the importance of the game to a given community, as the materials may be more a reflection of those immediately available, rather than in the importance of the ballgame to a given community. This is apparent at Baking Pot, where both the NBC and the Plaza 2 ballcourt’s construction fill, in addition to that found in much of the Late Classic architecture throughout the site (Bullard and Bullard 1965; Aimers 1997) consists primarily of alluvial fill rather than the typical limestone rubble and core fill seen at other sites in the Belize Valley (Healy 1992; Ferguson et al. 1996; Ferguson 1997). Variations in the structure and construction of the complexes is important to consider since such differences likely denote more significant things than such variations in churches, gymnasia or sweatlodges since the variation may not only relate to deeper meanings, but to the functionality of the court and thus the play of the game. In the case of Baking Pot, the lack of limestone construction materials may in fact reflect the inability of the Baking Pot community to gain full access to this resource during the Late Classic period due to political or territorial conflicts and boundaries in the Belize Valley at this time.

Some scholars have suggested that differentiation of ballcourt complexes may be reflective of the fact that different courts were used for different reasons, or for different religious or ritual "cults", as is suggested for El Tajín (Wilkerson 1991:67); while others argue that the variations indicate different types of play (Stern 1949:35; Ritman 1968:40). While one can see how variations in ballcourt form may be seen as reflections of changes to, and resulting
in different types of games being played, and perhaps for different reasons, others, such as de Montmollin (1997:38), question why these variations were not more distinct and grandiose. I suggest that structural inconsistencies in ballcourt features are due to variations in the play of the game, and perhaps its role, as well as reflections of different “architects”, local preferences, or architectural styles (Stern 1949:35; Ritman 1968:40; Locock 1994:10). The important point is that the main characteristics of the ballcourts are maintained, and thus support the premise that the ballgame, and ballcourts, are an excellent medium through which to communicate and remind the population of its deep-seated culture history, group identity, and ability to persevere.

With the increases in the number of ballcourts at individual sites and across the region, the structural diversity of ballcourt types and features, perceived methods of play and scoring, as well as the imagery and ethnohistoric impressions, the ballgame underwent changes in the Late Classic period (Acosta 1940 in Clune 1963:183). These same points also seem to suggest that different versions of the ballgame existed (Taladoire and Colsenet 1991:162). Given the diversity of ballcourts within a given region, such as the Belize Valley, the Cuyumapa Drainage (Fox 1996) or the Greater Rosario Valley or the upper Grijalva Basin (de Montmollin 1997), it would further appear that these versions were not specific to geography or chronology, but may have been specific to the function of, or the purpose for playing the ballgame. The fact that Baking Pot encompasses three differing ballcourts, all of which date to, or have construction episodes that date to, the Late Classic period attests to the likelihood that the ballcourts had varying roles.

Based on the construction techniques of the Group I ballcourt, it is my interpretation that the final construction episode of this ballcourt was never actually used as an arena for the active play of the ballgame. Rather, I argue that its relevance or value was placed in its
symbolic associations. The Group I ballcourt's terminal phase of construction consists primarily of alluvial fill, which was then evidently capped by a layer of ballast type fill, over which plaster would have been set. As such, this ballcourt complex is unlike the others at Baking Pot, or in the Belize Valley in that no cut stones were utilized in the creation of a backing wall. Such a feature is typical of ballcourt construction in that these walls likely served to stabilize the structure, and help brace the structure for the repeated impact of the heavy, solid rubber ball. Fox (1996:493) has also suggested that some ballcourt complexes, for example those of unusual size like at Chichén Itzá, may never have been utilized for the actual playing of the ballgame. It is possible that such courts were used as theatres, in which performances to re-enact previous ballgames and past creations were conducted (Scarborough 1991b:144). The Maya are known for the construction of other architectural complexes whose meaning is invoked through their symbolic or metaphoric function, rather than its operative or intended function. Houston (1996) has identified a symbolic sweatbath at the cross group of Palenque, whose role it was to imitate mythological structures rather than actually function as a sweatbath. He makes this supposition based on the fact that the structure contains no evidence that it could have produced or maintained a sweatbath environment (Houston 1996:132-133). I perceive that the Plaza 2 ballcourt at Baking Pot served a similar function, in that this particular complex was meant to mimic the ballcourt utilized by the Hero Twins, as discussed in the Popol Vuh. I make this suggestion based on its medial location at the site, between the metaphoric Upper- and Underworld of Group I and Group II, as well as the presence of the sacbe leading directly from the southern Underworld to the ballcourt symbolically located at the surface of the earth. However, this was evidently not always the case, as the archaeological record indicates that the Plaza 2 ballcourt was the first ballcourt at the site, and that the two earlier ballcourt constructions did possess the backing wall perceived to be important in the construction of an actively utilized ballcourt. It was not until the Late
Classic period that the other two ballcourts were erected at Baking Pot and that the role of the Plaza 2 ballcourt changed.

The NBC at Baking Pot is an anomaly in the Belize Valley in that, to date, it contains the only evidence of a ballcourt marker in the Valley. I believe that the NBC complex is obviously associated with the civic-ceremonial architecture of the northern-secular architectural compound. This paired with its yet somewhat isolated location, away from the majority of civic architecture, relates to the fact that this ballcourt complex was the only ballcourt at Baking Pot actively utilized for the playing of the ballgame. I submit that its location supports this premise in that Group I and its architectural structures are all public buildings, intended to be "utilized", or "observed" by the general public. The association of the complex with Group I therefore speaks to its intended public audience. The somewhat isolated location of the NBC from Group I can be seen as function of its use as an active arena in that its isolated location would have assisted in the viewing of the game by the general public, since the area surrounding the ballcourt was free from other forms of architecture. Additionally, the presence of a scoring marker at the site also lends support to this hypothesis. Perhaps the NBC was constructed in the Late Classic to take over the no longer active role of the Plaza 2 ballcourt.

**SUMMARY**

This thesis has examined the role of the ballgame at the Maya civic centre of Baking Pot, as evidenced through the architecture and distribution of ballcourts at the site, and throughout the Belize Valley. All three ballcourts at Baking Pot had individual roles specific to their location at Baking Pot, but which were related to their metaphoric connections to Maya cosmology. As such, the ballcourts became instruments of cohesion, solidarity and social
order, in that their ability to serve as permanent reminders of Maya ideology and culture history was capitalized on during times of change and stress in the Late Classic period.

I have argued that during the Late Classic period, the Belize Valley was in a period of transition, as the socio-political fabric of the region was being challenged due to climaxing stresses in the social order. This period of transition was the result of increasing population and density pressures on resources, and the resulting economic, political and social stresses. The resulting role of the ballcourts in the Belize Valley at this time appears to have changed. They became modes of communication for inciting group cohesion and unity during this time of stress, and in effect served as a form of symbolic capital for a revitalization movement.

The sudden increase in ballcourt construction across the region, and at sites such as Baking Pot, is believed to have been directly associated with the efforts of individual sites to initiate a revitalization movement within the Belize Valley. By consciously and unconsciously denoting aspects of Maya ideology, ballcourts functioned as a facility for social integration through the participation in the construction of a symbolically charged monument, in their ability to reconstitute the culture history of the community and thereby foster a sense of unity.

Through the coordination of this ideologically based ritual game and the prevailing social order, the ballcourts served as a form of symbolic capital that gives power to, and is utilized as an instrument by, the entire community. Because of a community's attachment to the ballgame and its cosmological relations, the Baking Pot and Belize Valley population evidently accepted the "manipulation" of the ballgame and ballcourts during this time of socio-political stress and change. The permanency of the ballcourt and its metaphoric
meaning and role served as an emblem of the past, of stability and of perseverance during times of stress in the Late Classic period. As such, Maya ballcourts were mechanisms of a revitalization movement, and by extension of governance. Such ballcourts functioned as optimal reminders of various facets of the social order to all members of society.
REFERENCES CITED

Aimers, J.

Algeria, R. E.
1983 Ball Courts and Ceremonial Plazas in the West Indies. Yale University Publications in Anthropology, No. 79. Yale University, New Haven.

Ashmore, W.


Ashmore, W., J. Yaeger, S.M. Chase, J. VandenBoch and S.V. Connell


Aveni, A. and H. Hartung

1986   *Maya City Planning and the Calendar*. The American Philosophical Society, Philadelphia.

Awe, J. J.


Awe, J.J. (Editor)


Awe, J.J. and J.M. Conlon (Editors)


Ball, J.W. and J.T. Taschek


Bassie-Sweet, K.

Baudez, C.F.

Becquelin, P. and C.F. Baudez (Editors).
1975 Architecture et Sculpture á Tonina, Chiapas, Mexique. 41st ICA Actas 1:433-435.

Blom, F.

Boot, E.

Brady, J. and A. Stone
Broadbent, G. and T. Llorens

Bullard, W.R., Jr.


Bullard, W.R. Jr. and M. Ricketson Bullard

Carlston, E.

Chase, D.Z., A.F. Chase and W.A. Haviland

Cheetham, D.T.

Cheetham, D.T., J. Vinuales, J.T. Carlsson, T. Wallis, and P. Wilson

Clarkson, P.B.

Clune, F.J., Jr.

Coe, M.D.

Cohodas, M.


Conlon, J.M.


Conlon, J.M. and J.J. Awe (Editors)

Conlon, J.M., T.G. Powis and B.M. Hohmann

Conlon, J.M., K.K. Finlayson and T.G. Powis

Connell, S.V.


Dahlin, B.
de Borhegyi, S.F.

Demarest, A.A.

DeMarrais, E., L J. Castillo and T. Earle


de Montmollin, O.


Dobson, N.

Driver, W.D. and J.K. McWilliams
Dunleavy, A.O. and A.W. Miracle

Durán, D. de

Eco, U.


Fash, W.

Fedick, S.L.

Ferguson, J.


Ferguson, J., T. Chistensen and S. Schwake


Flannery, K.V. and J. Marcus


Ford, A.


Ford, A., D.C. Wernecke and M. Grzybowski

Fox, J.G.


Fox, J.W.


Freidel, D.


Freidel, D., L. Schele and J. Parker


Fritz, J.M.


Fry, R.E.

Garber, J.F.


Garber, J. F., W. D. Driver and L.A. Sullivan


Garber, J. F., W. D. Driver, L.A. Sullivan and S. Goldsmith


Garber, J. F., D.M. Glassman, W. D. Driver, and P. Weiss

1994  The Belize Valley Archaeology Project: Results of the 1993 Field Season. Report Submitted to the Belize Department of Archaeology, Belmopan.

Gifford, J.C.


Gillespie, S.D.

Glassie, H.

Golden, C. and J.M. Conlon

Gossen, G.H. and R.M. Leventhal

Graham, E.

Greene, M.

Gutman, R.

Hammond, N.


Hammond, N. and W. Ashmore


Healy, P. F.


Healy, P.F. and J.J. Awe


Healy, P.F., J.J. Awe, G. Iannone and C. Bill
1995 Pacbitun (Belize) and Ancient Maya Use of Slate. *Antiquity* 69(263):337-348.

Healy, P.F., K. Emery, and L. Wright

Healy, P.F. and N. Prikker

Hegmon, M.

Hellmuth, N.M.

Hendon, J.A. and R.A. Joyce
1993 Questioning “Complexity” and “Periphery”: Archaeology in Yoro, Honduras. Paper presented at the Society for American Archaeology Meetings, St. Louis, Mo.

Hill, W., M. Blake and J. Clark

Hodder, I.

Houston, S. D.


Humphrey, R.L.

Iannone, G.


Jamison, T.R. and G.A. Wolff

Jencks, C.

Jones, C.

Joyce, A. A. and M. Winter

Joyce, R.A.
Keller, A.H.


Kent, S.

Kemrer, M. F., Jr.

Kirke, C.M. StG.

Knauth, L.

Kowalewski, S.A., R.E. Blanton, G. Feinman and L. Finsten
Kowalewski, S.A., G.M. Feinman, L. Finsten, and R.E. Blanton
1991 Pre-Hispanic Ballcourts from the Valley of Oaxaca. Mexico. In The
Mesoamerican Ballgame. edited by V.L. Scarborough and D.R. Wilcox,
pp. 25-44. The University of Arizona Press, Tucson.

Krickberg, W.
1966 El Juego de Pelota Mesoamericano y su Simbolismo Religioso. In
Traducciones Mesoamericanistas, translated by J. Brom O., Vol. 1. pp. 191-
313. Sociedad Mexicana de Antropología. Mexico. D.F.

LeCount, L.J.
Research. In Xunantunich Archaeological Project 1994 Field Season,
Department of Archaeology, Los Angeles and BelMopán.

Lee, D.F.H.
1996 Nohoch Na (The Big House): The 1995 Excavations at the Cas Pek Group,
Cahal Pech, Belize. In Belize Valley Preclassic Maya Project: Report on
the 1995 Field Season, edited by P. F. Healy and J. J. Awe, pp. 77-97. Trent

Lee, D.F.H. and J.J. Awe
1995 Middle Formative Architecture, Burials and Craft Specialization: Report of the
1994 Investigations of the Cas Pek Group, Cahal Pech, Belize. In Belize Valley
F. Healy and J. J. Awe, pp. 95-115. Trent University Occasional Papers in

Leventhal, R.
1990 Southern Belize: An Ancient Maya Region. In Vision and Revision in
Maya Studies, edited by F. Clancy and P. Harrison, pp. 125-141. University of
New Mexico Press, Albuquerque.


Lewis, B.


Leyenaar, T.J.J.

1978  Ullama, the Perpetuation in Mexico of the Pre-Spanish Ball Game Ullamaliztli. Rijksmuseum voor Volkenkunde, Leiden.


Leyenaar, T.J.J. and L. A. Parsons

Locock, M.


Loten, H.S. and D.M. Pendergast


Lowe. S. R. And M. Ries


Lucero, L.J.


Mann, M.


Marcus, J.


McAnany, P.A.

McGovern, J.O.


McGuire, R.H. and M.B. Schiffer

McKillop, H.

Miller, D.

Miller, M.E. and S.D. Houston

Miller, M. and K. Taube
Moore, A.F.


Nielsen, A.


Ovideo y Valdés, G.F. De

1851-55 Historia General y Natural de las Indias. 4 Vols., Madrid.

Parsons, L. A.


Pasztory, E.


Pertierra, R.

Piehl, J.C.

Pina Chan, R.
1955 *Las Cultras Preclassic de la Cuenca de Mexico*. Fondo de Cultura Económica, México, D.F.

Powis, T. G.


Rapoport, A.

Richards, C.


Ricketson, O.G., Jr.


Ritman, L.


Robertson, M. Greene


Roys, R.L.

1931 The Ethno-Botany of the Maya. Middle American Research Institute, Publication 2. Tulane University, New Orleans.

Sanders, D.

Sanders, W.
1960  Prehistoric Ceramics and Settlement Patterns in Quintana Roo, Mexico. CIW Publication 606, Washington, D.C.

Santley, R.S., M.J. Berman, and R.T. Alexander

Scarborough, V. L.


Scarborough, V.L. and D.R. Wilcox (editors)

Schele, L.

Schele, L. and D.A. Freidel

Schele, L. And M.E. Miller

Schwake, S.

Schwartzman, J.

Shanks. M. and C. Tilley

Smith. A.L.

Stanchly, N.

Stern, T.


Stromsvik, G.


Stone, A.


Stuart, G.E.


Taladoire, E.


Taladoire, E. and B. Colsenet

Tate, C.E.

Tedlock, D.

Tezozomoc, H.A.
1878 Crónica Mexicana. Mexico.

Thompson, D.E.

Thompson, J.E.S.


Tilley, C.

Trigger, B.
van Bussel, G.W.

van Tucrenhout, D.

Webster, D.L.

Wallace, A.F.C.


Wernecke, D.C.

Whalen, M. E. and P. E. Minnis
White, C.D., P.F. Healy, H.P. Schwarcz
1993   Intensive Agriculture, Social Status, and Maya Diet at Pacbitun, Belize. 

Wilkerson, S.J.K.
1991   And Then They Were Sacrificed: The Ritual Ballgame of Northeastern 
        Mesoamerica Through Time and Space. In *The Mesoamerican Ballgame*, 
        Press. Tucson.

Willey, G.R.
1973   Certain Aspects of the Late Classic to Postclassic Periods in the Belize Valley. 
        of New Mexico Press. Albuquerque.

Willey, G.R. and W. Bullard, Jr.
1965   Prehistoric Settlement Patterns in the Maya Lowlands. In *Archaeology of 
        Handbook of Middle American Indians, Vol. 2, R. Wauchope, general editor. 
        University of Texas Press, Austin.

Willey, G.R., W.R. Bullard, Jr., J.B. Glass and J. C. Gifford
1965   *Prehistoric Maya Settlement in the Belize Valley*. Harvard 
        University, Peabody Museum of Archaeology and Ethnology, Paper No. 54. 
        Cambridge.

Yaeger, J.
1994   1994 Fieldwork at San Lorenzo: Excavations at an Outlier Community. In 
        *Xunantunich Archaeological Project, 1994 Field Season*, edited by R.M. 
Yaeger, J. and S.V. Connell

Zeitlin, J.F.