The Architecture of Mohenjo-Daro as Evidence for the Organization of
Indus Civilization Urban Neighbourhoods

by

Matthew S. Mosher

A thesis submitted in conformity with the requirements
for the degree of Doctor of Philosophy

Department of Anthropology
University of Toronto

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2017

Abstract

The Indus Civilization of South Asia (c.2600-1900 B.C.) is one of the earliest and most geographically extensive complex urban-based societies in the world. The near-standardized proportions of its architectural components, technically-elaborate pyrotechnologies, undeciphered writing system and, perhaps most famously, its elaborate networks of urban water management, are well known elements that attest to the highly ordered coherence of its civic culture. However, the basic means of urban organization in the Indus Civilization are poorly understood. This thesis attempts to address this lack of understanding by examining the architectural record of its largest and best-studied city, Mohenjo-Daro, for the foundational elements of urban society: neighbourhoods.

Through the reanalysis of its original published reports created in the 1930s, this thesis reveals that much of the built environment of Mohenjo-Daro consists of a limited number of recurring building types, leading to the creation of the first functional architectural typology for the Indus Civilization. The distribution of these architectural types was used to identify the cores of distinct neighbourhoods in the city, locales typified by scaled-down replicas of Mohenjo-Daro's iconic buildings in its Upper Town.

Anthropological theory concerned with spatiality, interaction, and identity in urban contexts was applied to examine the relationship between these separate neighbourhoods. While being united to one another in a broad program of stylistic symmetry ultimately tied to the corporate aesthetic of most Indus Civilization cultural expressions, the separate neighbourhoods
of Mohenjo-Daro manipulated these same expressive practices to proclaim localized and distinct civic identities, and in so doing architecturally mimicked the tension between the centralizing forces of the Mohenjo-Daro state and the decentralizing tendencies of local manners of association. This balance between local community and larger polity is one of the defining elements of both urban neighbourhoods and complex societies generally. The revelation that Mohenjo-Daro was subject to these tendencies helps to clarify its internal urban organization, and allows for the Indus Civilization to be more firmly situated into comparative studies of urban and political processes.
ACKNOWLEDGEMENTS

If scholastic progress depended on the efforts of individual scholars working in isolation relying on their own resources, nothing would ever get done, least of all this dissertation. Throughout my time at the University of Toronto, I have benefited from the wisdom, experience, patience, helpfulness, interest, support and inspiration of many individuals and organizations.

Generous funding for my research was provided by the Social Sciences and Humanities Research Council of Canada, the School of Graduate Studies and the Department of Anthropology, University of Toronto, and the Research Office, University of Toronto Mississauga.

Heather M.-L. Miller served as my dissertation supervisor. Heather provided a robust, exciting, and engaging introduction to the archaeological study of the Indus Civilization. She was extremely supportive, exceedingly generous in her knowledge, and eternally optimistic in her evaluation of the value of my dissertation project. Her unflagging enthusiasm and encouragement are very much appreciated.

I sincerely thank Ted Banning and Ed Swenson for their work as members of my supervisory committee. They both brought refreshing perspectives to my research, and challenged me to move beyond my comfort zone both in my understanding of architectural data and my consideration of the interpretive possibilities of such data. Very useful discussion of my dissertation and helpful comments were also provided by Max Friesen, who served as an external reader. Timothy Harrison also served as an external reader of my dissertation, and although technical difficulties prevented his participation in my dissertation exam, I very much appreciate his willingness to be involved. Thanks also to David Levine, who acted as the chair of my dissertation exam.

Dr. Michael Jansen of Rheinisch-Westfälische Technische Hochschule Aachen served as the external examiner for my dissertation. In addition to providing very useful comments and advice on my dissertation, he has been very supportive of the potential of my dissertation research for future collaborative work. The lengthy and detailed discussion of Mohenjo-Daro we shared was the highlight of my dissertation exam.

While at the University of Toronto I was able to learn from and work alongside outstanding faculty, and for that I am truly thankful. In particular, I thank Mike Brand, Sherry Fukuzawa, Dave Smith, Michael Chazan, Gary Coupland, Heather M.-L. Miller, Ed Swenson, and Justin Jennings. Additionally, I thank Roger Lohmann of Trent University, both for the
opportunity to learn from him, as well as for his support and encouragement of my dissertation project.

Very special thanks are extended to Natalia Krencil and Maria da Mota, who made sure that things ran as smoothly as possible for me while at the University of Toronto.

A number of students, colleagues, and good friends also helped the progress of this dissertation. Some of these people regularly discussed and debated academic topics that excited, challenged, and ultimately helped shape how I understand many of the key themes that lie at the core of this dissertation and for that I am grateful. Others helped remind me that there was and is life beyond the strange joys and deep frustrations that are particular to contemplating the ruins of old cities, and for that I am even more grateful. The more patient amongst them did both. In a decidedly random order, some of them are as follows: Lesley Howse, Adam Pollack, Jennifer L. Campbell, Stephen P. Wall, Greg Braun, Liz Jackson, Martin Bale, Kathy Pitirri, Adam Allentuck, Quentin Lewis, Alana Rudzik, Alfred Park, Emily Hubbard, Anna Johnston, Graydon Gibbons, Karen Wittke, Mike White, Danielle MacDonald, Stefan Jones, Guy Duke, Barbara Slim de Proulx, Lauren Norman, Kalyan Chakraborty, Mary Davis, Candis Haak, Jeffrey Seibert, Christiane Martin, Claudia Zerht, Emma Yasui, Paul Kosemetsky, Carmen Nave, Angela Beeple, Joelle Chartrand, Brendan Walsh, David Landry, Travis Steffens, Keriann McGoogan, and Super Mike.

As anyone related to an academic understands, family can often take a back seat to the demands of research. For support, encouragement, and patience both when I have been far away and when I have been close at hand, I earnestly thank Kyleigh and Adam Campbell, Ashleigh Lepage, Mike and Jean Kalbun, Alex and Debbie Mosher, Marion Didsbury, David Kalbun and, most especially, Daegan and Rowan Mosher.

Most of all, I wish to thank my wife, Laura, without whom I would have long-ago abandoned this project. She has supported, comforted, and encouraged me throughout my dissertation, as well as provided a frustratingly capable sparring partner over all matters related to urbanism. For this and so much more, thank you.
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CHAPTER 1

URBANISM and SOCIAL ORGANIZATION at MOHENJO-DARO

The ancient city of Mohenjo-Daro in Sindh, Pakistan (Figure 1.1), is amongst the earliest urban conglomerations in the world, and represents the largest and most complete evidence of the first stirrings of urbanism in South Asia (Franke-Vogt 1993; Jansen 1994). Its size, state of preservation and extensive exposure through almost a century of archaeological research afford it primary status in attempts to grasp the beginnings of social and political complexity, especially for comparative approaches to the subject. As the best-documented and publicized city of the Indus Civilization (also known as the Harappan civilization), it is often considered a definitive resource for unravelling the intricacies of that particularly enigmatic ancient civilization. Many aspects of its urban organization remain unknown, however, despite its general importance and iconic status for comparativists and South Asia archaeologists, and the very large dataset associated with the ancient city. We are uncertain of the means by which city sections were conceptualized and spatially organized, and with the notable exception of a few select structures located on the western-situated "Upper Town" (such as the Great Bath and Stupa Complex), few studies have explicitly and systematically categorized the civic or public architectural morphology of Mohenjo-Daro, and fewer still attempted to pair such diversity with meaningful societal segments. Perhaps most importantly, we remain lamentably unenlightened, not only of how political-authoritative and localized identities articulated within the urban context of Mohenjo-Daro, but of the ultimate nature of Indus Civilization political authority as a whole (Possehl 2002a:5-6).

Admittedly, these are very large issues, each interrelated in multiple ways and comprising many discrete components; to assert that a definitive and adequate remedy to such shortcomings lies in the pages that follow is both presumptuous and contrary to the very nature of archaeological scholarship (Smith et al 2012). We can begin to examine the outstanding issues of Harappan political and social organization in a more robust manner than is currently practised, however, by advancing investigative strategies whose aim is to parse out as precisely as possible the architectural and spatial factors that underlie the urban organization of Mohenjo-Daro, and that account for, or at least correlate with, the
diversity of forms apparent in the city (Figure 1.2).

The architectural and spatial factors to which I allude functionally comprise the basic unit of urban organization in virtually all known modern and historic cities: the neighbourhood (Abbott 2006; 
Banning 1997; Blumenfield 1943; Chaskin 1997; Cowgill et al 1984; Marcuse 1993; Marcuse and van 
Kempen 2002; Smith 2010; Smith 2012:137). As is discussed in the following chapter, 
neighbourhoods are the basic social, political and productive aspects of cities (Keith 2003; Friedman 
2009; Smith 2010, 2011; Trigger 2008:57-58). Rather than simple residential areas, neighbourhoods 
historically housed a wide range of economic, familial, and community activities and institutions, and played important official and non-official roles in urban administration. Neighbourhoods are especially 
important as the point of articulation between kin-based or household and wider political modes of 
social authority (Topic 2009:239). In a socio-spatial sense, neighbourhoods occupy a critical middle 
ground between the centralizing tendencies of the (urban) state (Swenson 2003:257), and the more 
diffuse and immediate adherence to long-standing kinship models of social cohesion (Hirth 2008; 
Netherly 1993; Yaeger 2000, 2003). As both physical settings and social institutions set in the midst of 
such tensions, neighbourhoods are perhaps of most importance to scholars of urbanism as they were 
and are the locations for the formation of localized and more inclusive urban social identities (Attarain 
2003; Blackmore 2011; Manzanilla 2015; Pellow 2011; Swenson 2007, 2011:284). Such identities are 
pivotal to our understanding of the inception and continuation of political processes in ancient societies 
and lie at the heart of the motives by which people initially abandoned local autonomy for a more 
restrictive and asymmetrical social order. The argument could be made that the study of 
neighbourhoods should be considered alongside class hierarchy, economic specialization, and 
legitimizing politico-religious ideologies as one of the defining elements of complex societies.

To date, the data that have accumulated through the extensive and lengthy research at Mohenjo-
Daro has not yet been subject to an analysis specifically aimed at uncovering this essential aspect of its 
urban social and political life. This lack of attention to the basic spatial principles upon which the city 
was formed is, like other shortcomings of the early research, not an indication of scholastic oversight 
but rather a factor of context. As is illuminated in Chapters 3 and 4, the great majority of the data upon 
which interpretations of Mohenjo-Daro are based was derived from excavations conducted in the 1920s 
and 1930s, a time during which even the most critical and reflexive archaeologists operated in a way 
that would today be considered at best reductionist (Trigger 2006:211), and at worst deterministic and 
normative (Binford 1962). Furthermore, the scholars who participated in the excavation were well
credentialed in archaeology, but were intellectually aligned with Classical and historical models

Figure 1.1 Aerial photograph of Mohenjo-Daro, showing the exposed areas on the Upper Town (blue), and Lower Town (red) addressed in the text. The Upper Town is comprised of the SD (a) and L Areas (b), while the Lower Town contains the DK-G North (c), DK-G South (d), VS (e), HR (f), DK-M (g), DK-A, B, and C (h), and Moneer Areas (h).

focused on the description of a new civilization and defining its material characteristics, rather than anthropological issues of social and political structure as problems in their own right. Accordingly, Mohenjo-Daro's urban organization and its corresponding social components were treated as relatively trivial matters, discussions of which relied as much upon the assumptions and attitudes of the researchers as they did on archaeological and historical examples (Marshall 1931c). The breadth of discussion of neighbourhood structure was largely limited to acknowledging that larger, more elaborate structures likely housed civic elite, while smaller structures were the locales for commoners (Marshall 1931d). Broader questions concerning Mohenjo-Daro's neighbourhoods, or the systematic investigation of neighbourhoods at all, were simply not addressed. In all fairness, most archaeologists at this time similarly failed to deal with such questions.

Despite the lack of attention to these issues in the original excavations, we luckily do not have
to re-excavate Mohenjo-Daro in order to investigate the nature of its urban communities. Among the wealth of information unearthed at Mohenjo-Daro during the 1920s and 1930s is the basic constituent spatial and architectural information (Mackay 1938; Marshall 1931a). This, gleaned from the original excavation reports and syntheses, can be subjected to methods aimed at uncovering the underlying patterns and logic by which Mohenjo-Daro's urban communities were structured. If the civic patterns of Mohenjo-Daro, and the Indus Civilization generally, can be compared to the civic patterns evinced in other politically complex societies (e.g., Ashmore 1989, 1991; Bard 2008; Cowgill 1983; Stone 1987, 2007; Wheatley 1970) it will greatly assist in understanding the foundational logic by which its urban communities were conceived and the spatial particulars of how they articulated with one another, and with other urban elements, and ultimately in comprehending the broader characteristics of its social and political organization.

What follows, then, is a general statement on the relationship and constitution of Mohenjo-Daro society as understood through its architectural and spatial remains. My overarching framework (Chapter 2) consists of anthropological theory concerned with the interconnected issues of political typology, complex socio-political organization, urbanism and identity, informed through the lens of the historic particulars of the Indus Civilization generally, and the city of Mohenjo-Daro specifically (Chapter 3). The data and analytical methods used for this study (Appendices 1-3) primarily employed qualitative description and comparative analogy with some limited input from spatial analysis studies(Chapter 4). In addition to being practical, such methods are appropriate for the general exploratory scope of the study and its dependence on older data, and operate broadly enough to postulate functional correlations between civic forms at Mohenjo-Daro and those of urban centres from other politically complex societies (Chapter 5). The specific results of the architectural and spatial analysis of Mohenjo-Daro are synthesized to allow a general, yet important statement: Mohenjo-Daro, and by extension the Indus Civilization, followed a program of civic organization that manifested itself as aesthetically unique, but likely operated in a similar fashion to those of many other complex societies insofar as the spatial and architectural dimensions of its constituent neighbourhoods served to reify social and political cohesion, yet also proclaimed distinctive, localized identities (Chapter 6).

Ultimately, the main contributions of this study are the introduction of an approach to the identification and organization of the civic architecture and urban sections of Mohenjo-Daro, and the placement of the Indus Civilization more firmly into comparative discussions of ancient architecture, urbanism, manners of socio-political organization, and civilizations generally. Identifying the
architectural and spatial characteristics of the neighbourhoods of Indus Civilization urban centres may provide the right combination of pragmatic, empirical data and refined anthropologically-informed social theory necessary to change public and scholastic perception and treatment of the Indus Civilization from an aberrant outlier to a meaningful and valued component for understanding the range of political and urban processes in ancient civilizations.
CHAPTER 2

THEORETICAL CONCERNS AND INTERPRETIVE FRAMEWORK

This project deals with several discrete areas of anthropological interest in the context of an ancient urban society, and a summary discussion of the theoretical topics that underlie and inform these areas is, of necessity, rather broad. To make such a discussion viable, I have divided this discussion into two broad sections. The first deals with various foundational concepts and definitions related to complex societies and cities, and elaborates on their significance to the anthropological analysis of Mohenjo-Daro. The second specifically focuses on the central defining issue with which I am most concerned: the relationship between urban physical form and social organization at Mohenjo-Daro as manifest at the level of the neighbourhood.

2.1 DEFINITIONS: Complex Societies and Cities

"The vocabulary of the social sciences...scarcely permits decisive definitions."

- Fernand Braudel

As is the habit amongst social scientists, anthropologists are fond of repackaging theories and concepts to suit their own particular needs or case-studies (Goldstone and Haldon 2009:4). In that "all definitions contain or imply theories" (Cohen 1979:11), I will begin by addressing the particulars of the definitions upon which this dissertation depends. The academic ambiguity surrounding the terms employed by archaeologists, historians, sociologists, and anthropologists to make sense of their data and give form to their understandings and interpretations has garnered considerable criticism (Mann 2012:2), especially when dealing with such contentious (and misaligned) issues as social differentiation and social evolution (Marcus 2009; Trigger 1998), and social and political complexity (Cumley 2001; Peregrine 2012; Roscoe 1993; Trigger 2003:41-42). What I present here is specifically how I employ the following terms for the present study, and while my uses largely conform to and are based on conventional anthropological definitions, they are not meant to be definitive statements on anthropological terminology as a whole.
2.1.1 COMPLEX SOCIETIES, STATES, and CIVILIZATIONS

The Indus Civilization, and the other ancient societies used as comparators in this thesis were 'complex societies', perhaps the most ambiguous of the terms used by students of political systems. I use the term 'complex society' as a blanket term to refer to those societies that demonstrate the highest degree of socio-political complexity. I do not use this term as a synonym for what scholars have traditionally referred to as chiefdoms, or for those societies charged with exhibiting incipient or nascent political organization (cf. Trigger 2003:47).

As a broad social typological category, complex societies exhibit a diversity of traits. Depending on how one chooses to examine and categorize such traits, the category as a whole can be parsed into several discrete sections. Scholars have employed dominant modes of production, settlement systems, geographic location, religion affiliation, military exploits and combinations thereof to discuss many kinds of complex societies, such as preindustrial civilizations (Sjoberg 1960), city and territorial states (Nichols and Charlton 1997; Hansen 2000; Trigger 2003:92-119), riverine civilizations (Hassan 1997; Wittfogel 1957; Yasuda 2011), Roman Catholic states (Miley 1850), the Inka and Ottoman empires (Morris 1998; Kunt 2003), and others. Anthropologists, however, tend to investigate social typology primarily from the vantage of socio-political organization and economic organization and control, and so these distinctions are generally considered variations of those societies that employ a state manner of political organization and arrange society along the lines of a civilization (Baines and Yoffee 1998, 2000; Yoffee 2005).

To summarize, complex societies are typically described as structurally distinct from other forms of social organization on the basis of the presence of the following criteria: (1.) (minimally) two endogamous, hierarchically-arranged social strata (ruled and rulers) coupled with the existence of a legitimating ideology of separation centred around a ruling elite and their societal roles and cultural roles (a civilization); (2.) specialized governing institutions in the service of, and largely conflated with, the ruling stratum (a state); (3.) administrative means of social articulation between the state and society, by which information is controlled, governmental laws maintained, and economic matters overseen; and (4.) exclusive recourse by the state to military and other sanctions to impose its interests (Marcus and Feinman 1998:4-7; see also Frank 2013:10; Johnson 1973).

I assert that complex societies are fundamentally based on the first principle, while the rest of the above traits are symptoms indicative of a basic principle of organization of society along class lines
(Trigger 2003:46; see Kradin 2006 for a different view). The presence of social classes denotes the parsing of social roles into self-contained segments, each replete with distinct societal obligations and expectations (Giddens 1973:118-120). As such, class distinctions are not simply a result of oppositional relations to a society's means of production (Krader 1979:221-224). Tangential social currency such as wealth, prestige, and ideological status are often closely tied to one’s class (Baines and Yoffee 1998, 2000). Class associations can thus be seen as the quintessential communities of division within state-level societies in contrast to the largely kin-based organization of other socio-political systems. However, within said classes, new communities of association are formed, following the structural principles of class-based identity in a recurrent pattern (Crumley 2003), what Mann (2012:1) terms the "multiple overlapping and intersecting sociospatial networks of power" (see also Weber 1921). Understanding the spatial dimensions of such networks necessitates examining the notion of urbanism.

The Indus Civilization and the other complex societies referenced in this essay had ruling institutions best described as archaic states, which correspond with the earliest form of truly complex society for which archaeologists have evidence (Claessen and Skalnik 1978b; Feinman and Marcus 1998; Forest 2005). While they can be considered conceptually, if not genealogically foundational to all later forms of complex societies, they are not necessarily equivalent to them. For example, while all states (even modern ones) are justified and predicated upon ideological support, it is most common for archaic states explicitly to conflate religious and political offices (Brisch 2008; Oakley 2006:10-14; Trigger 2003:410-413). Likewise, the ruling bodies of all states manage their articulation with the ruled factions by administrative means, but the bureaucratic capacity of archaic states was severely limited and informal in relation to later ones (Rothman 2007; Weber 1909:39-40). Owing to such differences, I explicitly avoid discussion and comparison of the Indus Civilization to the often (incorrectly) invoked analogy of modern nation-states, which are predicated upon a construction of identity in which the political structure (state) is equated with those that are subject to its authority (the nation) (Mookherjee 2011). Although identity in archaic states has always been a matter of active construction legitimizing a political class to a wider community (Alcock 2000; Bawden 1995; Emberling 1999; Kurtz 1994; Richards and van Buren 2000; Saturno 2009; Swenson 2011), the concept of a universal and equal involvement in matters of state is a very recent phenomenon (Blanton and Fargher 2008; Taylor 1994; Yoffee 2005).
States and civilizations are connected, and in fact rely on one another for mutual definition; while often used interchangeably, they refer to quite distinct aspects of complex societies. The term civilization refers specifically to the cultural dimensions of complex societies (Baines and Yoffee 1998:254). It is the social, religious, economic, and aesthetic matrix within which state-level political organization operates and from which it draws its symbols of identity and notions of legitimacy (Cohen 1979; Kurtz 1994; Trigger 2003). For the purposes of this discussion, we must appreciate the two main aspects of civilizations: (1) they are not necessarily coterminous with the geographic extent of a polity (for example, the elite cultures which defined Sumerian or Classic Maya civilizations were shared amongst numerous autonomous states), and (2) they relate specifically to the conventions, values and institutions of the elite segments of society (Baines and Yoffee 1998:233). That is, a civilization is the so-called high culture of those whose group membership enables them to participate in the state apparatus or to enjoy the privileges of association with such a position, at least in theory, if not in practice (Joyce 2000). It is connected to, and perhaps derived from, the broader cultural and historical patterns of the entire population, but distinct in its form and restricted in its scope, as evinced by the control of wealth and markers of status as exclusive prerogatives of this ruling class (Redfield 1956). This is true whether or not a civilization encompasses one specific cultural tradition (such as Pharaonic Egypt), or has its roots in a series of related ones (as with Classic Mesoamerican civilization). Whatever else it may be, civilization is hegemonic in its operation; just as the state operates through mechanisms of domination, including the imposition of laws and sanctions (Trigger 2003:), the conceptual dualism of complex societies (that is, state and civilization) result in similarly intertwined and deeply culturally embedded mechanisms of operation. To complicate the matter further, such distinctions are difficult to disentangle archaeologically (Adams 2001; Yoffee 1997). These issues of shared symbols of identity and legitimacy will be essential when evaluating architectural and spatial aspects of Mohenjo-Daro.

2.1.2 URBANISM and CITIES

Urbanism is a topic that enjoys a lengthy history of academic enquiry reaching far beyond the traditional scope of anthropology and, indeed, the social sciences (Cox 1965; Lynch 1960). Historically, the investigation of cities and attached phenomena has been a central impetus for studies of the past prior to the formal inception of archaeology (Trigger 2006:48-73). Sociology, psychology,
economics, history, planning, architecture and numerous other disparate academic traditions (including, of course, anthropology) have all contributed to the very deep and sometimes unwieldy theoretical heritage and investigative toolkit of archaeologists interested in urbanism (Abbot 2006; Christaller 1933; Beals 1951; Blanton 1976; Blumenfeld 1943; Grant 2001; Hall 1966; Hoyt 1941; La Gory and Pipkin 1981; Mellor 1984; Mumford 1961; Sjoberg 1960; Weber 1921; Wirth 1938; Wheatley 1972; Yiftachel 1998).

Owing to this, it is important at the outset to distinguish the main interrelated concepts that comprise this particular subject: urban, urbanism, and urbanization. While related, these terms are not interchangeable, and relate to distinct processes and phenomena (M.L. Smith 2003:12).

The term urban (from the Latin urbs (city) or urbanus (of, or relating to, the city)) is best understood as an adjective describing all manner of phenomena directly related to the experience of life in cities (such as urban landscape, urban population, urban music, etc.). It is the most general (that is, non-academic) and encompassing of the concepts through which cities are understood.

Urbanism is the blanket term that specifies things urban in their entirety and largest extent. It is a conceptual and specifically structural matter, and, as such, often appended to other qualifiers (ancient urbanism, African urbanism, etc.). Often, the term urbanism is used to refer to the general state of being or ethos that is conditional upon the presence of an experiential urban reality (M.L. Smith 2003:12).

Lastly, urbanization is the collection of processes through which urbanism emerges. While some scholars understand this as the state of being in which “a sizeable proportion of the population lives in cities” (Davis 1955:429), within archaeology this term is often discussed in relation to the appearance and proliferation of cities, and specifically concerns the array of social and economic changes that allow the implementation and maintenance of the complex political organization that accompanies them and, indeed, upon which they rely (Renfrew 2008; Weber 1909:391-409).

The term city is likewise the beneficiary of myriad definitions and uses. At its functional and anthropologically conceptual core, however, a city is a type of settlement, distinguished from villages and towns in part by their greater (relative) size and complexity (Chase-Dunn and Manning 2002:380-381; Wirth 1938). Additionally, cities are the settings for civic administration, which is in part predicated on functional interrelations with the broader hinterland in which cities are located (Algaze 2007:348), and they act as nodes connecting far-reaching economic networks (Lahiri 1990; Marcus and Sabloff 2008a:13). In addition to their economic and administrative facets, cities often occupy central
ideological and political roles in complex societies in a manner that smaller settlements usually do not. As such, they are inherently tied to and facilitate the cultural underpinnings of complex societies (Redfield 1954:55-56).

In an anthropologically defined manner, cities have been both the subject and setting of innumerable studies covering a vast range of topics (e.g., Carl 2000; Fox 1979; Kolata 1997; Marcus 1983; Marcus and Sabloff 2008b; Smith 2011a; Šprajc 2005; Swenson 2003; Wheatley 1979). The pivotal place of the city in complex societies, has been implicitly understood since the origins of archaeology as a discipline, but was really given coherence through the work of Gordon Childe (1936, 1950). In his well known paper dealing with the legitimately revolutionary qualities of emergent urban life, Childe presented several interlinked traits which characterize political complexity, traits only made possible by the radical rearrangement of society necessitated by its urbanization. The Urban Revolution was so named because Childe felt it comparable in importance to his “Neolithic Revolution”, which marked the transition from hunting and gathering to agriculture, and the “Industrial Revolution”, which saw the transformation of labour practices (and the ownership thereof), which made possible the modern age (Childe 1936:9-19, 59-61). He asserted that all the hallmarks of complex societies came about through the shift in residence and consequent social reorientation from smaller, largely familial agricultural villages to larger, socially heterogeneous, more complex urban centres. During the inception and development of urban centres, then, the link between social organization and community, including its spatial arrangement, was substantially reorganized.

The ideological and religious basis of society in early cities was promulgated through monumental and other civic projects, mainly in the form of ostentatious architecture. Contrary to the kinds of collective goals and communal ethos that typified Neolithic villages (Childe 1936:81), urban life was characterized by societal and economic segregation, specialization, and hierarchy (see Marcuse 1993 for a modern manifestation of these tenets). In effect, city life created, fostered, and promoted a class-stratified society, one based on economics rather than kinship, and which radically realigned social expectations and identities. As M.E. Smith (2009:7) claims, ”[w]heras the Neolithic Revolution combined technological breakthroughs with social transformations, the Urban Revolution was almost entirely a transformation of social institutions and practices.”

To be certain, there are historical exceptions to this general trend, and cities have arisen apparently devoid of pronounced class divisions (McIntosh and McIntosh 2003). As such, we should not consider the social transformations that accompanied and resulted from the processes of
urbanization as absolutes that transpired with equal measure everywhere urban society flourished. Such exceptional cases are very few in number and remain relatively unaddressed by scholars, however, and while such cases certainly contribute to the diversity of urban social form and compel us to refine our models of urban processes, they effectively remain unexplained outliers to the overwhelming majority of anthropological data on urbanism. As a point of clarity, such exceptional cases do not include the cities of the Indus Civilization, for which compelling evidence of class division has been noted for decades (e.g., Marshall 1931d; Miller 1985; Ratnagar 1991).

Outside of a strictly developmental stance, scholars have viewed cities from many different perspectives, and criteria lists for urbanism proliferate (Mumford 1961; Wirth 1938). Likewise, functional typologies exist that seek to highlight their most dominant features with the aim of identifying discrete manners of urban settlements (Eames and Goode 1977; Martindale 1958; Southall 1998). The most familiar of these typologies is perhaps Richard Fox's (1979) recognition of administrative cities, in which are located governmental and bureaucratic offices and through which the operation and authority of a ruling body is organized; mercantile cities, urban settings that are primarily structured around facilitating economic interactions; and regal-ritual cities, built and intended for the performance and enactment of public ceremonies and spectacle of a religious or governmental nature. While many archaeological and historic examples of these civic categories have since been identified, many scholars of urbanism claim that this typology should be understood as a means to identify the relative importance or proclivities of such traits for select cities, rather than as a means to account for exclusive urban characteristics. That is, no historical examples exist in which the activity of a city is restricted to a single one of the categories.

Another manner of drawing distinctions between cities has been to focus on the reach of their political institutions, an approach most often associated with the city state and territorial state dichotomy (Hansen 2000, 2008; Trigger 2003:92-119). This model is designed explicitly to highlight select aspects of the variation inherent in state form, of which urbanism is simply one variable. Scholars have applied it specifically to urban contexts, however, as the location where the distinctions between these models of states are most emphatically asserted and most archaeologically visible (Charlton and Nichols 1997). Territorial states were characterized as (relatively) large, often multi-ethnic regions unified through hierarchically-arranged networks of administrative centres of varying sizes, at the zenith of which were the cities, in which were located the ultimate offices of the states' governing institutions. According to this model, such cities come closest to realizing Fox's
(1979) administrative city, as most civic data from such locales can be tied in some fashion to the business of political administration. Generally and relatively, the cities of territorial states are small, and the broader civilization of which they are a part drew little from such places for their defining and legitimizing symbols. Indeed, with notable exceptions such as New Kingdom Egypt, monumental works in the cities of territorial states tended to primarily focus on general public projects and broadly communal imagery (e.g. Janusek 2002). The ruling elite of territorial states tended to be more dispersed and less physically centralized than in other state models. In contrast to this manner of settlement, the governing institutions located in the cities of territorial states usually employed the most centralized and far-reaching bureaucracies, through which they controlled extra-governmental trade, and communication (Trigger 2003:104). The civilizations of territorial states were very often synonymous with the political borders of the state itself (Trigger 2003:104). Historical examples of territorial states include the Shang Dynasty and the Inca Empire (Trigger 2003:105-110).

The counterpart to territorial states is city-states, which, at least in Trigger’s (2003) and Hansen's (2000) typology, tended to correlate with relatively small, largely ethnically homogenous non-urban domains. In contrast to their small extramural holdings, the largest cities of the ancient world were those associated with city-states, which were further distinguished from territorial states in that they were most often part of a wider, multi-state civilization. While the capital cities of city-states held a primary spot in local settlement networks, such networks tended to be much reduced in size relative to those in territorial states (Trigger 2003:94). However, the symbolic and cultural role of such cities was paramount, and little if any distinction existed between civic and political identities (Lecount and Yae- ger 2010; Lucero 2007; A. Smith 2000). Both the state's governing institutions and ruling elite were usually centralized within the confines of the city and, while bureaucracy was very closely aligned with both elements, local economic interactions tended to be relatively unhinged from state oversight, save for luxury goods and specifically elite trade (Trigger 2003:94). In contrast to the tendency of territorial states to downplay individualizing monumental works, the most elaborate and personally-specific monumental civic projects of the ancient world are located in city states, such as amongst the Classic Maya or Sumerian polities (Demarest 1992; Fash 1988; Reichel 2008; Yoffee 1995). Exceptions exist, however; the central Mexican city states of Postclassic Mesoamerica, such as those of the Aztec and Toltecs, evinced a monumental record more in keeping with the norm amongst territorial states (Berdan 1982; Broda et al 1988; Diehl 1983; Ohnersorgen 2006). These exceptions
shared other traits with city-states, along with other elements, such as a proclivity to endemic warfare and a general inability to form long-lasting multi-civic political alliances, leading some scholars to propose the existence of a general "city-state culture" (Hansen 2000).

True to its enigmatic reputation amongst archaeologists, the Indus Civilization defies easy encapsulation within either a territorial or city-state model. The size and complexity of its urban centres and the lack of identified smaller administrative settlements certainly warrants inclusion into the city-state model, yet the near-uniform nature of Indus Civilization urban material culture maintained over its startlingly large geographic area, combined with the relative infrequency of its cities are cultural features more in line with territorial states (see section 3.4).

Despite the multiple political or functional typologies that scholars have employed to make sense of the diversity of urban traits, such vehicles of differentiation usually have at their interpretive core a common assumption: the equation of urban form with political authority and ability. This notion is a firm part of a broad scholastic tradition, and not necessarily restricted to anthropological studies of urbanism. No less a figure than Max Weber (1921:80-81) claimed that:

[t]o constitute a full urban community a settlement must display a relative predominance of trade-commercial relations with the settlement as a whole displaying the following features: 1. a fortification; 2. a market; 3. a court of its own and and at least partially autonomous law; 4. a related form of association; and 5. at least partial autonomy and autocephaly, thus also an administration by authorities (italics added).

Similarly, the Chicago school of sociology, whose practitioners (Park et al 1925; Wirth 1938) in many ways initiated modern sociological studies of urbanism and set the framework for many later anthropological studies of the subject (Hannerz 1980:19-58; Marcus and Sabloff 2008:6-10), stressed that complex economic and socio-political organization were necessary elements for any appropriate definition of cities or discussions of urbanism (Wirth 1938). The diverse field of urban planning, both in its applied and academic forms, largely relies on the principle that an institutionalized and legitimate civic authority exists which can enforce or alter matters pertinent to civic growth and management (Grant 2001; Kjaersdam 1995; Marcuse and van Kempen 2002). Historical studies in particular abound in which cities are regularly defined in relation to, or as an extension of, political power, irrespective of what other roles or social elements might factor into their function (Bennison 2007; York et al 2011).

The equation of the state with the city is central to most anthropological discussions of
urbanism, both ancient and modern (Yoffee 2005:60). Cities are the main vehicles through which the mechanisms and centralizing tendencies of the state are realized (Swenson 2003:274), and, as such, their relationship is characterised by interdependency. Redman (1978:215) addresses this principle through his description of cities as "the functioning node in a broader civilizational network." Yoffee (2005:17) asserts a more intimate connection, claiming that the existence of one implies the other, and the differences between the two are more a matter of degree than of kind.

A principle factor informing the anthropological linkage of cities with state-level societies is that the social processes that typify the former are, in effect, no different than those that characterise the latter (Trigger 2003). Both require managerial complexity, economic specialisation, and institutions that breach the common kin-based structures typical of non-complex societies. However, as with complex societies as a whole, these phenomena are not reducible to the actions and ability of the decision-making stratum of society. As social and economic heterogeneity are the structural hallmarks of complex urban societies, it is important to emphasise that what makes such conditions feasible in the long-term is the participation, negotiations, and implicit acceptance by the (more numerous) commoner segments of urban populations (Yoffee 2005:16-17). This point has often been overlooked in studies of the social dynamics of complex societies, especially in those that focus predominantly on the means of control used by ruling factions to the exclusion of the challenges that ruling classes face in maintaining their positions (Blanton and Fargher 2008; Fargher and Blanton 2010; Gonlin 2007).

While ideological, bureaucratic, and other legitimating mechanisms of control were important components of state programs of domination (Kurtz 1994; Yoffee 2005:16-17), the mutual engagement and collective agency of the entire social spectrum largely provided the structural stability necessary for the expanse and maintenance of complex urbanism societies. Attending to such matters in our programs of inquiry into the social dynamics of ancient complex societies is one way that we can perhaps move closer to an appreciation of the active role of the materially and politically disaffected in their own subjugation, as well as the materialist, contractual underpinnings of complexity (see A. Joyce 2000; Blanton 2007; A. Smith 2003).

This, of course, does not mean that such engagement or contractual underpinnings were symmetrical or equitable in their structure or operation, but it does mean that we can search for behavioural evidence of such engagement in the accretional mass of primarily elite-focused architecture and civic spaces that comprise ancient cities as surely as we already do for matters of elite interests. This is especially the case in those locales that were the point of spatial and social
articulation between the administrative apparatus of the state, and communal and familial identities: the
neighbourhoods and districts of ancient cities.

2.2 Ancient Urban Organization: Neighbourhoods

Because ancient cities and the communities that comprised them were complex and dynamic, there existed multiple ways in which they were held together, multiple forces that operated to rend them apart, and multiple means of compromise that allowed the existence of such tension (McAnany 1995). Such centripetal and centrifugal mechanisms are often studied archaeologically through the locus of the neighbourhood, in which we can observe the interchange of such forces to allow us a better understanding of the social factors that typified ancient urban settlements.

Neighbourhoods, both ancient and modern, are interesting and somewhat contradictory concepts. They exist simultaneously as social and physical constructs, being comprised of the interconnected families and other residents that constitute urban communities, and of the architectural, spatial and civic features in which such communities reside and through which they identify (Cowgill 2000; Sinopoli 2003; Smith and Novic 2012). This ambiguity is highlighted by their historical positions as both the fonts of localized notions of belonging and attachment, and, in certain cases, as imposed elements of a broader civic administration. The merger of both bottom-up social organization and top-down political oversight in the form of these elements is sufficiently attested that Michael E. Smith (2010:137) asserts such means of urban organization are "one of the few universals of urban life from the earliest cities to the present."

In a very general manner, I assert that such ubiquity is owed to the fact that neighbourhoods collectively provided a measure of resolution between the centralizing forces of politically complex societies and the decentralizing tendencies of familial or associative authority in a manner that allowed for their relative integration within civic space (Trigger 2003:196-197). Put another way, neighbourhoods provided the conceptual and operational link between the multifaceted and encompassing experience of urbanism, and the particular and exclusive experience of household domesticity (Hare 2000:78). The quasi-institutional manner in which they operated served the varying interests of both the state and the local community.

Perhaps the most explicit and thorough archaeological studies of neighbourhoods and urban organization are those associated with Michael E. Smith (Isendahl and Smith 2013; Smith 2005, 2007,
2010, 2011a, 2011b; Smith and Novic 2012; York et al 2011), who explores urban structure through an
avowedly comparative lens to garner broad generalizations of urban organization that can be tested
with archaeological case studies (Smith 2011b; Smith et al 1999; Smith and Novic 2012). Smith
(2010:139) defines a neighbourhood as "a residential zone that has considerable face-to-face interaction
and is distinctive on the basis of physical and/or social characteristics." Attached to his notion of
neighbourhoods is what Smith terms a 'district' which, "has some kind of administrative or social
identity within a city... [and is] typically composed of multiple neighbourhoods" (Smith 2010:140).

While Smith's comparative and synthetic work on neighbourhoods, urban organization, and
political complexity largely shapes how I have conceived of the operational attributes of
neighbourhoods in Mohenjo-Daro, I do find his actual definitions problematic. One such reason is that
I do not feel compelled to essentialize the residential quality of neighbourhoods. With the exception of
areas defined through specific functions that preclude habitation, such as some markets and docks,
residence in ancient cities was far more pervasive, and far less circumscribed, than in modern urban
contexts (Bawden 1990; van Gijseghem 2001; Wilk and Netting 1984). Even the civic and
monumental cores of most ancient cities were characterized in part by residential functions, just as they
were by administrative, productive, commercial and other functions (Harrison 2003a, 2003b; Knights
1994).

Additionally, I do not support Smith's claim that social identity in an urban context is exclusive
to supra-neighbourhood agglomerations (districts). Identity is a notoriously difficult concept to restrict
in archaeological contexts, partly because of its fractured and capricious qualities, but moreover
because of its essential role in defining social life in general (Bernardini 2005; Frankel 2003; Siapkas
2003). Regardless of their size, neighbourhoods surely contained a plurality of individual and
collective identities that served to define their roles in an urban setting.

Similar to the embedded nature of identity at all social levels and the intertwined character of
residence with other functions in ancient cities, the myriad communities that comprised ancient
complex societies, including neighbourhoods, were often involved with the organization and
administration of certain civic duties, such as public labour projects or providing public representation
(e.g., Gillespie 2000; Keith 2003; Manzanilla 1996, 2015; Moseley 1975). Again, this is at odds with
how Smith (2010) restricts administrative capacity to the 'district', a relegation made more problematic
since, in many cases, the identification of such capacity often relies on evidence not always available to
the archaeologist, such as historic documents or ethnohistorical data, or through the analysis of clearly
administrative or civic architecture in conjunction with either recurrent or distinctive civic-spatial patterns (Tascheck and Ball 2003). These issues are problematic for the study of some ancient cities (Bard 2008), including those of the Indus Civilization.

For these reasons, and in spite of the fact that much of the forthcoming discussion relies heavily on Smith's other contributions to the archaeological study of neighbourhoods (Sections 5.5 and 6.2), I employ a definition of neighbourhood that is similar to how many other archaeologists have conceived of communities generally (Isbell 2000; Keith 2003; Kolb and Snead 1997). In this thesis, the term 'neighbourhood' refers to general civic segments populated by spatially discrete urban communities that cohered, in part, though a shared identity that presumably involved aspects of civic organization.

Neighbourhoods are distinguished as discrete social elements of a city through their spatiality, potential for social interaction, and association with the construction of particular identities. Spatiality pertains to the characteristics of the built environment that provide for the dwelling, activities and sense of place within which a community exists and develops (Ingold 2000). The term built environment, as used in archaeological discourse, relates to the artifactually reordered environment (Preziosi 1979), an appropriate framework in which to discuss the almost entirely anthropogenic quality of cities. Monuments, circumvallations, all manner of architecture, public and infrastructural works, as well as the open areas that separate them, constitute large-scale built environments, the settings for an urban landscape. One aspect of the spatiality of the built environment, similar in effect to broader understandings of landscape, is that it provides the physical referential framework for the “lived experience” of historical meaning (Knapp and Ashmore 1999; Kuper 1972). As with other categories of material culture, the built environment is amenable to being imbued with meaning quite unconnected to its utilitarian purposes. This is in accord with Bourdieu’s (1977) notion of praxis, whereby the “lived experience” of phenomena generates contextualized social meaning and understandings without, necessarily, premeditated intention, or a formalized plan. As a (relatively) temporally-stable element of the material dimension of urban experience, the built environment is amenable to retaining and communicating historical meaning on a scale far in excess of most quotidian means (cf. Barrett 1999; Ingold 1993).

Interaction refers to the daily and communal behaviours that at once define a community as distinct, and mediate its relations with other social groups; neighbourhoods are are spatial locales populated by such communities. Keith (2003) provides a useful discussion of interaction in her use of neighbourhoods to analyze urban settings. Rather than focusing on spatial boundaries (perhaps owing
to the complexity of delineating clear-cut examples of socio-spatial demarcation in the Old Babylonian cities in which she works), she focuses on common activities and means of habitual integration as a means of defining neighbourhoods. An important point Keith raises is the role of the neighbourhood community in mediating relations between similar and different scales of social organization (e.g., political and kinship groupings). This focus on collective experience is very much suited to examining the crucial point of the articulation of different neighbourhoods, a process that contributed to the development of political participation beyond the spatial limits of the neighbourhood itself (Stone 2007:216-225). As such, this aspect of neighbourhood community is essential in trying to account for the functions of generalized “public” spaces such as plazas and streets within urban cores (M.L. Smith 2008).

Both interaction and spatiality inform not just an appreciation of how separate neighbourhoods articulated, but of the mechanisms by which they were separated from one another and from other civic sections. As stated by Michael E. Smith (2010), an archaeological understanding of neighbourhood demarcation relies almost exclusively on the presence of an imposed or natural physical boundary (such as walls and topographical elevation, respectively), or architectural aggregation combined with less overt means of circumscription (such as clusters of houses surrounded by open spaces). From ethnographic studies of settlements (Horne 1994; Widlock 1999; Wilk 1983), we also know that such material and spatial means of separation do not work in isolation, and are, in fact, active elements of more pervasive social mechanisms that serve to divide populations along a spectrum of attributes (M.L. Smith 2007; Tilley 2004). Ultimately, whether or not such collective community experience is physically reified by demarcation, aggregation, or other means (Aslan 2006:138; Levi 2003; Mack 2007; Taube 2003), interaction and spatiality work together yet again to create a bounded sense of identity (Cohen 1979:15)

Identity is another interpretive avenue that has been used in multiple ways to investigate the archaeological record. As with the concept of community in general, it has an enveloping character whose meaning may vary in relation to scale and subject. At its most basic, the meaning that I employ here, identity refers to the sets of activities, beliefs, and social investments which proclaim a sense of solidarity, political or otherwise, amongst a particular group of people (Bernardini 2005).

It is important to note that identity is something that cannot exist apart from social intercourse; that is, identities are contextual and exist in simultaneous plurality within any social body. Put another way, the many social obligations and investments in which people and societies are implicated (such as
gender, age, status, ethnicity, occupation, religious conviction, to name a few) all compose types of identities, through which social and individual definition is achieved. Various aspects of identity may be emphasized or downplayed according to particular contexts; the result of this is that identities are commonly fluid, negotiated concepts (Emberling 1999; Schortman et al 2001:312). For the purposes of this project, I use identity as one of the conceptual tools that serve to articulate and reinforce the inclusiveness or separateness of those neighbourhood communities that comprised Mohenjo-Daro. Settings such as these, where different traditions and societal interests and allegiances strive for coexistence in a shared locality, are often where symbols of group belonging or distinction are emphasised and promoted, in part through material means such as shared or disparate architectural styles (Blanton 1994; Hodder 1977, 1982; Knapp 2007; Kopytoff 1987, 1999; Parker 2006). In these instances, identity is closely tied to the various historical experiences and associated ideologies to which people adhere or against which they resist. As such, material means of declaring, promoting, and producing group identity, especially architectural ones, are salient vehicles for stressing the historicity of identity, the memory of collective integration (A.P. Cohen 1986; Schortman et al 2001).

In summary, I understand neighbourhoods, or urban communities, as spatially-based sets of social relations, tied together through a sense of solidarity based on shared identity and interactions, which existed and reproduced themselves within their own social and built environments. In many cases, these localized units served both official, administrative roles connected to the overarching governing apparatus of the state, as well as more intimate and immediate social purposes. The myriad factors of urban life provide both the structural boundaries and transformative opportunities for the maintenance and emergence of these separate roles (Renfrew 2008).

The principles of interaction and identity equally inform our understanding of the social and structural factors underlying neighbourhoods, and while all these concepts will guide the interpretation of this project, the particulars of the archaeological record of Mohenjo-Daro focus my analyses on that city's constituent physical attributes (its spatiality). This is realized by means of investigating that city's architectural record. In particular, I will focus on the stylistic variation evident in Mohenjo-Daro to investigate its architectural "grammars" (Bafna 2003; Hillier 2008; Hillier and Hanson 1984), a method that has been used successfully in the analysis of Classic Maya cities (Ashmore 1986, 1992; Houk 2003).

Like cities, the individual architectural components of which they are comprised are multifaceted artifacts whose importance lies far beyond the simply utilitarian (Rapoport 1982). By
virtue of its ubiquity in urban contexts, architecture is often understood as the constituent of a particular type of landscape (Rotea et al. 2003), and, as with other landscapes, plays the dual roles of communicator and naturalizer of the various ways in which a society understands itself (Bender 1992; Darvill 1999; Ingold 2000; Knapp and Ashmore 1999; Moore 2007; Thomas 2001). However, unlike some other forms of landscape, urban ones are by definition enmeshed in a clearly hierarchical social order (Blanton 1976; Childe 1950; Mosher and Jones 2008) and must be understood as an extension of such. It stands to reason, then, that the constituent architectural components of these landscapes largely communicate and naturalize that which pertains to those social elements that enjoy disproportional promotion or representation within such a system (Marcuse and van Kempen 2002:9). In urban settings, the main effect of architectural communication is therefore asymmetrical and unavoidably political (Kus and Raharijoana 2000; Topic 2003). This is in keeping with the assertion that architecture is active and selective, not a passive conveyor of undifferentiated cultural meaning (Alcock 2000; A. Smith 2000, 2003).

Similar to urbanism, architecture is an umbrella subject that has been approached from numerous disciplines and sub-disciplinary traditions. The main aspects of architecture that concern us presently are related to its role as means of communication, but it should be remembered that architecture is an inherently multifaceted phenomenon - its utilitarian functions always exist alongside and intertwined with its symbolic ones; in fact, their respective roles often rely upon one another (Trebsche 2009).

When archaeologists, especially those who study ancient civilizations, speak of architecture, the term itself is often used as a stand-in for a monumentalism (Trigger 1990, 2004). The history of inquiry into complex societies bears ample testimony to the fact that the focus of archaeologists has largely been biased towards palaces, temples, public works, central plazas, and other architectural indications of elite privilege and ability (Trigger 2006:52-73). Part of this focus is that monumental architecture allows a direct investigation of the political system of such societies (D. Chase and Chase 2001; Christie 2006; Ristvet 2007). Additionally, however, there are far more broadly socially applicable reasons to examine monumental architecture, specifically because as they often correspond to elite agency, they serve legitimately public uses. As Kolb (2012:138) notes: .

Unlike more private forms of architecture such as houses, monuments serve as public focal points and places of community interaction, built to communicate very specific meanings about how to become a member of a larger social whole, how to interact collectively. Their more complex architectural grammars (with plazas, expansive doorways, or passageways) create a spatial map that is acted on through movement,
translated through spatial experience, and physically communicated by anchoring social meanings in space. And as individuals move around or through monumental spaces, they experience and translate these public meanings.

In terms of the Indus Civilization, the delineating line between vernacular, or domestic, and monumental architecture is a blurry one. The disagreement between precisely how to parse vernacular and public architecture in civic contexts attests to the complicated nature of this matter (Nash 2009:241). This matter is taken up with a broader discussion of Indus Civilization architecture in Section 3.7.

2.3 Summary

This thesis is ultimately concerned with understanding the urban organization of Mohenjo-Daro through the identification and analysis of its constituent neighbourhoods, which I define as socio-spatial civic segments populated by spatially discrete urban communities defined through interaction, a common spatiality, and a shared identity. I assert that neighbourhoods are part of, and subject to, the centralizing and decentralizing social tensions that characterize all facets of political complexity. They exist as simultaneously distinct and integrated communities that constitute wider socio-political spheres, and fill an important mediating role in the urban settings of which they are a part; as such, they hold promise to elucidate integrative aspects of Indus Civilization political organization. The following chapter lays out the current state of knowledge on the Indus Civilization generally and the city of Mohenjo-Daro specifically, to contextualize the theoretical orientation explained above that underlies the analysis described in Chapters 4 and 5.
CHAPTER 3
AN OVERVIEW OF THE INDUS CIVILIZATION

It is widely recognized that South Asia is home to one of the oldest traditions of complex social and political organization in the world. All of the characteristics that define and accompany anthropological notions of complexity, such as embedded class identity, intricate and far-reaching networks of production and exchange, religiously-validated political hierarchies, multifaceted and intensive agricultural regimes, and large, regionally-dominant cities have typified many South Asian cultures for millennia (Allchin and Allchin 1982; Avari2007; Despande and Shinde 2006; Eltsov 2004; Jha 1991; Lal 1997; M. Smith 2006; Possehl and Rissman 1992; Ray 1987; Spodek 1993; B. Stein 1998). At the turn of the twentieth century, however, Western academic wisdom held that South Asian cultural history, while certainly venerable, was not on a scale comparable to other Asian, or even European traditions. Indeed, South Asian history proper was understood to begin with the intrusion of Hellenic culture into the subcontinent during the fourth century BC (Lahiri 2012:74); while the religious texts and traditions of South Asia referenced earlier periods, there was no systematic manner by which the antiquity of these could be investigated, nor an established regional historical framework in which to place them. Generally speaking, archaeological research at this time did not expect nor was equipped to encounter materials that preceded the Buddhist Period (Fogelin 2006:9-10; Ray 2006; Trautman and Sinopoli 2002:497-499).

The exploration of Harappa and Mohenjo-Daro in the 1920s and the resultant recognition of a widespread Bronze Age culture that dramatically predated all known ancient South Asian civilizations, so transformed the developmental narrative of world history that South Asia is now considered amongst the earliest locales for the emergence of complex society globally (Gordon and Gordon 1940; Jansen 1994; Lamberg-Karlovsky 1982; Maisels 1999; Possehl 1990; Reade 2001; Trigger 2003:34; Wright 2010:1). While more comprehensive gains have been made unravelling the prehistoric details of other world areas since the 1920s, no single discovery has so radically reshaped our collective historical understanding of complex social development as the discovery of the Indus Civilization.

While this chapter is not devoted solely to the history of Indus Civilization scholarship, it is necessary at the outset to emphasize the exceptional context and effect of its discovery, as
"exceptionality" (as opposed to "exceptionalism") is an appropriate description of most aspects of the material and presumed social traits of the Indus Civilization relative to other complex political societies (Possehl 1998; Trigger 2003:73). The actual aim of this chapter is to describe and explain the combination of material traits and social behaviours that comprise what we know of the Indus Civilization, contextualize how we as a scholarly community have interpreted these traits, and do so within a framework that is amenable to broader, comparative studies of complex political and social forms. Emphasis is placed on discussing the urban aspects of the Indus Civilization as the main focus of the present study.

3.1 HISTORY OF INDUS CIVILIZATION SCHOLARSHIP

As Mortimer Wheeler (1968:1) once remarked, "[m]uch that is essential to an understanding of this ancient Indian civilization, both in detail and in general context, still eludes us." This pointed statement should not be read as a lamentation of the state of Indus Civilization scholarship, but rather accurately and humbly places focus on perhaps the definitive historical trait of Indus Civilization studies: it is a newly studied, isolated, and wholly archaeological culture typified by a material record that does not easily fit into conventional interpretive frameworks used to study ancient civilizations.

In the more inclusive discourse on early civilization studies, this manifests as a simple truth: in both absolute and relative terms, far less is generally known about the Indus Civilization than most other ancient primary civilizations (Trigger 2003:73). This is not an evaluative statement on the productivity or achievements of Indus Civilization scholars; rather, this simple truism communicates the main reasons for the dearth of Harappan studies in comparative studies of ancient civilizations. The structural and functional parameters by which scholars demarcate complex from non-complex societies are simply poorly understood for the Indus Civilization; this creates logistical difficulties integrating Indus Civilization research into comparative frameworks that have at their conceptual core the main issues of political organization or social typology (Feinman 2008; Haas 2001; Kradin 2006; Peregrine 2012; Service 1993; Trigger 1998). Discussions of social hierarchy, political organization, and historical change in socio-political structures are consequently difficult to engage from an Indus-centric stance. But why is this the case? How is it, that after almost a century of sustained research on the Indus Civilization, Wheeler's near fifty-year-old claim still hold validity?

One reason has to do with the comparatively small academic community that concerns itself with the prehistory of South Asia in general, and particularly with the Indus Civilization. A smaller
cadre of academics focused on the Indus Civilization does not only mean a proportionally smaller
dataset with which to work, but also less infrastructural capacity: less overall funding and fewer
research programs, and a reduced breadth of specialties focused on the different aspects that comprised
the quotidian and exceptional characteristics of life in this ancient civilization (Dales 1982:97-99).
This disparity also reflects a temporal lag; Mesopotamian, Mesoamerican, Egyptian, and Andean
civilizations have been actively and continuously professionally researched since between the
seventeenth century and nineteenth centuries, usually following on a lengthy period of what we would
today term avocational archaeology and speculative history (e.g., Bingham 1922; Morley 1909;
Stephens 1841; E. Thompson 1932; J. Thompson 1931). In contrast, the Indus Civilization was an
absolute unknown in academic or even antiquarian circles until 1924, when its remains were confirmed
as pertaining to a genuine “lost civilization” (Marshall 1924; Possehl 2002a:12).

The context in which research takes place is also an important distinction between Indus and
other traditions of enquiry. While fieldwork in any location presents idiosyncratic problems, there are
unique challenges to conducting fieldwork in South Asia, and especially the territory formerly occupied
by the Indus Civilization. These are especially evident and troublesome regarding the political realities
of the area in general, which, in the past century, has been host to conditions that are not conducive to
extensive or long-term field research, such as internal political or regional ethnic conflicts, broader geo-
political turmoil, and in some cases, a general or popular anti-Western sentiment (a pertinent point, as
the majority of scholars and research projects focused on the Indus Civilization until quite recently
have had some sort of Western origin or institutional affiliation). Importantly, the area with the most
dense concentration of Indus Civilization settlements roughly corresponds to a large portion of the
international border between Pakistan and India, countries which have officially been at war six times
since their mutual independence from Great Britain in 1947. Needless to say, this border region is of
central interest to the national security of both countries and is heavily militarized. Archaeological
research here occurs infrequently and is largely limited to survey (Kenoyer 2012; Mughal 1982). As
such, relatively little is known of what some have postulated as a “heartland” of the Indus Civilization.

Despite these limitations, the field itself, especially in the UK and North America, has been
blessed with a long tradition of prominent and unusually prolific scholastic personalities who have
endeavoured to express the particular characteristics of the Indus Civilization in a general manner to
both academic and popular audiences, including such people as Stuart Piggott (1910-1996), Mortimer
Wheeler (1890-1976), Georges F. Dales (1927-1992), Gregory L. Possehl (1941-2011), and J. Mark
Kenoyer (1952-). Although none of these individuals ever encapsulated the consensus of Indus scholars, they have generally been perceived as unofficial, yet authoritative spokesmen for the Indus Civilization. The proclivity for small numbers of very intensely focused and influential researchers on the Indus Civilization has had a considerable impact upon the relatively integrated character of Indus Civilization studies.

Much of the initial archaeological research on the Indus Civilization was conducted by the Archaeological Survey of (then) British India, and almost exclusively focused on the cities of Mohenjo-Daro and Harappa (Lahiri 2013); indeed, the focus of Indus Civilization studies was (and some could argue, continues to be) dominated by a preoccupation with these large cities, and it was not until roughly a half century later that serious survey and applied research began in other regions of the Indus Civilization (Jansen 1980a; Mughal 1970, 1990). This (lessening) disparity between archaeological knowledge of these urban centres and other areas has largely shaped the interpretive frameworks within which Indus Civilization scholars operated (Shinde et al. 2006:64, 66), and accounts for the majority of the general and popular archaeological literature concerning the Indus Civilization (Maisels 1999).

3.1.1 Theoretical Concerns within Harappan Scholarship

In terms of dominant theoretical concerns, Indus Civilization scholarship (at least its western branches) has been shaped largely by a focus on a few main elements, primarily those concerned with technological and material studies, trade, and the generation of cultural and regional chronologies (e.g., Kenoyer 1991a, 1991a, 1997, 2003, 2008; Mackay 1930, 1931d, 1933, 1937; Meadow 1991; H.M-L. Miller 2000, 2007; Shaffer 1992; Vidale 2000; Wright 1991). Ethnoarchaeological and experimental archaeological studies are prominent means by which such issues are regularly approached by Indus Civilization scholars (e.g., Belcher 2006; Jamison 2012; Kenoyer 1994b, 2006; Reddy 1997; Vidale 1995; S. Weber 1999).

In contrast to craft production, less immediately tangible concerns, such as social organization and political structure have enjoyed less explicit and sustained interest amongst Indus Civilization scholars. While concerns about political and social structure have always been present in Indus studies (Childe 1935; Kenoyer 2000; Marshall 1931a; D. Miller 1985; Possehl 1990; Wheeler 1968), they have most often been approached from a generalized perspective, or have emerged as a secondary objective of specialist research (e.g. Jamison 2008, 2012; Miller 2013; Rajan 1982; Vidale and Miller 2000;
Weber 1999). Some of the most accessible and important contributions of Indus scholars to the broader archaeological community are those works that deal expressly with questions of political and social organization (Kenoyer 1997, 2000; Possehl 1998; Ratnagar 2004; Vidale 2010); however, such works are much fewer in number and are usually not promoted to the same extent as their more technical brethren. They are often confined to edited volumes or buried in theses and specialist journals (e.g., Dhavalikar 2002; Jacobson 1987; Kenoyer 1994a; Manuel 2008; Petersen 2012; Possehl 1998; Rissman 1988; Vidale 2010). Exceptions exist, of course, Ratnagar (1991) being the most obvious full-length and explicitly functional treatment of Indus Civilization political structure, but seem often relegated to the fringes of the focus of Indus Civilization scholarship. Smaller in scope, yet more prominent studies of Indus Civilization political structure (or of its constituent ideological elements) have been produced primarily by Kenoyer (1991, 2000, 2008), Possehl (1990, 1998), Rissman (1988), and a single yet lastingly impactful article by D. Miller (1985). Broad summaries of Indus Civilization, such as those by Possehl (1982, 2002) and Wright (2010), assert questions of Indus political organization as a primary theme but as with the works cited above, their investigations into such matters is largely hindered by the lack of an explicit focus on political organization within the research culture of Indus Civilization studies generally. Tied to this tradition is the tendency for most Indus scholars to work in a fairly isolated, and at times, insular context (Possehl 2007); both theoretically and topically, most Indus Civilization archaeological studies limit their interpretive references by geography, to the historical and archaeological record of South Asia in general (Kenoyer 1997; Wright 2002), as opposed to a structural or typological approach, which looks to similar kinds of social structure and political organization, regardless of geographic proximity (e.g., Charlton and Nichols 1997; Smith 2012a; Trigger 2003; Yoffee 2005).

Regardless of traditional proclivities and the particular focus of most Indus Civilization scholarship, lately scholars from both within and outside of South Asia have been calling for a more problem-focused and interdisciplinary approach for archaeological research set in the Indus Civilization (Possehl 2007; Shinde et al. 2006:71). This recent, although not universal, change in focus has resulted in both a broadening of theoretical scope and concomitant research interests, but also a refinement of the kind of information that can be gleaned from the copious amount of material, ecological, and other data that comprise the archaeological record of the Indus Civilization (e.g., Clark 2009; Rogersdotter 2007; Schullenrien et al 2004). While much work remains to sort out the full nature of Indus Civilization culture history and regional systems of cultural development and
chronology, the move towards a more globally-integrated archaeology is warranted not simply for what can be brought to the study of the Indus Civilization, but equally (if not more so) for what Indus Civilization scholars can contribute the wider archaeological community. This is especially so for studies devoted to understanding the processes involved in the emergence and long-term maintenance of social stratification. A decade's worth of "outreach" archaeology on behalf of Indus Civilization scholars concerned with the mechanisms and manifestation of political ideology, for example, has radically altered general understandings on the variability of leadership in ancient urban societies, and allowed political complexity itself to be re-imagined as something far more entrenched and subtle than was previously thought for such antediluvian contexts (Possehl 1998; Smith 2004).

3.1.2 Approaches to Political Organization

The nature of the political organization of the Indus Civilization is a matter of contention amongst scholars. Specialists (and others) remain divided as to whether the Indus Civilization constituted a single large territorial state (Piggott 1952:136), a series of smaller city states (Kenoyer 1994a), or a form of collective organization yet unknown or unrecognized in other complex societies (Possehl 1998, 2002a:56-57). Despite the differing interpretive implications of these possibilities, scholars are largely in agreement that the main interpretive challenge for understanding Harappan social organization hinges on whether or not the authoritative apparatus for the Indus Civilization was, in fact, a state (Kenoyer 1994a:75; Ratnagar 1991:12). The importance and ambiguity of this issue was present in the earliest archaeological scholarship on the Indus Civilization (Coningham and Manuel 2009), and regularly dominates current discussions of anthropologically-based Indus scholarship (Kenoyer 1994a; Manuel 2008; Ratnagar 2004; Vahia and Yadav 2011; Wright 2010:16-19). In fact, and in contradiction to the majority of the topical studies on the Indus Civilization, the question of statehood forms one of the main narratives by which Indus studies are understood internally and approached generally (Chakraborty 1983:2133; Cork 2005:413; Kenoyer 1997:263; Lamberg-Karlovsky 1972:228-229). Such a disproportionate research focus relative to the main narratives by which such research is discussed and understood forms one of the distinctive tensions of Indus Civilization scholarship.

An important issue to which the above situation is in part attributable is the lack of agreement on definitions of political complexity amongst anthropological scholars generally, not just those that work on Indus Civilization material (Adams 2001; Blanton 1998; Blanton et al 1996; Campbell 2009;
Claessen and Skalnik 1978; Crumley 1995; Davis 2012; Feinman 1998; Marcus and Feinman 1998:4-10; Goldstone and Haldon 2009; Mosher 2012; Possehl 1998; Trigger 2003:46-48). Debates over the nature of Indus Civilization political complexity become understandably complicated when the conceptual foundations of such a debate are unclear, and downright confusing given that the evidence for traditional markers of political authority amidst Indus Civilization material culture is, at best, ambiguous. Given such circumstances, general survey assessments are not incorrect when they state that the Indus Civilization is a prime example of an "enigmatic state" (Chazan 2014).

An additional problem is that in many ways the evidence of political authority used by archaeologists largely, although not uniformly, conforms in kind to the symbols that connote a very specific kind of political order, one made all the more familiar by its correlation with the historical cannons of Western political structure (Mann 2012:30-31; cf. Yoffee 2005:13). This in itself does not constitute a scholastic shortcoming, but is simply the result of a cultural, if not explicitly academic familiarity, of most archaeologists with such symbols (Trigger 1996). Such familiarity does, however, obscure the finer nuances that typify actual political practice and the material residues of such practice in the archaeological record (Kurtz 1993, 1994; Ratnagar 1991:16).

Aside from the disagreements or confusion over the terms and underlying ideas that scholars have used to make sense of Indus Civilization political organization, the number of ways in which the operation of such structures have been explained (or proposed) can largely be attributed to differences of scale, primarily framed within a social evolutionary framework (Chakrobarty 1983: 2134-2136; Kenoyer 1994a; Possehl 1998, 2002b; Ratnagar 1991).

3.2 GEOGRAPHIC CONTEXT

In terms of geographic extent, the Indus Civilization is the largest primary civilization for which we have evidence. Distinctively Harappan archaeological sites have been located throughout almost the entirety of modern-day Pakistan, northwestern India, and far northeast Afghanistan, an area that exceeds one million square kilometers (Jansen 1993a:11-12, 2002:107; Possehl 2002a:6; Wright 2010:14) (Figure 3.1). Broadly, these areas can be divided into the Baluchistan Plateau along with the western highlands (Sind Kohistan, Kirthar, and Sulaiman ranges), the lower Indus Valley (western and eastern valleys and delta area), the eastern boundary provided by the Thar Desert, and Gujarat to the southeast (Figure 3.1). Each of these areas are tied to specific regional traditions both preceding and
following the Indus Civilization proper (Allchin and Allchin 1982:97-140; Dales 1965; Jarrige 2000; Kenoyer 1991a; Mughal 1970; Shaffer 1992). Evidence of the products of the Indus Civilization are found much further afield, and have been recovered from archaeological contexts in Iran, Turkmenistan, Bahrain, Oman, and Iraq (During-Caspers 1979:125; Edens 1993; Franke-Vogt 1994:40-41; Shinde et al 2006:64; Wright 2010:232). The prominence and kinds of Indus Civilization material remains in ancient Mesopotamian contexts in particular has led some researchers to postulate that the Indus Civilization may have been the ancient land of Meluhha, noted in Sumerian texts as a kingdom that engaged in significant economic relations with that section of ancient Mesopotamia (During-Caspers 1979; During-Caspers and Govindakutty 1978; Lamberg-Karlovsky 1982; Possehl 1997). These discoveries attest to the fact that the Indus Civilization did not exist in some kind of cultural and political vacuum, but rather was an integral component of Bronze Age societies to the west and northwest of South Asia proper, an inclusive cultural and economic confluence of lasting influence sometimes termed the “Middle Asian Interaction Sphere” (Possehl 2002a:215).

Figure 3.1 Location of Mohenjo-Daro in relation to the approximate geographic extent of the Indus Valley Civilization.
The dominating characteristic of the territory of the Indus Civilization and the source of the name of the ancient culture is, of course, the River Indus. This approximately 2900 km long, winding and seasonally flooding Himalayan-sourced waterway has literally shaped the landscape of the northwestern section of South Asia for millennia; its presence, and its shifting temperament, has defined the conditions of all the various cultures in that part of the world from the first human presence until the present day. It enabled intensive cereal-base agriculture in the largely semi-arid terrain of the region (especially in Sindh), and, perhaps more important from a cultural stance, served as a means of communication and unification for the dispersed settlements and peoples of the Indus Civilization (Miller 2006). It has been a consistent conduit for trade, the movement of populations, languages, religions, and myriad other cultural factors for thousands of years; not without reason have the largest and most prominent cities of South Asian antiquity been located along its banks and those of its tributaries.

As vital and domineering as the Indus river system was and is, however, it was not the sole watershed that fostered the civilizational ethos of Harappan society. On the eastern fringes of the Indus Civilization territory, paleoclimatic research indicates that the largely desiccated and buried river system, the Ghaggar-Hakra, once flowed openly through present day Cholistan and fed other channels that eventually emptied into the Arabian Sea (Wright 2010:37-38). While obtaining precise dates for paleoclimatological events is more difficult than for archaeological ones, most figures point to the disappearance of this system by around 2000 B.C. (Wright 2010:212-213), likely as a result of tectonic upheaval, and a correlating with the dissolution of Harappan urban society.

The ancient presence of this system (which Possehl (1998b) equates with the Vedic Sarasvati River) resulted in a far wetter environment in that particularly dry corner of South Asia, an interpretation in line with broader models of climatic change over the past several millennia (Gaur et al 2013). The presence of this ancient river system facilitates an explanation for the very dense concentration of small Harappan sites in what is now a desert environment (Mughal 1970; Stein 1942). Interpretively, the recognition that the Indus Civilization was one that developed and was maintained primarily between two complex watersheds rather than along a single one, adds new legitimacy to broader comparisons with Mesopotamia that have always been present in Indus Civilization studies (Cork 2011; Mackay 1925, 1934; Marshall 1931c; Kohl 2007:215).

The geographic and geological characteristics of the area to which the Indus Civilization was indigenous may have played particularly important roles in the development of Harappan culture,
specifically urban culture, as several key settlements seem to have arisen in the intersection of the differentially naturally endowed areas, and may have served as connecting hubs for the activities conducive to their varied terrains (i.e. pastoralism, agriculture, trade in outlying resources) (Law 2005). Lahiri (1990) postulates that the city of Harappa itself may have arisen owing to its location as a “gateway” city: a settlement at the conjunction of pastoral and agricultural activity areas and which profited from the extensive trading that passed through it. Possehl (1982:19-22; 2002:6-7) understood the different geographic characteristics and their associated settlements as indicative that the territory of the Indus Civilization could be divided into several distinct political or cultural domains: 1. Eastern (that area roughly corresponding to Haryana associated with Kalibangan and Rakighari); 2. Harappa (the Punjab); 3. Cholistan (associated with Ganweriwala); 4. Sindhi Domain (Mohenjodaro and area); 5. Anarta Chalcolithic ; 6. Sorath Domain (Lothal); 7. Northwestern Borderlands (roughly the NWFP, Pakistan); 8. The Kulli Domain (most of Baluchistan, Pakistan). The unique histories and specific regional traditions enjoyed by each of these areas (for example, the tendency to construct abodes from stone, as opposed to brick at Dholavira (Bisht 1989:399)) does not, however, preclude the unifying commonality of shared cultural and material traits by which each was enmeshed in varying degrees into the broader sphere of Indus Civilization.

3.3 CHRONOLOGY

The shared Indus Civilization cultural and material traits alluded to above are most pertinent to what scholars have traditionally understood as the florescence of Harappan society - that phase of the culture that witnesses civilization. Modern chronometric techniques, verified through cross-dating with outside datable assemblages (e.g., textual evidence, Possehl 2002a:29) has determined that the period of urbanisation for the Indus Civilization can be placed from roughly 2600-1900 B.C (Kenoyer 2008:186; Lal 1994:23). Although numerous more-or-less convergent chronologies have been advocated (Franke-Vogt 1991:167), Indus specialists do not uniformly use a standard chronological framework, or even standard terminology by which to discuss chronological issues (Dyson 1982:425-426; Jansen 1993b; Possehl 2002a:29-50).

Despite this, many Indus Civilization specialists and general scholars investigate Harappan society as a component of a broader culture-historical tradition, understood through the specific convergence of historically-related practices and material culture throughout a particular geographic range, a methodology for situating chronological and cultural matters first outlined by Willey and
Philips (1958). Jim Shaffer (1974, 1992), has done the most to render this in a systematic chronological format for South Asia. Shaffer (1992:442) envisions that the Indus Civilization was the terminal component of a broader, regional cultural tradition that unites the practices of the preceding South Asian Neolithic with those of the subsequent Iron Age. Within this tradition, several distinct Eras are noted, each contributing to the overall historical and cultural heritage of the Indus Civilization: Early Food-Producing (c.6500-5000 B.C.), Regionalisation (c.5000-2600 B.C.), Integration (2600-1900 B.C.), and Localisation (1900-1300 B.C.), as described below. This general chronology is only one component of a larger, regional time-frame; indeed, this region of South Asia has been inhabited continuously since the Lower Paleolithic (Avari 2007:24).

As such, the chronological framework for the Indus Civilization cannot be understood apart from the broader historical processes that form the general outline of South Asian prehistory and, for some regions (e.g. Baluchistan, Shaffer 1974), more broadly inclusive regional histories (Dales 1965; Kohl 2007; Mughal 1970; Shaffer 1992). Scholars of this civilization have long held to the view that a discussion of Indus Civilization chronology should be explicitly linked to those historical patterns and traditions to which it is related, and in some cases, upon which it drew significant cultural practices (Kenoyer 2008:188-191; Wright 2010:12-13).

This manner of correlation presents for the Indus Civilization the same strengths and weaknesses it does for other historical periods; namely, that it recognizes the integration of the period in question with a collection of preceding eras and as such allows for a holistic appreciation of such issues, while it also makes difficult a precise or demarcated set of dates from which to identify the end and beginning of the period in question (Kenoyer 2008). Rather than a failing, this simply reflects the lack of precise correlation between the conceptual devices we employ in order to understand the past, and the sticky realities of uneven cultural change, a condition inherent in a discipline that is predicated on the analysis of a fragmented data set (Eerkins and Lipo 2007; Ingold 1993; Johnson 2011:768-769; Trigger 2006:355-356).

Conventionally, the appearance of food production as opposed to collection in the Baluchistan Plateau before 6000 B.C. marks the genealogical baseline from which the urban societies of the Indus Civilization can be ultimately, although not entirely, traced (Shaffer 1992:441-443). The use of Neolithic innovations to mark the origins of the Indus Civilization is not meant to produce a claim of exaggerated antiquity nor to stress the inevitability of political complexity, but rather to recognize that the requisite economic practices and social conventions necessary for it were, although incipient,
nevertheless in place. Likewise, this conceptual chronological scheme does not purport, except in very broad and simultaneously selective ways, a cultural continuity between the Early Food-Producing societies, at such locales as Mehrgarh (Jarrige 2000; Possehl 2002a:177; Shinde et al. 2006:65), and the later Indus Civilization.

The appearance of a domesticated society in the eastern Iranian plateau and Baluchistan between 7000 and 6000 B.C. introduced a suite of (primarily cereal) domesticates and associated material and social practices that would provide the economic and conceptual underpinnings of later political complexity in South Asia. Barley, wheat, limited use of millet, cattle, sheep, goats, and water buffalo all appear as entrenched elements of North Western South Asian societies by the close of this Era. Likewise, this Era is noted for the appearance of non-agricultural aspects of local economies such as the beginnings of lapidary and shell-working using imported exotic materials (Shaffer 1992:444; Wright 2010:59-63).

Largely understood through regionally circumscribed ceramic assemblages (each comprising various Phases), the subsequent Regionalization Era witnessed the emergence, spread, and embedded perseverance of many cultural elements that would later serve as distinctive markers of the Indus Civilization, such as specific ceramic forms, settlement patterns, and the initial appearance of symbols that are likely ancestral to the script of the Indus Civilization (Kenoyer 1998; Lal 1962, 1964; Possehl 2002:133-134; Shaffer 1992:444-448; Shinde et al 2006:65-66; Wright 2010:186). While these separate traditions are geographically and to a lesser degree temporally dispersed, they were clearly in communication, as they are typified by a number of shared cultural and material features, including wheel-thrown pottery and shared forms of metallurgy, as well as larger settlements on the order of regional centres (Shaffer 1992:448).

The earliest evidence for these societies is dated to approximately 4000 BC, and the close of the Regionalization Era is generally accepted at around 2600-2500 B.C. (Shaffer 1992:448). However, the end of the Regionalization Era is not entirely evident in all of its constituent Phases.

The various phases that comprised the Regionalization Era (e.g., the Balakot, Amri, Ravi, Hakra, and Kot Diji Phases) largely, although not completely, correlate with several of the distinct intracultural zones listed by Possehl above (1982:19-22; 2002:6-7). This might indicate that many of the core sources for the culture of the Indus Civilization maintained their historical and societal identities through the course of its florescence (Shaffer and Lichenstein 1989; see also Ameri 2008, 2013). This is indeed the case for the Northwestern Borderlands region, for which radiocarbon dates
confirm that both Kot Dijian and Mature Harappan material culture were in use simultaneously at Indus Civilization sites (Possehl and Raval 1989:9).

As stated above, the chronological setting for the Indus Civilization proper is conventionally given as c. 2600 - 1900 B.C., the Integration Era (Shaffer 1992). This timeline is based on the presence of an integrated set of distinctive material traits that correlate with a pan-regional expression of cultural identity, rather than those which pertain to regionally-specific traditions. Of course, scholars are not always in agreement about the particulars of such traits, nor of their associated chronologies, and deviations from the above dates do exist (Agrawal et al 1978:41; Kenoyer and Meadow 2000; Shaffer and Lichenstein 1989:117-119). This is not an unusual condition in archaeology, especially amongst those civilizations and cultural traditions that lack indigenous or associative textual records. The inability to excavate to the initial periods at main urban locales such as Mohenjo-Daro (Jansen 1987:9) also hinders attempts to refine our developmental knowledge of Indus Civilization origins. Suffice it to say that shortly prior to 2600 BC, the shared material and behavioural traits that bound societies together across the northwestern section of South Asia had morphed into an encompassing and robust integrative cultural system (Chakraborty 1983; Shaffer 1992).

In contrast to many ancient civilizations, the outstanding chronological issue regarding the development of the Indus Civilization is defining its termination, rather than its beginning. Unlike the Classic Maya (Braswell et al 2004; Stuart 1993; Wright 1997), or most of Mesopotamia (Van de Mieroop 1999:229-231; Yoffee 2005:141), many of the cultural practices and distinctive material correlates of the Indus Civilization did not uniformly disappear along with its socio-political integration (Despande and Shinde 2005:121-123). Rather, a piecemeal retention and selected transformation of material practices characterizes the period immediately after that conventionally given for the dissolution of the Indus Civilization (Possehl 1997; Vidale and Miller 2000:124-125), corresponding to Shaffer's Localization Era (Shaffer 1992). What appears to disappear is the presence of institutionalized practices - the behaviour associated with not simply cultural traditions, but large scale political institutions. The disappearance of standardized brick sizes, weights, seals, and a subtle, but noticeable transformation of spatial and urban sensibilities all mark the "transformation" of the societies of the Indus Civilization into something novel and in many ways removed from its predecessor (Possehl 1997). Contrary to the abrupt change or sudden collapse of social institutions or of urban society coincident with the loss of political stability in many ancient civilizations (Tainter 1988), those that typified the Indus Civilization were relatively neither drastic nor quick to emerge.
This, as much as the lack of associated martial materials or evidence of typical complex society ostentation has led to a dispute over the nature of Indus Civilization political structure.

3.4 IDENTITY, AUTHORITY, and MATERIAL SIGNATURES of the INDUS CIVILIZATION

As an entirely archaeological culture, the Indus Civilization is defined by a diverse, complex, yet largely aesthetically unified material canon. Whether in terms of its ceramic traditions (Dales 1991; Dales and Kenoyer 1986; Quivron 2000), lithic crafts (Kenoyer 1984), metallurgy (Hoffman and Miller 2009; Kenoyer and Miller 1999), expressive culture (Clark 2009; During-Caspers 1994; Rogersdotter 2007), or symbols and implements of bureaucracy (Bisht 2008), most Indus Civilization material culture displays a striking consistency in form across the space and time occupied by the society. Indeed, the lack of expected variation or distinction encountered amongst the urban material culture during the initial excavations of Harappa and Mohenjo-Daro led researchers to lament its general uniformity, and sceptical of its ability to inform an understanding of temporal change. An understanding of the development of form and style of many Indus Civilization artifact categories remains relatively unrefined, although definite artefactual precedents and antecedents are easily distinguished from those that pertain to the florescence of the civilization proper (Chaolong 1994:65-68). In an impressionistic manner, the pattern of distribution and stylistic conservation of Indus Civilization material culture resembles those of archaeological horizons, rather than traditions proper. While we know a great deal about the productive mechanisms and technological necessities that made them possible, we can only really correlate many diagnostic Indus Civilization artifacts with the florescence of its urban culture, rather than sub-periods of it.

Nevertheless, such a correlation is extremely important, as the articulation of its diagnostic artifactual and urban elements demonstrates the defining role of both as the material components of a complete cultural, and indeed, civilizational system. The relative uniformity of its material components, which early Indus Civilization scholars such as Marshall (1931a) and Piggot (1952) understood as a sign of a passive societal stagnation and a general lack of cultural creativity, can perhaps be more reasonably understood as a purposeful strategy to downplay variation and the possible constituent or factional identities conventionally linked with intracultural variation (Adams and Adams 2003; Janusek 2002; Rissman 1988; Wobst 1977). By extension, this strategy might also have served to promote societal-wide markers of a shared corporate identity, one based on the ethos of Indus
civilization.

But what mechanisms lay at the heart of promoting this shared ethos? As materiality is intimately tied to identity, and as identities are always multifaceted and contextual (Attarian 2003:185-186; Bartell 1989; Emberling 1997, 1999), the exclusion of selected facets and the retention of others by means of a shared materiality suggests intention, coordination, capability, and ultimately the authoritative capacity of political capital, at least insofar as it forms a main component of aesthetic-based legitimizing strategies (Bawden 1995; Beekman 2008; Feinman 2000; Manzanilla 1996). Most often, there is a correlation between such things and the kinds of material culture that embody (or pertain to) the administrative aspects of social relations in complex societies (Blanton 1998:146). Usually, the material markers of bureaucracy and administration are tightly circumscribed; they appear in limited archaeological contexts, can generally be correlated to specific social segments, and often are typified by imagery or symbols that communicate the social ideals of the highest social strata (they embody Culture) (Harrison and Osbourne 2012; Kurtz 1994; Rothman 1994, 2007; see also Lesure 1999). In most ways, the iconography and distribution of bureaucratic materials follow the same patterns as other elite materials, and is similarly taken to indicate the hierarchical nature of these societies (Borowicz 2003; Marcus 2006). Intriguingly, the systemic regulation common to elite symbols is, in the Indus Civilization, present for more mundane materials. Understanding this pattern is perhaps possible through examining and applying the concept of standardization to such materials.

By way of definition, the analytical concept of standardization refers to the systematic implementation of an authoritative ideal (Costin 2001:301-2). As such, it is not necessarily concerned with the scale or the agent of production; it does not imply locational centralization over individual production, nor does the term implicate the quantity of production. Standardization does not mean that all things were identical, nor that there was a lack of variation among items within certain classes or categories of material culture, a feat which has only really been achieved in modern industrial productive contexts. Variability, usually in the form of aesthetic distinction, does exists amongst standardized things. Archaeologically, we see this through the variable Classic Maya epigraphic permutations, which pertain to identical expressions of kingship (Fridel and Schelel 1988; Marcus 1976), subtle differences in the shape and size of Sumerian barley ration vessels from the same archaeological assemblages (Beale 1978:289), and well as the idiosyncrasies that typify minted coins from virtually every pre-modern context (e.g., Shaw 2008). Likewise, things as mundane as varying
Latin fonts common to modern word processing software are not distinct artifact categories, but, like the above, are variations of a central, authoritative, and unifying ideal.

The presence of standardization, as opposed to culturally-derived similarities (Kowalski 1999; Pauketat 2001), implies a coordinated effort on behalf of an authority to control certain operations within a society, and the sanctioned means to do so. As such, standardization is not the conceptual opposite of monumentalism, but rather structurally analogous, and perhaps more effective as a deliberate mechanism of political authority. In Harappan society, three classes of material culture in particular best suggest the presence of administrative authority by way of standardization: weights, seals, and architectural materials.

Throughout the Indus Civilization, at least the main class of weights largely conform to a set standard of materials, shapes, and sizes, suggesting a coordinated, enforced, and monitored system of measurement (Miller 2013). Weights are often recovered from the areas adjacent to the internal and external gates of Harappan cities (Kenoyer 2010:115; Miller 2013:168), and often in conjunction with balance scales, implying, perhaps, that a civic administration oversaw and enforced taxation on goods entering and leaving the city.

Stamp seals are another material indicator often used alongside weights to argue for the administrative capacity of the Indus Civilization (Parpola 2005). These are important, not just as potential indicators of the administrative aspect of this civilization, but because they are a primary medium for the Harappan writing system (Parpola 1986:400). The relatively small amount of total characters and short inscription length have led some scholars to link their use to detailing economic transactions. Furthermore, these stamp seals contain a standardized iconographic corpus which some have interpreted as iconic representations of Harappan social segments (Ameri 2013:357).

The main building material used throughout the Indus Civilization is brick, not surprising given the alluvial setting for the majority of the known Harappan sites. What is surprising is the standardized proportions of the bricks used as basic construction material for domestic as well as pubic architecture, circumvallations, and other civic elements (see discussion below). This is a remarkable constant and, as with the seals and weights, the bricks maintain their standard proportions in most Indus Civilizations locations.

Taken separately, the evidence of standardized weights, seals, and building materials suggests that some type of control of production and trade was a probable source of political power for Harappan elites. Taken as a whole, alongside massive city walls and raised building platforms (Mughal
1994), (largely) orthogonal layouts (Bisht 1989; Jansen 1978; Wanzke 1984), internally segregated and perhaps modular civic sections (Kenoyer 1992, 1994, 2008a, 2008b), standardized pottery shapes and designs (Quivron 2000; Rogersdotter 2007), public monumental buildings (Urban 1987), shared systems of water management (Jansen 1989, 1993, 1994), and a proclivity for relatively nondescript architecture (Sarcina 1978, 1979), these standardized materials contributed to what has been termed a “Harappan Veneer” (Meadow and Kenoyer 1997), a collection of material traits and practices that not only served as a means of cultural identification for Harappan society, but provided the unifying symbols necessary for its legitimization and replication (Dhaivaliker 2002; Jacobson 1987; Ratnagar 1991, 2004). All of these standardized traits, by definition, avoid individualizing tendencies or expressions. Variation did, of course, exist in the Indus Civilization (Ameri 2008, 2013), but the most widely distributed symbols comprise a shared aesthetic that refers to corporate experiences.

3.5 INDUS URBANISM

The regularity of its urban features is perhaps the most obvious and striking feature of the Indus Civilization, especially in regard to the advanced level of planning, technological prowess, and architectural and civic symbiosis evinced in its cities. Although the actual state of affairs is much more complex and nuanced than the popular perception of Indus cities as orthogonal systems of sewage management, they do often seem far more developed than cities from most early civilizations, especially in regards to the apparently modern spatial sensibilities and hygienic considerations (Jansen 1993a).

Regardless of the above, most models for the social and political aspects of Indus urbanism have been found to be conceptually inadequate (Possehl 1990:276). Primarily, this is because urbanism is an inherently political issue that speaks to notions of control, exclusivity, and cultural and economic differentiation. Proposed models of Indus urbanism always accompany, at best, an explicit attempt to justify the inclusion of the Indus Civilization within a political typology (Smith 2004:79), or, at worst, a set of unstated assumptions pertaining to the political fabric and operation of the Indus Civilization (Maisels 1999). Whether explicit or not, scholastic visions of urbanism are always embedded within a broader political narrative and, given the enduring lack of consensus amongst Indus Civilization scholars as to the nature of ultimate political authority in Indus society, it is not surprising that a similar lack of agreement exists in relation to its urban characteristics. Rajan (1982: 72-3), for one, in a somewhat formalistic sense asserts that Harappan urbanism was "probably a conditioned, secular,
consumer-oriented, agricultural-exchange economy - a stringently disciplined oligarchy of political, trade, and technocrat coterie”. In contrast, Wright (2010:235) describes Harappan cities as landscapes comprised of "markers of social and cultural identities," and claims that that urbanism itself is usually "part of a larger overarching state system" (Wright 2010:107).

Regarding the state of knowledge of centralized authority and its link to social stratification for the Indus Civilization, Kenoyer (1989:183) once remarked that the data employed were “admittedly poor and unreliable.” In many ways, the same can be said of the data used to generate encompassing statements about spatial organization in Indus Civilization cities. Although the general characterization of such urban centres is of highly-ordered, planned metropolises, implying a degree of internalized, centralized decision-making, (Maisels 1999), such depictions are only one manner in which scholars of the Indus Civilization have approached urban space. Furthermore, the characterization of all Indus Civilization urban centres as gridiron amalgams of brick architecture and sewage systems is generally derived from a selected and limited sample of these ancient cities, and acts to hide the very real differences found within the data itself (although it should be understood that a comprehensive analysis of all Indus Civilization cities does not currently exist) (Possehl 1990; Wright 2010:107). Despite the lack of emphasis on how urban space (and landscape) is conceived and discussed within Indus scholarship generally, there do appear to be several distinct approaches to the topic that dominate the literature and influence the interpretive models we employ to make sense of the character of ancient Indus society.

The most prominent research emphases focused on urban space (aside from the commonplace reiteration of city-planning) are those dealing with activity areas (Kenoyer 1989, 1992; H.M.-L. Miller 2000), and the technical analyses of specific architectural and engineering features (Jansen 1984, 1993). Although presented here as basically discrete theoretical approaches to urban spatial organization, it should be noted that these concerns are not essential and do in fact intersect, although rarely to the point of providing a true synthesis of Harappan urban patterning (Miller 2007).

3.5.1 Urban Activity Areas

The analysis of activity areas, such as craft-production locations, food-processing areas, places of ritual activity and the like, is a standard means of archaeological site assessment (Drewett 1999:17). Unique to the study of the Indus Civilization, however, is the heavy reliance on studies of activity areas, especially urban craft production locations, as a means of evaluating the structure of urban
society and political organization (Kenoyer 1998; Miller 2000; Vidale and Miller 2000). Rather than simply plotting the spatial distribution of craft workshops, the integration of spatial data has allowed researchers to examine the potential of political and economic control of such activities as well as the interrelations between artisans engaged in different productive technologies (Miller 2007). This method is closely associated with the work of archaeologists at Harappa and at Mohenjo-Daro (e.g., Davis 2012; Kenoyer and Miller 2007:172; Jansen 1980a, 1980b, 1989; Miller 2000; Miller and Vidale 2000; Wazkne 1984).

Analyses of production areas and political economy in general for Indus Civilization cities suffer from the lack of unequivocal elite contexts to which to tie production activity. Similar studies in other contexts can use the proximity of elite structures or visible markers of status can be used to generate rather specific models of the political clout of craft producers and ascertain the control, or lack thereof, of economic or production activity by societal elites (and hence elaborate on models of political cohesion) (Feinman and Nichols 2004; Hendon 1991; Smith and Masson 2000:21). In Contrast, the Indus-based studies have to work solely from the vantage point of the production areas and artefact distributions themselves.

One manner in which Indus archaeologists have dealt with this is to examine the spatial relations between the production areas themselves (Miller 1994a, 1994b, 1997, 2000, 20007; Kenoyer1989). Miller (2007:42) notes that, at Harappa, production activities seem to have been differentially allocated across the urban landscape, apparently owing to the types of technological processes involved (extractive-reductive and pyrotechnologically transformative processes, respectively). The particular distribution of such activity areas indicates that extractive-reductive production (such as lithic and shell-working) tended to aggregate together (regardless of the material) while pyrotechnologically transformative craft activity (metal and ceramic production) was pursued in relative isolation (Miller 2007:47). This offers interesting parallels for the interpretation of ancient Indus social organization with Vidale and Miller’s (2000) concept of “technical virtuosity”, which posits differential social status and prestige (as well as the possibility of political leverage or autonomy) for the artisans involved in these different technologies.

3.5.2 Technical Analyses

One physical aspect of cities of the Indus Civilization that largely separates them from those of other ancient states is their sophisticated and ubiquitous system of water supply and effluent disposal (Jansen 1993a). Modern popular and scholastic astonishment with both the engineering finesse and
egalitarian nature of this aspect of the Indus Civilization has been a fixture of the literature, and such systems are seen as one of the defining characteristics of Indus Valley urbanism (Jansen 1993; Jarrige 2000; Scarre and Fagan 2003:155-157).

The work of Michael Jansen (1984, 1993) has done much to elucidate the architectural characteristics and technical points of the water and sewage systems of Indus Civilization cities, especially Mohenjo-Daro. His analyses are also important for assessing the sheer volume of water capable of being held or transported within the cities. His detailed and systematic investigation of Mohenjo-Daro’s water system revealed no fewer than 700 wells placed throughout the city with a distribution of one well for every three houses, based on the assumption that the structures themselves represent household units in the sense denoted by Blanton (1994) (Jansen 1993a:118). Additionally, in-house bathing platforms and the presence of the “Great Bath” structure on Mohenjo-Daro’s western Upper Town underscore the practical and most probably ideological importance of water and water management systems within ancient Indus Valley society. While Mohenjo-Daro evinces a system of wells on singularly grand scale not matched at other cities, water management is a primary civic feature of all studied Indus Civilization cities (Bisht 1989; Possehl 2002:69, 243).

Perhaps more impressive than the presence of the numerous wells at Mohenjo-Daro was the system of drains and public sewerage. This holds true for Harappa and Nausharo as well, although it appears that the water management systems at the smaller sites were not as elaborate as that at Mohenjo-Daro (Jarrige 2000; Kenoyer 1991a). According to Jansen (199a3:118), the brick masonry-constructed drains “mostly ran along past the houses on one side of the generally unpaved streets, some 50 or 60cm below street level.” The sewerage system at Mohenjo-Daro displays precision in technical execution and civic planning – in many instances the public drains were directly connected to the drainage systems of individual structures and converged at large sink pits which would have required regular maintenance (Jansen 1993a:119).

The effect of Jansen’s survey of Mohenjo-Daro’s water management system is to create a water-based expression of urban space. Through the contextual distribution of wells and the public sewerage system we can see not only the scope and obvious social importance of water to the ancient inhabitants of Mohenjo-Daro, but also a particular type of urban plan. A tempting assumption is that the system of ordered main streets characteristic of Indus Phase cities grew in complement with the similarly aligned effluent disposal system. This sort of material and social interactivity, if so verified by later archaeological testing, has important ramifications for how we conceive of the development and
stability of ancient Indus urban space.

3.6 INDUS CIVILIZATION ARCHITECTURE

While much detail has been given over to the notion of the seemingly orthogonal and planned nature of Indus Civilization cities (Jansen 1987a, 1993; Kenoyer 2008; Wanzke 1984), much less attention has been paid to the formal characteristics of Harappan architecture proper (Jansen 1984). Again, this is partly attributable to the small field of researchers who concern themselves with the Indus Civilization. As has been noted previously, this historically small cadre of specialists has largely been involved in developing an understanding of the economic, productive, and technological aspects of Indus Civilization, and the lack of focus on urban architecture is by no means attributable to scholarly neglect. Another factor that has played into an overall lack of concern with issues architectural in the Harappan world, at least in comparison with the central focus of architecture in scholarly communities that investigate other ancient civilizations, is its lack of preservation. The mudbrick that was commonly used in many architectural contexts (both for platforms and structures) in notoriously ill-suited to long-term integrity (Woolfitt 2007:173-174); where it has survived, its presence has often been misrepresented or simply overlooked in published reports (Verardi and Barba 2010). Likewise, the Indus Civilization was primarily situated amid the extensive, shifting, and heavily depositional floodplains of the Indus and Ghaggar-Hakra watersheds, a setting which is not conducive to revealing architectural remains for study. Perhaps even more importantly, many Indus Civilization sites, most prominently Harappa, have suffered at the hands of generations of brick-robbers (Possehl 1977:235). Consequently, many structures simply no longer exist, and only the outlines of rooms or buildings, sometimes devoid even of doorways, are left to guide archaeologists in their reconstruction. So lamentable is the state of most surviving Harappan structures that the locale that evinces the best preserved architecture, Mohenjo-Daro, has become by default the focus of most studies on Indus Civilization architecture, skewing discussions of architectural variability (see below). Finally, in a generalized sense, the architectural dimensions of the ancient Indus Civilization have, at times, been presented as uncomplicated, aesthetically unappealing, and essentially uninteresting (Possehl 1990:278). Marshall, in a genuine display of British classicist projection, once famously remarked of them that the overall effect of being immersed in the urban landscape of a Harappan city was not unlike visiting a northern English industrial town with their attendant uniform, and sullen-looking brick row-houses (Marshall 1931d:15). Marshall's condemnation of Harappan architectural aesthetics is
complemented by his simplification of functional possibilities, claiming, for example, that the excavated structures at Mohenjo-Daro could be easily classified as dwellings, public baths "which may have had either a religious or secular character", or buildings of an indeterminate purpose (Marshall 1931d:17). The notable absence of the required monumental and palatial forms coincident with what was known of ancient civilizations in the early part of the 20th century also did not help to induce researchers to tackle architectural issues as the field of Indus Civilization studies grew. Mostly, where it was addressed, the study of Indus Civilization architecture was pursued as a corollary to larger settlement studies, and architectural form itself mainly understood as an indicator of Harappan culture rather than a significant anthropological problem in its own right (Kenoyer 2008).

There were, of course, exceptions to this pattern. As early as the 1920s, in the context of Marshall’s initial excavations at Mohenjo-Daro, Sahni identified the exceptional characteristics of Houses L and XXX in the HR-B area of Mohenjo-Daro (Sahni 1931b; Possehl 2002a:202-204). Other than noting the unique dimensions of these structures, however, little else seems to have been investigated in an explicitly architectural manner. Additionally, there do exist several instances of what are at best understood as “enigmatic” structures at both Harappa and Mohenjo-Daro (most conspicuously the “Granary”, and “Great Bath”, respectively), but other than noting their exception to the perceived similarity of architectural cannons, little consideration was invested in rigorously understanding why such aberrations existed.

Owing to the lack of preservation, the large-scale disappearance of architectural materials, and the fact that our chronological knowledge of the development of the Indus Civilization is almost wholly dependent on the urban-based ceramic typologies developed at Mohenjo-Daro and Harappa (later supplemented at other sites) (Wright 2010:85-100), we have little to go by in the way of a framework for understanding the chronological development of Harappan architecture and its attendant cannons. The earliest well-documented occurrence of Indus Civilization architecture is found at Nausharo, on the western peripheries of the Indus cultural sphere (Jarrige 2000). In terms of its manner of clustering and distinguishable elements, this architecture is largely indistinguishable from that which was erected in places like Mohenjo-Daro at the close of the Mature Harappan period c. 1900 B.C. As with the issues mentioned above, this presents logistical problems for trying to understand architecture as a revealing and active element in the changing cultural patterns of Indus Civilization.

The overriding consensus on Indus Civilization architecture, both impressionistic and via comparisons external to the Indus Civilization, is that it demonstrates a cultural predilection for
downplaying distinction and difference, a concern that is evident throughout the material culture of the Indus Civilization (Rissman 1988). This is not to say that there are no actual material, decorative, or design differences between various buildings, or between buildings in different urban locations (see Wright 2010:234), but rather that such differences appear to be of secondary importance to an emphasis on shared elements. This concern to downplay differences is seen most readily in the standardized nature of the building materials used in the construction of Indus Civilization architecture (Jansen 2010; Kenoyer 2010), the apparent lack of publicly-minded decorative or emblematic markers, and the internal focus of Indus Civilization architectural design. The most thorough discussion of this topic, as well as the most thorough discussion of architectural categorization and Harappan architecture generally, is that presented by Sarcina (1978, 1979), whose work is discussed in Section 4.2.

With the exception of those few locales that lacked access to the material, all architectural structures within the orbit of the Indus Civilization were built primarily or at least in substructure of mudbrick, baked brick, or both (Possehl 2002a:99). To be certain, other materials figured significantly in the architectural repertoire of the Indus Civilization, perhaps most importantly wood, from which entire buildings may have been constructed (Vidale 2010). Wood also formed the main material from which spanning structural elements were created, for example, doors, rafters, and lintels. Plaster, likely played significant roles in Indus Civilization architecture, but is poorly preserved. The overwhelming bulk of the structural remains at Indus Civilization sites, however, are comprised of various kinds of brick. This is not at all surprising given the alluvial and riverine setting in which most Indus Civilization cities were located. The combined lack of locally-accessible durable building materials, such as stone (Law 2005) and the abundance of suitable clays in the valleys along the dual Indus river system and its tributaries created a natural disposition, if not preference, for brick as a medium of construction. What is not attributable to issues of naturally-occurring availability is the standardized and quite uniform dimensions of the bricks themselves, a feature of Indus Civilization architecture that, as with the emergence of “typical” urban spatial patterns, appears initially in the archaeological record as an already established practice not necessarily confined to a specific regional tradition (Wright 2010:242).

The standardized characteristics of the Harappan bricks do not necessarily relate to their actual dimensions, which varied across time and space, but rather their form. From the first occurrence of bricks in the archaeological record of the geographic locus of the Indus Civilization they have maintained a distinctive height: width: length ratio of 1:2:4 (Vahia and Yadev 2011:37).
In contrast to the ubiquity and consistency of standardized baked brick, certain Indus Civilization structures were occasionally embellished with seemingly decorative elements. Pillars, columns, window screens, column capitals, and variations in brick bond have been noted at some of the larger complexes at Mohenjo-Daro (Vidale 2010). Likewise, column stones, an architectural artefact generally associated with and used to imply the presence of wooden columns, have also been attested at Dholavira, Harappa and Rakighari (Kenoyer 2012). What precisely such elements imply or what manner of information they communicated in antiquity is uncertain. No comprehensive synthesis of such decorative elements exists; their distribution, as with their function, is hinted at in several general Harappan studies, but their pertinent details do feature in the original Mohenjo-Daro reports.

3.7 INDUS CIVILIZATION SUMMARY

Like all other complex societies, that of the Indus Civilization defies easy explanation or encapsulation. Similar to other comparably organized and contemporaneous societies found in Mesopotamia and Egypt, that of the Indus contained many disparate elements that were, at least symbolically, bound together under the dominant ethos of an urban-based hierarchical political order. The scale of their cities, the complex and entrenched nature of their economic connections with neighbouring and distant regions, the technical proficiency of their productive methods and their widespread investment in and management of unifying symbols, amongst other matters, all attest to the intricate and robust character of this civilization. Where the Indus Civilization differed from its typological peers seems primarily to have been in those areas concerned with the display of political and social hierarchy. The standardization and control of numerous forms of publicly situated material culture (beads, bricks, seals, etc.) suggest that, while differences presumably tied to status and wealth were certainly present, such disparities were far more subtle in operation than was the norm amongst many other complex societies. This also implies the presence and far-reaching ability of an organizational body by which such standards were maintained, as an aspect of and in addition to broad cultural adherence to such norms. Indeed, the restriction on the display of public hierarchical symbols throughout the Indus Civilization seems directly proportionate to the extent of its state institutions. Paradoxically, most material markers of the governing apparatus of the Indus Civilizations manifest themselves as a widespread and conspicuous lack of hierarchical images and a relatively homogenizing civic aesthetic, both of which may constitute the most hypertrophic examples of the corporate ideal of political display (cf. Blanton et al 1996).
A similar kind of lack of correlation exists between Harappan architecture and the state of knowledge of its functional or symbolic particulars. While it comprises the most conspicuous aspects of Harappan material culture, the architecture of the Indus Valley Civilization is not nearly as well-understood as its portable artifacts. Again, preservation and the particulars of its spatial and stylistic dimensions may largely be the reason for this disparity. No definitive archaeological typology exists for the Indus Civilization, although the issue has been explored in a piecemeal manner over the decades. Mohenjo-Daro, which is the single largest example of preserved Harappan architecture, largely skews the study of Harappan architecture in favour of that city, leading to a lack of appreciation for the variation that is implied in the historic canons of this tradition (Bisht 1984, 1989; Possehl 2007b). In the following section, the architecture of this city is explored in detail, allowing a more in-depth discussion and appreciation of the particular issues that surround the urban and structural dimensions of this society.

3.8 MOHENJO-DARO: EXEMPLAR CITY of the INDUS CIVILIZATION

The “Mound of the Dead” (the translated meaning of the Sindhi word, Marshall 1931b:1) and the artifacts associated with it, has been the de facto popular and scholarly icon of the Indus Civilization since its academic discovery in 1924 (Marshall 1924; see Jansen and Urban (1987:i) and Possehl (2002a:185) for the various conventions and controversies of the terms used to describe Mohenjo-Daro). This is due to both the extensive research tradition associated with this city since the 1920s (Dales 1964; Dales and Kenoyer 1986; Jansen 1984, 1987, 1993; Marshall 1931a; Mackay 1938; Sarcina 1978/1979; Vidale 2010; Wheeler 1968), and to its preserved architectural attributes, which, of all the Indus Civilization cities, comes closest to approximating Western symbols of civilization (Kenoyer 2000; Mosher 2012). As such, the material culture of Mohenjo-Daro is conceptually more amenable to the non-specialist in conveying the scale and organizational complexity of this poorly known society.

As has been stressed several times thus far, the system of writing used at Mohenjo-Daro and other Indus Civilization cities has yet to be deciphered by scholars. Consequently, we are at a loss to provide a similar level of contextual information for Mohenjo-Daro as for other structurally and
temporally comparable civilizations. While we cannot yet outline the political history or relative regional prominence of this polity, the scope and detail of the many years of excavation and material analysis conducted at Mohenjo-Daro do allow us to make some very specific and important comments on the city, its development, occupational history, and its economic and social organizational components. All of these lend support to the general interpretation that Mohenjo-Daro likely held a special position within its civilization. While it surely participated in the material and social traditions of the civilizational ethos of which it was a part, Mohenjo-Daro boasts numerous unique architectural and spatial attributes. In the opinion of most specialists, the number and nature of these unique attributes set it apart as a location of special cultural and perhaps even ideological status within the Indus Civilization (Possehl 2002:185).

3.8.1 The Multiple Sources For Mohenjo-Daro

The material for this dissertation is based on several separate sources of archaeological information generated over the course of archaeological investigations at Mohenjo-Daro, which appeared in published form between the 1930s until the 1990s. During this lengthy period, archaeological analysis and methods underwent significant developments and revisions of prevailing modes of archaeological thought (Bennett 1943; Flannery 1968; Hawkes 1954; Hodder 1984; Schiffer 1988; Trigger 1989, 2006). Furthermore, the Mohenjo-Daro material originates from several distinct regional, governmental, and academic archaeological traditions. While it collectively accounts for the extant corpus of archaeological knowledge for this particular ancient city, such sources are far from theoretically or analytically uniform. As such, contradictions in original interpretations, and in some instances in the presentation of data, are not uncommon, owing to the internal inconsistency in the source materials. These inconsistencies are complicated by the convoluted picture of archaeological preservation at Mohenjo-Daro, the analysis of which does not necessarily result in a coherent understanding of its ancient architecture (Jansen 1984).

Despite these multiple sources of information on Mohenjo-Daro, not all factor equally into our knowledge of the ancient city. This is especially the case when delimiting the sources used to highlight selected aspects of the city. For the current study, which focuses mostly on architectural information, the most relevant and comprehensive sources remain the original excavation reports produced over the course of the 1930s (Mackay 1938, Marshall 1931). In addition to these original sources, important
architectural information is also derived from the lengthy and continuing documentation work of the Aachen University Mission (Jansen 1984, 1993, 2010).

It is important to stress that the original reports are products of their time. This is true in terms of both the implicit assumptions that characterized the social and political context of the authors and their scientific standards and techniques. Methodologically, the most obvious and problematic of these concern the lack of stratigraphic excavation undertaken at the site. The majority of the work at Mohenjo-Daro was done prior to the widespread practice of using 'natural' stratigraphic levels; the nearest to even stratigraphically-informed techniques that were employed involved assigning architecture and associated artifacts to a site-wide chronology based on elevation (Marshall 1931c), a highly problematic method for mounded urban tell sites. Obviously, the task of discerning actual chronological associations is a very difficult one, whether for artifacts, architecture, or entire sections of the city. Additionally, several other less encompassing, but nevertheless troublesome faults permeate the reports. Some of these appear as simple inconsistencies, such as when the descriptions of some but not all structures are accompanied by corresponding dimensions, or when the associated artifactual material is omitted from discussion of architecture. More troubling is when the authors simply omit entire structures that appear as mapped and excavated on the site plans from their discussions of said plans, or instances when the recording system is not explicit. For example, at several points, Mackay (1938) uses the designations Room, Lot, Chamber, and Suite interchangeably without explanation.

A particularly frustrating issue is linked to the out-of-date standards of the reports as well as the variable nature of architectural preservation at Mohenjo-Daro. For many of the structures investigated, no note is made of how they articulated with the outside world. Doorways and thresholds, when they are evident archaeologically and discussed in the reports, are not always labelled as such on the accompanying site plans. This renders the task of analysing spatial patterns, especially issues of articulation, especially difficult (see Vidale 2010:2).

While these and other criticisms are valid from a methodological perspective, they should not be understood as personal or professional shortfalls of the excavators themselves, who devoted years to uncovering and situating a previously unknown civilization. Importantly, and in full recognition of the advances and contributions of later scholars, the initial reports edited by Marshall (1931) and Mackay (1938) remain the largest source of our knowledge of Mohenjo-Daro. Later scholars, most notably Wheeler (1968) are largely responsible for the current general and scholastic interpretations of the social aspects of the Indus Civilization (Jansen 1993:27-28; Lahiri 2012), but it is the years of toil by
Marshall, Mackay, and colleagues that provided us with the details that make such interpretations possible.

3.8.2 Setting and Description

Set in the arid, yet seasonally fertile expanses of the lower Indus River in the province of Sindh in modern Pakistan, roughly 400 km north of the city of Karachi (Jansen 1989:177; 1993:19-20), Mohenjo-Daro appears as a collection of interconnected and discrete mounds rising slightly above the alluvial plain (Figure 1.1). In relation to other Bronze Age cities, or to any pre-industrial city for that matter, Mohenjo-Daro is a behemoth in terms of its areal extent, density of occupation debris, and the scale of its architectural and other spatial works. Although population estimates are notoriously difficult to assess from the fragmentary remains of ancient settlements, to say nothing of the associated methodological problems (Cutting 2006; de Montmollin 1988; Fletcher 1995, 1996; Trigger 1968a), most such analyses place the population of Mohenjo-Daro somewhere between 50 000 - 100 000 inhabitants (Yoffee 2005:43). Likewise, the full areal spread of the ancient city is unknown, owing to millennia of accumulated growth and alluvial build up, and the presence of surrounding Indus Civilization habitation. Based on existing remains, conservative estimates place the size of the city at around 100 ha , with other estimations closer to 140 ha ((Jansen 1989:177; Possehl 2002:185). Of those sections of the city that are known, roughly 10% have been subject to excavation (Jansen 1993:31).

Similar to the other well-known Indus Civilization city, Harappa, Mohenjo-Daro is visibly divided into distinct large mounds, each internally divided into several discrete and interconnected urban sections. These mounds provide the first macro-scale analytical divisions of Mohenjo-Daro: the "Citadel/ Upper Town/Stupa Mound", and the "Lower Town", terms that refer to the small, westernmost, more elevated and most architecturally complex mound, and the extensive, easterly, and less physically imposing mound, respectively. These two civic sections are separated by a long north-south depression, which has thus far failed to yield to excavation any evidence of Indus Civilization architecture or habitation. Whether this spacious and unoccupied area served as a kind of social boundary, and, if so, whether it was maintained as such, is beyond our current knowledge.

Unlike the gradual accretion processes that usually typify the creation of urban tell sites (Rosen 1987), the various mounds of Mohenjo-Daro were at least partly produced through the directed construction of exceedingly large mudbrick platforms, platforms upon which the city itself was erected.
(Jansen 1984). These platforms provided the base for the architectural and habitation debris that led to the increasing height of the mounds. Rising from the alluvial plains within which the city is situated, part of the functional intention of these large platforms was likely to provide protection and refuge from the frequent, erratic, and at times powerfully violent seasonal floods that characterised this stretch of the Indus floodplain prior to the installation of water control systems during the British Era.

The Lower Town and Upper Town sections of the city form the basis for the current study, but this should not be taken to indicate that they represent the totality of the former urban extension of Mohenjo-Daro. In addition to the extramural habitations noted above, concentrations of Harappan architectural remains have also been reported to the south and east of the city (Hussain 1989; Possehl 2002:185-186). While generally not considered part of the city proper, they do indicate that our modern definition of Mohenjo-Daro is but one component of a much larger urban landscape that existed in antiquity (Jansen 2010:125-126). As these other areas remain little published and articulate in unknown manners with the those sections of the city addressed in the original reports, they are not addressed here.

3.8.3 Chronology

Mohenjo-Daro chronology is complicated. This is primarily owing to the methods that were and were not employed during its excavation in the 1920s and 1930s, and also as a result of the natural properties of the landscape in which the city is situated.

Although all of the extensive excavations of Mohenjo-Daro were conducted prior to the widespread acceptance of stratigraphic sequencing, later radiocarbon dates as well as the cross-dating of chronologically delimited material items from other well-dated archaeological contexts, especially Mohenjo-Daro's "sister city" of Harappa (Franke-Vogt 1991, 1993; Kenoyer 1991), allows us to broadly place the occupation of Mohenjo-Daro at 2600 - 1900 B.C.

While the dissolution of Mohenjo-Daro's political authority and subsequent abandonment can be chronologically defined with a fair degree of confidence, its lowest reaches representing the earliest evidence for the city have never been uncovered (Jansen 1987:9). Repeated attempts to locate its origins have been unsuccessful owing to the presence of a higher local water table than in antiquity. The deepest spots excavated at Mohenjo-Daro have consistently revealed that Indus Civilization architecture continues to depths below the current water table (Jansen 1987:11; Sahni 1931:227-228). Settlement data with which to try and determine the origins of Mohenjo-Daro are likewise unavailable,
as between 7m and 15m of alluvial sediment has been deposited in the vicinity of the city over the past four thousand years (Jansen 1987:10; 2010:125-6).

3.8.3.1 Marshall's Chronological System

While the chronological schemes initiated by Marshall (1931) and continued in a modified form by Mackay (1938) are known to be unreliable (Jansen 1987), it is important that we make note of just how they were understood and operated in the attempt to render a chronological narrative of Mohenjo-Daro.

Marshall determined the dates for Mohenjo-Daro's occupation through a variety of relative means, both mechanical and conceptual. The primary mechanical means employed to discern the timespan of Mohenjo-Daro was the use of seven "layers" of architecture that Marshall (1931i:103) identified at the city (Early; Intermediate I, II, and III; Late I, II, and III). Working from the assumption that the city expanded vertically in a uniform and synchronous fashion, an assumption later very heavily criticized by Wheeler (Wheeler 1968:44), Marshall believed that distinct chronological phases could be identified simply by accounting for the relative elevation of the area under investigation. Marshall felt that elevation was an appropriate avenue for determining temporal matters as in his view chronological variation could simply not be discerned from the uniform and consistent nature of Indus Civilization material culture (Marshall 1931i:102-103). The only exception to this view, one on which Mackay (1931d:262; 1938) expanded, can be found in Marshall's (1931i:103) opinion that the buildings of the "Late Period are meaner and more poorly built than their predecessors." With very few exceptions, such as when thinner later walls were constructed upon thicker earlier ones (Mackay 1938:163-164), architectural analysis at Mohenjo-Daro remains a subjective and qualitative measure of an assumed chronology, rather than a truly diagnostic one.

Marshall's adherence to this method was also a product of his understanding that the height of the city was directly proportional to the danger posed by the flooding Indus. The platforms upon which the city was built were designed to protect from floodwaters, and periods of rebuilding were often necessitated by the gradual rise in the level of the surrounding plain, which led to ever-rising river levels (Marshall 1931c:8-9). Marshall might certainly be correct that rising water levels accounted for part of the periodic rebuilding of the city, but there is no archaeological evidence that Mohenjo-Daro began as a city devoid of topographical relief (Jansen 1984). Ample archaeological evidence also indicates that the various sections of the city, and indeed individual buildings, enjoyed an independent
history of architectural renovation. Consequently, the equation of elevation with chronology simply
does not account for the localized nature of civic and architectural expansion at Mohenjo-Daro.
Marshall and Mackay were correct that the city's environmental context accounted for one factor of its
urban growth, but it certainly did not account for all of it.

The relative and general uniformity of what would become known as Mature Harappan
material culture compounded with the conservative architectural traditions of the city, were understood
by Marshall (1931i:103) as indicative of the comparatively brief tenure of Mohenjo-Daro, although he
did not extend such brevity to the Indus Civilization in its totality. He argued that the seven layers of
architecture discovered were attributable to the frequent raising and rebuilding of the city every few
generations, leading to his estimation that the uncovered elements of Mohenjo-Daro had a span of time
no greater than five hundred years (Marshall 1931c).

Marshall's conceptual basis of Mohenjo-Daro's occupation centred around diffusionary
processes and unilinear cultural evolutionism, which together lay at the core of archaeological
discourse concerning civilizations in the first decades of the twentieth century (Marshall 1931i:105-106); Trigger 2006:217-223). In explicit reference to Childe (1929), Marshall (1931i:102) claims that
the recovery at Mohenjo-Daro of "features common to the chief river cultures of South-Western Asia of
this period" warranted consideration of the Indus as temporally equivalent with Childe's "Later
Prediluvian culture of Elam and Mesoopotamia." While Marshall (1931i:102-104) implies that this
analogy constitutes adequate verification for determining the general time-frame of Mohenjo-Daro, he
also grounds this assertion in the recovery of Harappan materials in dated Mesopotamian contexts.
Accordingly, Marshall claimed that the occupation of Mohenjo-Daro could be provisionally dated
between 3250 and 2750 B.C., a period of time in concert with his understanding of the timing of
architectural succession at the city (Marshall 1931i:104). While the actual dates proposed by Marshall
have since been revised (Table 3.1), the radiocarbon dating program at the city of Harappa also evinces
a roughly five hundred year florescence of the Mature Harappan Phase of the Indus Civilization
(Kenoyer 1991b:38-40).

| Table 3.1 Comparison of the main chronological frameworks used for Mohenjo-Daro and the Indus Civilization (after Franke-Vogt 1991:167). |
|-----------------|------------------|------------------|
| **Years (B.C.)** | **Shaffer (1992)** | **Mackay (1938)** |
| 1900            | Post Harappan    | Late Period Ia   |

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<th>Year</th>
<th>Culture</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Late Harappan</td>
<td>Late Period II</td>
</tr>
<tr>
<td>2100</td>
<td></td>
<td>Intermediate Period I</td>
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<tr>
<td>2200</td>
<td></td>
<td>Intermediate Period II</td>
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<tr>
<td>2300</td>
<td>Mature Harappan</td>
<td>Intermediate Period III</td>
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<td>2500</td>
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<tr>
<td>2600</td>
<td>Early Harappan</td>
<td>Early Period</td>
</tr>
</tbody>
</table>

As is apparent, Mackay's divisions, based on those of Marshall (1931), do not mesh perfectly with the broad periodization of the Indus Valley Tradition as proposed by Shaffer (1992). It should be noted that although Mackay does divide the Late I Period into two sub-periods (Ia and Ib), he makes little use of such a distinction in his writing. As regards the maps from the reports, the Late II and I Periods themselves are conflated into a single period.

3.8.3.2 Later Chronological Revisions

Those scholars who followed Marshall and Mackay in the study of Mohenjo-Daro were obliged to grapple with the inadequacies of the previous chronological schemes. Mortimer Wheeler, who was appointed Director General of the Archaeological Survey of India in 1944 and who was largely responsible for the instigation of methodical stratigraphy-based excavation in the subcontinent, was particularly critical of his predecessor's techniques (Chadha 2002:381; Guha 2010:44; Wheeler 1968:44).

While Wheeler's and colleagues' interpretations of the Indus Civilization would form the core of the paradigm that would dominate general and scholarly discourse on the subject for the majority of the twentieth century, his excavations at Mohenjo-Daro itself were brief and of limited scope (Guha 2005:408). Wheeler's unwavering adherence to the stratigraphic method did allow him to present a more thorough and secure relational understanding of certain architectural elements at Mohenjo-Daro, but his excavations were subject to the same problems of raised groundwater levels as were those of Mackay and Marshall before him (Shaikh and Ashfaq 1981:46). Consequently, Wheeler's chronological account of the city was not very different from Marshall's in that it necessarily made use of analogy and the cross-dating of Indus Civilization materials recovered in textually-dated Mesopotamian contexts. The novel aspect of his approach, however, lay in the use of radiocarbon dating, a method simply unavailable to previous researchers. The radiocarbon dates from Mohenjo-
Daro, the above-mentioned use of Mesopotamian material, and reference to the ceramic chronologies developed at other Indus Civilization sites investigated over the previous generation, allowed Wheeler to situate the general chronology of the civilization and the city at roughly "sometime before 2400 B.C. and ... [it] endured in some shape to the eighteenth century B.C." (Wheeler 1968:125).

The most important current work in revising the chronology of Mohenjo-Daro is the attempt to establish a system for determining approximate architectural contemporaneity by investigating the hydraulic infrastructure to which buildings were connected in antiquity. This long-term project by the Aachen University Mission operates on the assumption that structures dating to a particular settlement phase were serviced by interconnecting drain networks. The existence of the latter indicates at least broad contemporaneity of the buildings thus linked (Franke-Vogt 1991, 1993; Jansen 1993:83).

This system of determining which structures were connected to the hydraulic systems at the same time is complemented by the three-dimensional stratigraphic reconstruction of the artifacts listed in the original field registers, correlated by their excavation depths, and the architecture in which they were located (ibid). This enormous project holds the most potential for not just updating, but fundamentally overhauling our understanding of the occupational phases of Mohenjo-Daro. It is likely that once the results of this project are disseminated, much of the existing research on the architectural aspects of Mohenjo-Daro may require significant modification. In spite of forging helpful professional contacts with project members and repeated attempts to obtain the delayed results of their analyses, I was unfortunately unable to secure access to the unpublished Aachen University material for this dissertation. Until such time as it is available, we must at least take heed of Jansen's (1993:84-86) assertion that the occupational levels that divide the various periods of the initial chronology, "far from corresponding to actual stages in the construction of the city...represent nothing but horizontal cross-sections at the respective depths."

3.8.4 Recording Systems Used in the Mohenjo-Daro Reports

As referenced above, internal inconsistencies and contradictions plague the original Mohenjo-Daro excavation reports. Adding to such confusion is the lack of clarity for the particular field recording methods and labels employed by the excavators. In addition to those inconsistencies which typify the work of individual report authors (e.g., Sahni 1931a, 1931b), significant variation exists between their respective works (e.g., Hargreaves 1931; Mackay 1931a; Marshall 1931c).
In theory, all of the initial excavations at Mohenjo-Daro adhered to the recording conventions instituted by Marshall (1931). The associated report maps, rather than the textual descriptions which pertain to their individual sections, usually conform more completely to such conventions, implying the goal of a site-wide coherence in recording matters. The overarching framework for such conventions lies in a nested and increasingly exclusive typology of archaeological space, divisible into *Areas*, *Blocks*, *Houses*, and *Rooms*.

The largest and most inclusive of these categories is the Area. These are based on the separate mounds which comprise the ancient city (Marshall 1931c). As such, there are no modular or limiting measurements which demarcate Mohenjo-Daro's Areas, they simply pertain to the discernible topographically distinct civic sections. Both the Upper Town and the Lower Town are divisible into Areas (Fig. 1.1). In the former, they are the SD and L Areas; in the Lower Town, they are the DK-G North Area, DK-G South Area, DK-M, DK-A, B, and C Areas, the Moneer Area, the VS Area, the HR Area. This last Area was further formerly subdivided into the HR-A and HR-B sections.

Each Area is further subdivided into a number of Blocks. Unlike the Areas, Blocks are not necessarily based on observable demarcating features, but rather are entirely a product of archaeological analysis. While certain blocks are obviously so termed by virtue of their physical unity or separation from nearby architecture (e.g., Block 11, DK-G South), many Blocks in Mohenjo-Daro exist as components of large contiguous masses of architecture (e.g., Blocks 8 and 9, DK-G South Area). There are no set parameters for the sizes or arrangement of Blocks. They are designated in the reports by the use of Arabic numerals (such as Block 10).

In most cases, individual Blocks contain several distinct Houses. These usually pertain to the individual structures of Mohenjo-Daro, although matters of architectural contemporaneity and articulation complicate the straightforward equation of Houses with structures in many cases. In certain cases, Blocks and Houses are functionally equated, such as when a Block is comprised of only a single structure (e.g., Block 6A, DK-G South). In other cases, a Block which consists of a single structure is divided into several Houses (e.g., Houses I and II, Block 29, DK-G North). As such, the designation of Houses are, like Blocks, as likely to result from archaeological convenience as from the recognition of an ancient pattern. Less convenient for those reading the reports is the tendency for House numbers to not always run in sequence *within a Block*, but rather for Houses to be numbered within the confines of an entire section or Area. An example of this occurs in the DK-B Area. House I is located in Block 1, Houses II-IV are located in Block 2, Houses V-VIII are located in Block 3, and
Houses IX-XVII are found in Block 4. Houses are also not always utilized in the reports, and examples exist of Blocks which include Room numbers but lack Houses (such as for Block 3, DK-C Area). Unlike Blocks, Houses are designated in the reports by means of Roman numerals (e.g., House XII).

Within Houses are the individual Rooms of which such structures are composed. Of all the recording variations in the reports, those involving Rooms are the most frequent. In most cases, Rooms are designated for discrete spaces within a structure; however, non-discrete spaces within a structure are sometimes allocated several Room designations, as would be the case if a lot recording system was in use, something for which there is no evidence in the reports. Likewise, the term Room itself is sometimes interchanged with the similarly capitalized Chamber, or Suite. To complicate matters further, in some instances Room designations not restricted to individual Houses, but rather the Room numbers are applied to an entire Block, which is itself divided into several Houses. For example, Rooms 1-45 are spread between Houses XIV-XVII in Block 3 of the HR-B Area. In other instances, Rooms designations can spread beyond Blocks and run in sequence for entire sections or Areas. Rooms 1-130 in the L Area, for example, are shared between all four of its sections and its eleven Blocks. Rooms are designated by the use of Arabic numerals, like Blocks.

In addition to the system of architectural labels, the many roads of Mohenjo-Daro are labelled by a collection of the related terms Street, Lane, and Alley (Mackay 1938:25-40). Although streets seem to be separated from lanes and alleys based on their greater width, this is not consistently true (some "streets" are more narrow than certain "lanes") or explicitly addressed, nor is the distinction between lanes and alleys. These features are not numerically designated, but rather are addressed by individual names (e.g., First Street, Low Lane). Unlike the architecture of the city, not all of Mohenjo-Daro's thoroughfares are named; many are simply referred to as "street", "lane", or "alley."

Throughout the present dissertation, I have attempted to adhere as closely as possible to the established conventions when discussing the various sections of Mohenjo-Daro. Ideally, such discussions contain all of the pertinent locational information for a particular civic locale, and make note of those instances in which the reports digresses from the standards noted above. As the reader will soon be aware, such digressions are rather frequent.

3.8.5 Labels and Terminology: The Upper Town and Lower Town

One of the most basic and often most contentious issues related to artifact typology in archaeology is that which relates to terminology. Luckily, the long history and analogical basis for
archaeological knowledge generation has provided a robust vocabulary of usually discrete terms for specific combinations of attributes to account for the artifacts, features, and other data that archaeologists encounter and with which they work. However, there are plenty of cases where archaeologists either have no precedent for an artifact or feature, or else are divided as to its proper designation. Usually, in those cases where an artifact's particular attributes are not diagnostic, or overlap with those of other classes of artifacts, choices of terminology are decided through context. For example, deciding to discuss a "weapon", rather than a "hunting tool", can result from (or depend upon) the particulars of the artifact's excavation. As with attributes, however, the context of an artifact is not always straight-forward, or even known. These background pieces of information are vital aspects of a holistic appreciation of why certain terms are used; archaeological terminology, in addition to merely serving to label artifacts and ideas, also helps to focus expectations and direct interpretations (Rouse 1943).

An important point to consider when discussing the terminology that archaeologists have employed in their descriptions of Mohenjo-Daro architecture is that often the attributes and associated excavation information of these built artifacts are at best ambiguous. Such ambiguity requires us to be cautious of the rather pointed terminology commonly used to describe the various components of the architecture and civic sections of Mohenjo-Daro, as well as the terminology's implications for how components were socially articulated in antiquity. The most important case concerns the naming of the two mounds that comprise the known urban portions of Mohenjo-Daro, the "Citadel/Upper Town" and the "Lower Town."

The first excavators of Mohenjo-Daro termed the westernmost and highest section of the city the "Stupa Mound", in reference to its most prominent feature (Marshall 1931j). This convention persisted until Wheeler's (1953) re-evaluation of the political dimensions of Indus society. With his discovery of "fortifications" (most plausibly, retaining walls) on the base of this tell, Wheeler drew on his earlier work on Roman military settlements to consider the Stupa Mound a defensible citadel, from which the ensconced elite of Mohenjo-Daro presided over the commoners of the Lower Town. Wheeler argued that the dichotomous nature of Mohenjo-Daro society was also reflected architecturally at other Indus Civilization cities, such as Harappa and Kalibangan. While little evidence exists to support this view of Indus society, Wheeler's civic labels have persisted.

The Upper Town (or the Mound of the Great Bath (Possehl 2002:185)), while comprising much less of the total area of Mohenjo-Daro than the Lower Town, has nevertheless received the majority of
scholarly interest, both in terms of the relative proportion of the mound which has been excavated, and in the dominant role it has played in informing reconstructions and interpretations of Indus Civilization social and political organization. In addition to the architectural complexes that comprise the Great Bath proper, the mound on which it rests also houses the Stupa area, the Warehouse or Granary, the College of the Priests, and the Pillared Hall. Owing to this concentration of presumably elite architecture, it has been regularly asserted that this mound constituted the centre of civic and religious authority at Mohenjo-Daro (Jansen 2010:125; Wheeler 1953:29, 52). While the inherent meanings of the buildings on the Upper Town mound remain ambiguous and contested by scholars, their public and monumental nature do allow traditional models of statehood to be applied to Indus material. The buildings mentioned above come closest to confirming by means of a traditional artifactual "litmus test" what most archaeologists working in and on the region for decades have long assumed: that the Indus Civilization, in terms of its internal complexities, scale of social organization, and manner of political organization, should be included amongst the earliest examples of truly complex, "state-level" societies (Kenoyer 1991, 2008; Trigger 2003:73).

In contrast to the seemingly specialized, elaborate, and concentrated architecture on the Upper Town, the Lower Town is notable for its relatively inconspicuous and uniform nature. It is the section of Mohenjo-Daro that most successfully engages with the standard architectural cannons characteristic of Indus society laid out previously, and quite likely what Marshall (1931d:15) had in mind when he described the overall aesthetic of Indus cities as comparable to that of English industrial cities, being "devoid of any semblance of ornament, and bearing in every feature the mark of stark utilitarianism."

While it does not boast the unique characteristics of the Upper Town, the Lower Town is not an undifferentiated amalgam of uniform architecture. Its many separate excavated areas have revealed an interesting suite of shared and distinctive features, although such traits are expressed with much more subtlety than those on the Upper Town mound. The Lower Town is also generally agreed to be the main concentration of domestic architecture at Mohenjo-Daro. Unlike the Upper Town, marked distinctions between domestic, plausibly civic, or production areas are not apparent in the Lower Town. Another important generalized feature that sets the Lower Town apart from the Upper Town is its relative density of occupational debris. While the Upper Town's monumental structures imply the sophistication and political coordination that anthropologists equate with complex civilizations, the Lower Town looks like a modern city. Its buildings border and build on one another, most often sharing walls. Structures are packed together in tight clusters, separated from other such clusters by
broad avenues and crooked lanes, and interconnected by a system of wells, drains, and sewers, the shared infrastructure that marks and makes possible modern urban life. If, on the basis of impressionistic aesthetic correlations, the Upper Town connotes the ideological veneer by which complex societies present themselves, the Lower Town certainly represents the concentration of quotidian energy and ability by which complex societies function and are maintained.

In common with the Upper Town, the majority of the Lower Town is built upon large brick platforms, not all of which are of uniform height (Eltsov 2004:264-265). Consequently, some sections of the city appear quite elevated relative to other parts; none, however, compare in height to those of the Upper Town. What it lacks in height, the Lower Town makes up in breadth, being several times the area of the Upper Town. Its excavated areas comprise only a small fraction of this total area.

![Architectural Symbols]

**Figure 3.2 Legend for the architectural symbols employed in the thesis.**

The detailed presentation, and complete architectural and spatial descriptions of the Upper and Lower Towns is provided in Appendix 1 (The Lower Town), Appendix 2 (The DK-G South Area), and Appendix 3 (The Upper Town) (see also Fig. 3.2). What follows in Chapters 4 and 5 are discussions of the analysis and interpretations of the architecture in the different sections of Mohenjo-Daro, with the aim of understanding how such analyses can help to uncover its constituent neighbourhoods.
Chapter 4

Architectural and Spatial Patterns at Mohenjo-Daro

As stated at the outset, the general aim of this study is to understand the internal logic by which Mohenjo-Daro was organized. This was operationalized through a qualitative analysis of the available architectural, spatial, and other civic data of Mohenjo-Daro with the intent of uncovering patterns that might reveal local expressions of civic identity and areas of interaction. Guided by the assumption that the civic administration at Mohenjo-Daro was likely closely aligned with its constituent urban communities, the specific aim of this study was to understand the processes and manner of articulation between the political and social dimensions of ancient Harappan society.

In order to assess the effectiveness of the analysis and contextualize the results, it is necessary to recap not just what I have learned in my review of the data (presented in Appendixes 1-3), but to touch upon what I have learned about the data themselves. This is followed by a general overview of the analysis, a detailed breakdown of that overview, and presentation of some unexpected yet important discoveries that may fundamentally alter how we understand Harappan urbanism.

4.1 THE DATA

The overview of the available data on Mohenjo-Daro makes evident the problems inherent in attempting to reconstruct an architecturally detailed and chronologically sound account of urban development and structure from information that in many places lacks architectural detail or chronological control. The field data from Marshall's (1931) and Mackay's (1938) excavations of Mohenjo-Daro are flawed by modern archaeological standards. In addition to the criticism that the excavations were conducted without regard for stratigraphy and omitted techniques that would have ensured adequate recovery of cultural information (such as screening, Vidale 2010:61), the reports are riddled with their own internal issues.

The most pressing of these is the inconsistent manner in which architectural and spatial features of Mohenjo-Daro are discussed. Disagreements between Marshall (1931) and his subordinates famously pepper the original reports, to the benefit of modern readers, but so do differences in terminology, inconsistent inclusion of various details, and general lack of clarity; for example, the plans include many symbols without an accompanying legend. As discussed in Chapter 3, some sections of the city are reported in painstaking detail, and provide comprehensive accounts on such matters as
previous excavations and interpretations, the physical nature of the archaeological matrix, brick sizes, floor ballast material, dimensions of walls and rooms, contextual information on artifacts, and cross-references for points of similarity and difference with other areas or structures of Mohenjo-Daro. Conversely, entire sections of civic areas (such as VS Area, Section B) are blatantly neglected or explained away through ambiguous and impressionistic statements, such as the oft-repeated claim that certain buildings are "of little interest" (Mackay 1931c:236; Sahni 1931:232).

Such matters, combined with the absence of comprehensive bridging between the Marshall (1931) and Mackay (1938) periods of excavation, resulted in several episodes of misunderstanding on my part. I spent much time pursuing features and, indeed, entire structures, only to conclude, on further reflection and much cross-referencing, that they actually do not exist. Perhaps it is for such reasons that many recent users of the original Mohenjo-Daro material restrict their involvement to its maps, artefact lists, and tabulated data, and avoid examining the textual material in detail (e.g., Cork 2011).

In light of such revelations on the source material, it is fair to ask if their problems render the present study infeasible, or at least cast serious doubts on its validity. If archaeological enterprises are are only as effective as the data upon which they are based (or, as Trigger (2006:516) states: "ontologically materialist and epistemologically realist"), can meaningful insights be gleaned from a deeply flawed and at times contradictory body of data? Of course they can. The extraction of meaningful insights from flawed data is of necessity built into the epistemological core of archeological practice. By their very nature archaeological data are flawed. The archaeological record is a broken one, and consists entirely of the differentially preserved remains of past cultural behaviour. While all culture is mediated and experienced materially, it is never fully encapsulated within such media, nor is it reducible to them (Schiffer 1996). We can still use such fragmented pieces of human action to infer patterns of behaviour that we can, in turn, use to form broader understandings of cultural systems (Guha 2005:403). From such understandings, interpretive models can be generated and tested, but only against incomplete data, in full recognition that the human condition consists of integrated tangible and ephemeral aspects. Archaeologists might uncover integral elements of a society's economic system, for example, but will never uncover an economy (e.g. Erickson 2006; Feinman 2004; LeCount 2001; Zeder 2003).

Of course, the robustness of archaeological data can and must affect its interpretive value in a research project. Consequently, the published Mohenjo-Daro data do raise significant concerns.
However, two related points require us to make the most we can of the reports.

First, the original excavation records and reports likely comprise our only realistic option for gleaning further insights into Mohenjo-Daro. Since the close of Mackay's excavations in the 1930s, very few archaeological programs have investigated Mohenjo-Daro, each one with increasingly smaller areas of actual excavations (Wheeler 1950; Jansen 1984; Dales and Kenoyer 1986). The shrinking areas of study are in part due to the site's UNESCO-protected status, which precludes or greatly restricts further excavations, and even more to changing standards of archaeological techniques and recording, which precludes excavations on a scale comparable to those of Marshall or Mackay. There are also concerns over Mohenjo-Daro's rapid physical deterioration. The sections that excavators exposed, even those excavated as recently as the late 1970s (Urban 1987), have suffered serious damage. While technological advances in non-invasive imaging might offer future scholars a more refined glimpse of aspects of Mohenjo-Daro than is currently available, at present the published reports contain the greatest concentration of information on architecture and urban form in the Harappan world. We are obliged to value it accordingly, although cautiously.

Second, the use of the published plans from Mohenjo-Daro is defensible on grounds that this was and continues to be the main source of information on most elements of the Indus Civilization. As mentioned in the opening chapters of this study, the Indus Civilization suffers from the way it is discussed both within and outside of archaeology. This stems not only from the small and cloistered tradition of Harappan archaeological scholarship, but from the fact that the outdated theories of Marshall and Mackay frame the largest available collection of Indus archaeological material. While Indus Civilization scholars note the methodological shortcomings, comparable contextualization is generally not found in generalist works, perhaps because the main criticisms come from specialists (Wheeler 1968). The uncritical use of the reports, associated tables, and city plans, helps to perpetuate claims of the "enigmatic" nature of Mohenjo-Daro, and the exceptional nature of the Indus Civilization as a whole (Chazan 2014:341-347; Maisels 1999; Possehl 1998). The "thick description" approach that I have followed here (Appendixes A, B, C), provides a critical context and integrates as much as possible the written account of the excavation with the associated civic plans and ancillary data. Where this is not possible, the lack of consistency between them has been highlighted. A similar approach has been used to good effect by Verardi (1987) and Verardi and Barba (2007) in their analysis of the Stupa Complex, and by Vidale (2010) in his assessment of a "palace" in Block 2, HR-B Area.

In terms of analytical methods, particular issues with the data make it apparent that some
methods for interpreting architectural space, such as access analysis and size-proportion analysis, are insufficient to unravel the characteristics of the urban communities at Mohenjo-Daro. In particular, the lack of a complete and standardized manner through which the Mohenjo-Daro data are presented, simply precludes rigorous quantitative analyses of architectural space at a level beyond that of the household. The inconsistency of architectural measurements communicated in the reports is further complicated by the lack of a standardized manner by which decorative or stylistic elements are reported and displayed, leading to knowledge of their presence at Mohenjo-Daro, but without an ability to fully address them analytically. The lack of distinction between occupational periods in the associated figures for most structures serves to further diminish the explanatory capacity of such methods. In short, very little information in the initial Mohenjo-Daro reports is quantified or quantifiable and, that which is, presents an incomplete account of the architectural and civic material uncovered at the city.

The above drawbacks to applying quantitative spatial analytical methods should not be read to suggest that such methods have not been used in the analysis of Mohenjo-Daro. When they have been employed, however, they rely either on data not present in the initial reports, such as those generated by more recent archaeological excavations and generally unavailable to the wider scholastic community (Jansen 1993; Urban 1987), or they rely on a shallow reading of the initial reports, presumably focusing on their associated maps (Cork 2011). While some studies avoid the pitfalls associated with using the initial reports in such a manner (Sarcina 1978), others have resulted in problems such as the omission of certain structures from analyses, owing to the inconsistent manner of communicating pertinent information in the original reports, and as such leading to incomplete and tenuous conclusions (Ratnagar 1991:44-45). If these are the regular problems associated with the quantitative analyses of aspects of Mohenjo-Daro civic data, how then are the same data appropriate foci for the qualitative scrutiny on which this dissertation relies?

Answering this question requires a brief foray into how I understand the role of analytical methods in archaeology generally, and those employed in this study specifically. No analytical method, especially those applied in an archaeological context, is free of problems. The usual operation of analysis itself in the social sciences is to compartmentalize knowledge and information in ways that are more considerate of the researcher than they are of the data under study, insofar as methods are by design inherently selective, and work by highlighting specific kinds of information (Rouse 1943). Thus they are all, to some degree, inherently exclusive as regards the information they do not highlight (Bennett 1943). Despite the optimism of certain scholars (Brown et al 2005; Tehrani and Collard
2002:444), the archaeological record is most often far too dense with potential information on past experiences flavoured through a diversity of cultural expression to mesh perfectly with any analytical method. Some things will always escape the net of analytical methods archaeologists employ to understand the past (Lucas 2015:313-315).

This disjunction between the evidence of what was, and our ability definitively and thoroughly to understand it, is not just one of the fundamental tensions of archaeological analysis in general, but rather a state of affairs largely, if not entirely, dependent on the particular theories and interpretive frameworks that scholars use to delineate the nature of their investigations in general (Abend 2008). Methods, contrary to programmatic normative stances, do not operate as an independent check on theoretical assumptions, but are rather an operational component of theory. In other words, analytical methods do not illustrate the underlying reality imbued in the archaeological record, but address those concerns most central to the interpretive structures within which scholars operate (Bunge 2004). This does not mean that archaeological analysis produces results that necessarily conform to the expectations (or desires) of researchers, but methods are selected to address particular problems in particular contexts, issues bound to the theoretical concerns and proclivities of the researchers in question (Banning 2000:36-37). Guiding theory and investigative method do not form two complementary, yet distinct, analytical components; instead, they are mutually dependent and operationally intertwined elements of a broad research plan. Ideally, each helps refine the other, the theoretical apparatus allowing for the possibility of connection and interplay between seemingly disparate social phenomena, and the methods asserting or limiting the scope of an investigative claim (Hodder 1999).

As this study has the goal of uncovering those elements by which Mohenjo-Daro's urban communities were expressed or constituted, the method chosen is one that has been used in other archaeological contexts to single out similar markers of community expression (Ashmore and Sabloff 2002; Martin 2001; Mosher 2010; Reese-Taylor and Koontz 2001). The nature of the known architectural material at Mohenjo-Daro effectively renders broad quantitative analysis unwieldy and unproductive, not because of the numbers involved, but owing to the non-existence of agreed-upon or robust parameters for enquiry. Simply put, no agreed-upon architectural forms or civic spatial patterns have been identified upon which to base quantitative analyses. Rather, a more efficacious and fruitful approach is to employ a method that allows the generation of such forms and patterns as a starting point from which to expand future analyses into the urban nature of Mohenjo-Daro. As such, I have
explicitly attempted to use an analytical method that, in my opinion, best identifies those traits that might speak to the recognition of neighbourhoods at Mohenjo-Daro. This method consists of closely reading the initial reports for evidence of the range of constituent architectural attributes in the structures of Mohenjo-Daro, and noting where such attributes (or clusters thereof) signify distinct architectural forms, forms that can inform an understanding of the morphological character of the various sections of the city, which can in turn be scrutinized to reveal patterns that may assist in neighbourhood identification. This method is elaborated below.

4.2 METHOD OF ANALYSIS: TYPOLOGY

It is important to stress the necessity of following the narrative of the Mohenjo-Daro reports in order to reveal the features of data the discussed below. Even a detailed and thoughtful review of the tables and city plans would not result in a comparable collection of information. Many of the architectural details are simply not recorded in such formats, but are instead presented in accompanying descriptions and, unlike the artifacts discovered at Mohenjo-Daro, which are also described, architectural details are not uniformly supported with photographic, illustrative, or tabulated evidence. This makes assessing and enumerating architectural details a tenuous one, as assertions cannot usually be cross-checked with other sources. However, the Mohenjo-Daro reports do contain references to recurring sets of architectural attributes, and while these are not addressed synthetically in the reports, a close reading of the texts has allowed for their identification, compilation, and comparison.

The study of these architectural attributes has enabled the creation of an architectural typology for Mohenjo-Daro (Section 4.5). This typology is the method that I employ in my search to identify and understand neighbourhoods at Mohenjo-Daro.

Although they appear as standard interpretive tools for the study of the settlements of certain complex societies (Cowgill 1983; Willey and Bullard 1965; Willey 1999), architectural typologies have a somewhat checkered history or the Indus Civilization. No overarching and agreed-upon organizational typology is employed for Indus Civilization architecture, although scholars have proposed interpretive frameworks with the aim of functionally categorizing certain kinds of architecture (Petersen 2012; Ravi 1997). The earliest, most thorough, and best-known of such typologies are the descriptive models proposed by Anna Sarcina (1978, 1979). Sarcina was interested in both the spatial and social structure of Mohenjo-Daro society and formulated an architectural typology to recognize, evaluate, and categorize what she understood as the domestic architecture at that
city (1978:156).

Sarcina argued that the presence of an internal courtyard in those structures that were not of a scale suitable for public function, or whose archaeological record was not dominated by production activities, was the decisive factor by which residential architecture could be discerned (Sarcina 1978:157). Such courtyards, which occupied either the internal northern or central areas of a structure, served as focal nodes from which a number of smaller rooms and hallways emanated, and acted as unifying spaces and the key diagnostic features of a series of related and replicable architectural layouts at Mohenjo-Daro.

As her analysis aimed to explore domestic or, as it was termed in her analysis, "private" (Sarcina 1979) architecture, Sarcina focused her attention on the Lower Town; by her estimation, approximately 75% of the excavated structures of the Lower Town could be classified as functionally residential.

These residences manifested in several distinct architectural types or models which, while related, are distinguished by traits specific to each. These models are briefly explained below.

![Figure 4.1 Sarcina's Yellow and Red Models of residential architecture at Mohenjo-Daro (after Sarcina 1978). Note: Figure is oriented with north at the top.](image)

**Yellow Model**

The Yellow Model (Figure 4.1) is the most common of Sarcina's models, and accounts for 58 of the 112 examples of domestic house forms she identified (Sarcina 1978:159). This model is characterized by a north-placed central courtyard not directly accessible from the street. The courtyard usually does not itself border on a street, but rather attaches to an additional building, in a few cases, to ancillary structures attached to the house itself (Sarcina 1978:159). Other distinguishing features of this model are the placement of two small, disarticulated rooms to the west of the courtyard (the
northern one c. 6m², and the southern one 2m²), the smaller of which often contains a staircase while the larger one functioned as a kitchen (Sarcina 1978:159). To the south of the courtyard is a large room, and usually a smaller room (2m²) accessible to its east.

**Red Model**

Sarcina's Red Model (Figure 4.1) comprises a collection of smaller and less complicated buildings than those that typify the Yellow Model. In these buildings, the courtyard is towards the north, usually in the northeast corner of the building (Sarcina 1978:159). As with the Yellow Model, this courtyard is generally inaccessible directly from the outside; likewise, a large room is usually situated directly south of the courtyard. Sarcina identified 42 red models at Mohenjo-Daro (Sarcina 1978:159).

**Green Model**

The most distinguishing feature of the Green Model, of which Sarcina only identified 6 examples, is that the courtyard is placed in the centre of the building (Figure 4.2). The courtyard is therefore inaccessible directly from the street, and surrounded on all four sides by rooms; that is, the courtyard does not share a bordering wall with another structure, as is common in the red and yellow models (Sarcina 1978:160). Sarcina notes (1978:160) that the Green Model exhibits an "interesting" typical internal layout, by which she means that the spatial distribution of rooms is more convoluted than in other models. All of the Green Model examples contain a well, and those rooms in which wells are located border on an external wall of the house, specifically upon a street, not a wall attached to an adjoining building.

**Brown Model**

The Brown Model is notable for over half of its surface area being devoted to the courtyard, which usually dominates the northern half of the building, with covered rooms to the south (Fig.4.2). It is also the least architecturally complex of Sarcina's models in terms of interior spatial considerations. The courtyard is accessible through one or more of these southern-situated rooms. The configuration and number of rooms in this model varies, leading to Sarcina's assertion that the development of a typology for this particular model was rather difficult (Sarcina 1978: 160). 4 structures were assigned to the brown model category (Sarcina 1978:159).

**Blue Model**

With only 2 examples, Sarcina's Blue Model comprises the least common of her observed architectural models (Figure 4.2). In both cases, a central courtyard is surrounded on three sides by a single row of
rooms. Although the free side of the courtyard is observed on both east and west external walls in the 2 examples, the external wall in question always borders upon another building.

![Diagram of Sarcina's Green, Brown, and Blue Models of residential architecture at Mohenjo-Daro (after Sarcina 1978). Note: Figure is oriented with the north at the top.]

While her analysis of these models involved the statistical evaluation of variation in architectural form, some of the underlying precepts by which she approached her analysis seem based on the same kinds of assumptions that informed the earliest excavators at Mohenjo-Daro. While none of the models she proposes are based on buildings on the Upper Town Mound, she justified by-passing this part of Mohenjo-Daro on the basis that it "presumably fulfilled administrative, public, and perhaps even cultural purposes" (1978:156). Likewise, the Lower Town is discussed as a largely functionally undifferentiated whole, despite the fact that, by her own estimation, the majority of its architectural record does not adhere to her typology. The residential typology itself is predicated on a reasonable, but largely uncritical and unexplained correlation of architectural features with a spatial sensibility that "allows [the] private life of Mohenjo-Daro's inhabitants" (Sarcina 1978:158).

Despite these (admittedly few) shortcomings, Sarcina's typology is the most complete and thorough attempt to render the architectural mass of Mohenjo-Daro, and indeed of the Indus Civilization, into a functionally-grounded interpretive framework. Unfortunately, this system has not been used to any degree beyond its current application. This is somewhat understandable given the poor state of preservation of most Indus Civilization architecture, but the overall result is the relegation of this typology to sections of general Indus Civilization texts discussing architecture (e.g., Possehl 2002a:110), rather than its establishment as a testable model for exploring the parameters of variation and consistency in Indus Civilization domestic architecture, or what such variation actually means.
The main interpretive element derived from Sarcina's work, however, remains very much a guiding principle in the study of Indus Civilization architecture: the internal focus of Harappan buildings. Indus Civilization architectural traditions are characterized by interdependence and the encapsulation of daily activities within structures. Both of these concerns, although they manifest differently and at times separately, are dominant and pervasive general traits affecting the architectural traditions of Indus Civilization society.

The apparently non-residential architecture of the Indus Civilization has received much more focus than its domestic counterpart (Kondo et al 1997; Jansen 1980b; Leshnik 1968; Veradi 1987) but, with very few exceptions (Vidale 2010), it has not been examined from an intra-Indus Civilization perspective, nor with an aim to develop a systematic manner through which it could be categorized. Rather, and in concert with the main narrative by which both Indus specialists and other scholars have engaged with its broader material culture, the public dimension of Harappan architecture has been explored largely as an isolated endeavour (e.g. Banerji 1984). This is in stark contrast to the investigation of non-structural public works, such as water and sewage systems, which are often understood as integrated and rather uniform systems (Jansen 1989, 1993a).

Alternative approaches to exploring public architecture do exist, however. Ratnagar (1991: Table 1) proposed that the "not ordinary residential structures" of Mohenjo-Daro could be identified through a consideration of a building's overall areal extent in conjunction with the width of its peripheral walls, as well as with its "essential features," architectural or spatial elements that were absent in residential forms (that is, in Sarcina's models). Based on a selective reading of the initial Mohenjo-Daro reports, she has compiled a list of fifteen separate structures at the ancient city that may have served public functions. While these structures largely correspond with those selected by the initial excavators as potential monumental buildings, her analysis does not really represent a typology so much as an compilation of anomalous structures.

A somewhat synthetic analysis is taken by Cork (2011), who compares the areal extent and access analysis patterns of select structures at Mohenjo-Daro against those from known categories of architecture from Mesopotamia in an attempt to create a functional typology of Mohenjo-Daro architecture. In so doing, he has categorized much of the architecture of the Lower Town into either nuclear family residences, extended family residences, stalls, or "other buildings." While valuable in terms of its general comparative angle and admirable in its attempt to employ quantitative analytic means, Cork's study suffers from the same pitfalls as does Sarcina's in its uncritical importation and
application of functional categories in the absence of any means to understand the underlying social elements of such categories in a Harappan context. Furthermore, the access studies, upon which much of the analysis rests, can at best be understood as rough approximations, owing to the highly fragmented nature of the data upon which Cork draws (that is, the maps and drawings in the initial reports - Mackay 1938; Marshall 1931a). The contemporaneity of architectural features, the location, and even the certainty of the presence of doorways, are presented in the texts of these reports as far more problematic than they are in even the associated civic layout maps and, by extension, in Cork's analysis.

Unlike Cork's typological analysis that uses spatial access patterns along with selected architectural attributes to assign functional qualities to single structures, and unlike Sarcina's specific internal focus on predetermined functionally-domestic buildings, I propose the existence of different types of architectural and spatial forms based on the analysis of a set of architectural attributes identified from all aspects of the Marshall (1931a) and Mackay (1938) reports: text, drawings, and maps. I explicitly analyze the distribution and patterning of these architectural and spatial forms for entire sections of Mohenjo-Daro. This approach places the focus of analysis on a scale comparable to that held by the neighbourhood - between the individual household and the urban polity itself (Manzanilla 1996, 2015) - and allows me to use the data to investigate the relationship between space and politics at Mohenjo-Daro.

In addition to Sarcina's work, the typological method of analysis that I employ is largely inspired by and derived from work on the recognition of architectural and civic patterns in other cultural traditions, most prominently that concerned with epicentral layouts in the Classic Maya cities of Mesoamerica (Ashmore 1991, 2005; Ashmore and Sabloff 2002; Becker 2004; Laporte 2003; Mosher 2010; Smith 2005). This body of work concerns similarities and differences in the spatial organization of civic cores (epicentres), and makes use of historical information to interpret and understand the logic that lay at the root of such patterns. Unlike the study presented in this thesis, however, the Classic Maya urban architectural data themselves are mainly communicated in visual format and their discussion relies on the authority of standardized terms and definitions to describe architectural data (e.g., Ashmore 1981; Loten and Pendergast 1984). In such analyses, monumental architectural form is understood as comprising both utilitarian and explicitly symbolic aspects. The former is mainly tied to elite residence, political administration and civic ritual, while the latter is intimately connected to broad, pan-Mesoamerican notions of cosmology and religious legitimacy.
(Ashmore 1989, 1992; Houston 1998). The fine-grained resolution by which scholars are able to associate Classic Maya architectural form with intangible cultural knowledge is possible thanks to the decipherment of an epigraphic record of the Classic Maya and their historical descendents.

The lack of a deciphered historical script or related historical information precludes similar insights into the Indus Civilization. However, a further line of analysis derived from Classic Maya civic layout analyses is of more applicability for helping us understand the urban dimensions of Harappan society. In addition to exposing the cultural root of the spatial signatures of Classic Maya cities, studies of the particular epicentral arrangements of certain cities demonstrate a degree of similarity amongst the cities of those polities that enjoyed long-standing political alliances (Mosher 2010). Specifically, polities that were politically aligned with and subservient to the dominant states, Tikal and Calakmul, featured civic cores arranged to resemble those of their political superiors. While the underlying architectural symbolism remained steeped in cosmological imagery, the emulation of spatial patterns actively communicated information of a political nature.

The recognition of such patterns was, as with this study, qualitative in nature, and relied mainly on a close reading of civic plans in conjunction with indigenous political histories (Martin 2005; Martin and Grube 2000). The main aspect of evaluation, however, was the presence or absence of key architectural or spatial attributes, the same method employed in this study. We cannot yet correlate such patterns at Mohenjo-Daro with other Harappan cities, for reasons explained previously, nor can we examine such patterns in the light of indigenous political information, or even those of related cultures, for we have none. However, the sheer scale of Mohenjo-Daro makes a presence/absence method particularly effective for discerning recurrent patterns. In this case, the focus is not on comparing the patterns discerned between separate urban centres, but between the different sections of the Lower Town and Upper Town of Mohenjo-Daro itself. I use this method to identify replicable and distinct patterns to discern the various neighbourhoods of Mohenjo-Daro in the same manner that Mayanists have used collections of architectural attributes to compare different urban epicentres.

4.3 CIVIC PATTERN OVERVIEW

The main backdrop for the present analysis of Mohenjo-Daro is the well-touted perception that this city, along with other Harappan ones, was subject to a rather homogenizing civic aesthetic. This perception, well ingrained in both specialist and general circles, asserts that architectural and spatial variation existed at Mohenjo-Daro only insofar as it differentiated structures like the Great Bath and the
Stupa Complex from the undistinguished mass of the Lower Town. The larger size, setting, and occurrence of unique features typified the Upper Town, while the Lower Town was primarily characterized by similarity of form and likely function, an impression strengthened by the utilitarian orthogonal spatial logic by which the Lower Town was thought to be arranged. The split between an exceptional Upper Town and a uniform Lower Town is pervasive in narratives of Harappan political and civic organization (Ratnagar 1991:12).

Based on a general overview of the architectural and spatial signatures noted in the present study of both areas of Mohenjo-Daro (Appendixes A-C), I also found that the Upper Town largely consists of larger, likely public-focused architecture. Even its smaller architectural clusters have features that mirror its larger forms. Likewise, spatial patterns that might be conducive to general community interaction, such as unbounded open spaces, seem not to occur in the Upper Town; rather, its open spaces are restricted to the street intersections, or are enclosed within sizable architecture. As far as the Upper Town is concerned, the general impression that it was a locus of elite or at least public architecture and associated activities seems borne out by the present study.

Conversely, the claim that the Lower Town is devoid of compelling evidence for elite activity, or that it is comprised of uniform, domestic-focused architectural and spatial features is not supported by the present study. Not only does the Lower Town display a diverse array of architectural styles and forms, it also replicates, in whole or in part, diagnostic features that define the emblematic architecture of the Upper Town. Rather than upholding the established interpretation of the Lower Town as a primarily residential area for an undifferentiated supporting population, the spatial and architectural signatures of the Lower Town suggest that it was divided into several areas, each with a mix of civic/public and residential spaces.

Furthermore, it appears that many such areas in the Lower Town display these features in a manner that might imply the social basis of the civic and political divisions at Mohenjo-Daro: the presence of elaborate households and their retainers, which I propose acted as the nuclei of the communities that comprised the ancient city. If the evidence indeed supports this view, it requires us to radically re-write the narrative of the Indus Civilization's urban and socio-political organization.

In order to contextualize and justify these assertions, I present the specific architectural attributes I have identified (Section 4.4), and the broader patterns associated with them (Section 4.5). In Chapter 5 I will discuss why such patterns imply the presence of an elite household focus for Mohenjo-Daro neighbourhoods. To that end, the following section describes the architectural attributes
uncovered in my reading of the Mohenjo-Daro reports.

4.4 ARCHITECTURAL ATTRIBUTES OF MOHENJO-DARO

Many architectural and spatial details are discussed in the Marshall and Mackay reports. Distinguishing communicatively insignificant attributes from ones that might be understood as pertinent to stylistic or communicative matters was a lengthy, but relatively straightforward process. Attention was paid to those instances in which the authors themselves wrestled with the lack of congruity of specific elements, or where they imparted a feeling that the features they described were remarkable or otherwise worthy of note.

The various architectural attributes that I identified in the Mohenjo-Daro reports are described below. These attributes are primarily those pertaining to individual structures (such as ornamental brickwork, oval wells, etc.), but also include ones that are external to structures, such as open spaces. In all cases, the attributes are additions, modifications, subtractions, or otherwise alterations that affect architectural space. The names and groupings of the listed attributes are descriptive. While some of the listed attributes are named after their recognition by the authors of the reports, I have provided names for those that have not been explicitly labelled. For example, the term "corbelled arch doorway" is lifted exactly from Sahni's description of the Room 54/49 interface in House V, Block 2, HR-B Area (Sahni 1931b:191); on the contrary, the term "opposing stairway" was not used by the excavators. The parenthetic alphanumeric characters that preface the names of the attributes are designed to function as a referential shorthand, specifically for the tables (Appendix 4) listing the full contextual information of all instances of the attributes in the original excavation references. A summary table (Table 4.1) displaying the frequency and distribution of the architectural attributes follows their description below.

4.4.1 Organization and Description of Identified Architectural Attributes

Group 1: Unusual Doorways

(1A) Corbelled Arch Doorway - An doorway using an arch comprised of corbels, overlapping, extensions on either side of a space in a wall that eventually meet at the top of the space to close it off, rather than the use of a lintel or a keystone. The corbelled arch is most commonly seen at Mohenjo-Daro in the context of the water management system, generally in the openings of large drains, as evinced in the Great Bath. Its inclusion in this list pertains only to its use in doorways which connect
two delineated spaces.

(1B) Wide External Doorways - As with "thick walls", no standard distinguishes wide doorways from narrower varieties. The frequency with which such doorways were noted by the excavators, however, implies that their occurrence was infrequent. Some of the doorways that fall into this category are the 2.4m doorway in House II, Block 6, DK-G South Area (Mackay 1938:72), and the 2m doorway in Block 5, SD Area (Mackay 1931a:145).

**Group 2: Unusual Stairways**

(2A) Opposing Stairways - Two stairways that emanate from a shared space, set in direct opposition to one another.

(2B) Double stairwell - Two sets of stairs set directly beside one another, similar in form, height of risers, and depth of treads. The staircases emanate from and terminate in the same spaces, and are aligned in the same direction. Were it not for the clear delineation between the two, both sets of stairs would form an especially wide staircase.

**Group 3: Architectural Supports**

(3A) Square column bases or piers - These are likely the remains of freestanding support columns, or the plinths upon which such columns rested; not enough distinction is provided in the reports to differentiate these forms. These are comprised of brick, are generally square in shape, but differ in terms of their dimensions, when such dimensions are reported. While these features likely bore architectural weight, they may also have played a symbolic role.

(3B) Internal Buttresses - A form of weight support attached to the internal faces of external walls, generally as a slanted column of brick whose base remains attached to the wall. The exact manner and characteristics of the buttresses located at Mohenjo-Daro are not provided.

(3C) Column Stones (or bases) - Column stones are round, thick rings made from limestone and other comparable material, and are believed to have served as the bases for wooden pillars or poles. They are perhaps analogous to the large ring stones located at Harappa, and may be one of the few artifact classes explicitly tied to rulership in the Indus Civilization.

(3D) Column Capitals - The structural opposite of column stones, these stone caps are thought to have topped poles or pillars. They are also associated with rulership.
Group 4: Unusual Wall Types

(4A) Notably Thick Walls - Many structures at Mohenjo-Daro had unusually thick walls, likely reflecting their role in carrying additional stories, or as a result of the fact that many of the visible walls at Mohenjo-Daro are actually foundations. As with many features, the thickness of walls was not something that all excavators noted, nor did they routinely report dimensions for walls. The most extreme instance of this particular attribute is the 8.5m thick wall located in Block 11 of the L Area (Mackay 1931b:168), while Block 6A in the DK-G South Area was considered to be "remarkably thick walled" owing to its 1.34m thick external walls (Mackay 1938:75).

(4B) Curved Walls - Wall segments that indicate a curvilinear, as opposed to rectilinear, part of a structure. These only exist as partial wall sections at Mohenjo-Daro, so it is unclear if these walls formed parts of truly round structures, or formed curved wall components of the usual rectilinear structures. It is also quite probable that many curved wall sections that appear on the report maps are actually unlabelled sections of drains or pits. In order to avoid such confusion, I have only listed those instances where both the maps and the associated text mention a curved wall.

Group 5: Wall Modifications

(5A) Vertical Chases - This interesting feature consists of roughly rectangular-profile recesses in the internal walls of a structure. They appear to have run the height of the wall itself.

(5B) Niche Recesses - These features are square or rectangular recesses placed into the internal wall faces of a structure. It has been proposed that the placement of such recesses may indicate their function; for example, those placed near the apex of a wall may have served to accommodate wooden rafters. Information on niche size and placement is not universally provided in the reports.

Group 6: Building Fabric

(6A) Gypsum Mortar - The presence of gypsum mortar at Mohenjo-Daro has inspired long-lasting debate amongst archaeologists (Hargreaves 1931: 183; Mackay 1938:598; see discussion of House VIII, HR-A in Section A.2.1). Recent conservation work at Mohenjo-Daro supports the assertion that groundwater movement and saltation processes are ultimately responsible for the deposition of a plaster-like gypsum coating over architectural remains (e.g. Jansen 2014:63). For the sake of consistency with the initial reports I have included gypsum mortar as an architectural attribute, although its intentional use should be apprehended with caution.
(6B) Ornamental Brickwork (non-specified) - While brick was ubiquitous at Mohenjo-Daro, the manner in which it was laid varied considerably. In some instances, the patterning used in laying bricks was noted as "ornamental" or "interesting" (Mackay 1938:146). As with many architectural features, comments on the existence of special patterns and their variety were haphazard.

(6C) Ceramic Nodules or Waste as Floor Ballast - Descriptions of archaeological matrix are rare in the reports, but apparently the composition of floor ballast was similar enough that divergences in its main component warranted recording. In this case, floor ballast was comprised primarily of ceramic nodules and wasters, including those from a brick kiln.

Group 7: Internal Wells

(7A) Eastern-Situated Internal Well - An internal well placed along or near the eastern wall of a structure.

(7B) Western-Situated Internal Well - An internal well placed along or near the western wall of a structure.

(7C) Northern-Situated Well - An internal well placed along or near the northern wall of a structure.

(7D) Southern-Situated Well - An internal well placed along or near the southern wall of a structure.

(7E) Centrally-Situated Well - An internal well placed in a central position of a structure.

Group 8: Well Copings

(8A) Square Well Coping - This represents the "collar" or "cap" at the top of a well shaft. For the most part, wells and well copings at Mohenjo-Daro are round in plan. In those instances where a well has a square coping, the remainder of the shaft is still cylindrical.

(8B) Oval Well Coping - As just noted, wells at Mohenjo-Daro are overwhelmingly cylindrical in shape. However, examples exist in which well openings appear "elliptical in shape" (Mackay 1931a:150). While the coping specifically is not mentioned as the source of the aberration in usual well shape, the presence of regular round shafts that accompany at least one oval well implies that the oval shape is a result of coping.

Group 9: Room Types

(9A) Small Square Central Courtyard - While internal courtyards are a common feature in Mohenjo-Daro architecture, most such features are situated either in the northern sections of a structure (Sarcina
1978), or are rectangular in shape. Structures that exhibit a decidedly square courtyard in a central internal space are conspicuous by their rarity, as attested to by the fact that Sarcina (1978:159) located only 6 examples of this trait in her study of domestic architecture (in her Green Model).

(9B) Standardized Rooms - This attribute manifests as small, seemingly standardized rooms or spaces arranged in opposition to one another (as in a a grid), or arranged in rows, within a single enclosure. While many internal spaces among structures of various sizes at Mohenjo-Daro approximate one another in terms of overall size, rooms that are practically identical in dimensions only occur in clusters or rows.

(9C) Entrance Gallery - Some structures have an entrance space containing wells, or sunk pots. In certain cases, these rooms might act as a unifying space, shared by several surrounding structures.

(9D) Very Large Internal Courtyard - Internal courtyards are common structural elements at Mohenjo-Daro, but the ones referred to here are exceptionally large, relative to the structure of which they are a part and its constituent rooms.

(9E) Long Gallery Room - A long and relatively narrow room or undifferentiated space aligned along one of the internal framing walls of a structure.

Group 10: External Open Spaces

(10A) Unbounded Open Spaces - In addition to roads and lanes, Mohenjo-Daro (Mackay 1938:25-37) had other forms of open space. One manner of these is as an area, surrounded by structures, into which lanes or streets may detour or terminate.

(10B) Bounded Open Spaces - In addition to the spaces described above, open spaces also exist as shared spaces fully enclosed by a wall or by structures. In such cases, it is presumed that access to and from such spaces was by means of the surrounding structures themselves. These open spaces are distinct from courtyards internal to a single structure in that, while similarly enclosed, they are contained by more than one building.

Group 11: Other

(11) Enigmatic Circle or Semi-Circle Arrangements - Half-or full-circular arrangements of brick appear at a select few locations in Mohenjo-Daro, often set into or laid upon a floor surface. Such arrangements are not linked to wells, kilns, or other similarly constructed features.
The following table summarizes the distribution and frequency of the architectural attributes described above. Please note that the "occurrences" column does not necessarily refer to a simple count of the number of occurrences of an attribute. Depending on the nature of the attribute, this column communicates either the numerical count of single attributes, such as is the case with 7A, "Eastern-situated internal well", or, in those cases where where precise numbers are not available, the number of structures in which the attributes were noted, such as with attribute 4A, "notably thick walls." For ease of interpretation, the occurrences of attributes with a precise count are underlined. For a full account of the attributes, refer to Appendix D.

<table>
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<tr>
<th>Table 4.1 Summary of Distribution and Occurrence of Attributes</th>
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<td><strong>Group</strong></td>
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<td>1- Unusual Doorways</td>
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<td>11 - Other</td>
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### 4.4.2 Discussion of Architectural Attributes

One of the immediate implications of the abundance of certain attributes is that some result simply as a result of architectural necessity. For example, the most common and widely distributed attribute, 4A, "notably thick walls", seems to indicate nothing other than many structures at Mohenjo-Daro evinced structural means of supporting additional storeys. In some instances, the co-occurrence of 4A with other elements warrants different interpretive possibilities, as is discussed in the appendixes, but thick walls likely resulted mainly from structural needs.

Likewise, abundance patterns evinced for other attributes could possibly indicate different standards of excavation and recording amongst the Mohenjo-Daro staff, an issue mentioned previously. This is most notable for architectural attribute 5B, "niche recesses," which likely signify the presence of rafters. This is primarily noted in the architectural details for the HR-B section. While attested in fewer numbers in other parts of the city, it is unlikely that such a common means of spanning internal space was disproportionately absent in the rest of Mohenjo-Daro architecture. Differential preservation or differential eye to detail amongst the excavators may explain such abundance and distribution patterns.

Certain attributes, by virtue of their rarity, serve to assist in creating an image of what constituted exceptional, or at least aberrant structures at Mohenjo-Daro. It is likely that the low
occurrence of these attributes indicates either a meaningful, or completely trivial status. This assertion is based in the knowledge that most such elements are deviations from regularly-attested features. For example, the architectural attributes concerning doorways and stairways (Groups 1 and 2) are stylistically distinct, yet functionally equivalent versions of architectural features so mundane at Mohenjo-Daro that their presence does not even warrant inclusion in the list of recognized features (that is, standard rectangular doorways and single stairs). Likewise, and as noted in the description of architectural attribute 9A, the presence of a central square courtyard differs from other internal courtyards only insofar as its placement is concerned. As such, the difference by which it is separated from the numerous examples of other courtyards might imply that a meaningful and deliberate act of signification formed part of its overall architectural meaning, especially if such courtyards occur in conjunction with other rare attributes. The least common elements that might imbue purposeful social cues are described below, along with spatial associations that support their status as meaningful rather than trivial exceptions to the norm.

**Doorways, Column Capitals, Unusual Stairways, and Column Stones**

Attribute 1A, located in Room 49, House V, Block 2 of the HR-B Area, is the only attested example of a corbel-arch doorway at Mohenjo-Daro. Corbelled arches exist in other forms in the ancient city, of course, primarily as openings for large drains (such as in the Great Bath), and their rarity in the doorways of Mohenjo-Daro may partly be a consequence of poor preservation, since Room 49 was infilled. It was noteworthy, however, that architectural attribute 3D, column capitals, are likewise restricted in their distribution to the same House V, HR-B. Of the three locations in which attribute 3C, column stones, are located at Mohenjo-Daro, two of them are in Block 2, HR-B, with the last in the L Area in the Upper Town of Mohenjo-Daro. The implied elite association of similar attributes in other Harappan contexts (Vidale 2010:68-69) suggests that their restricted distribution at Mohenjo-Daro implied a similar association, one to which the corbel arch can likely be appended.

In a similar case of rare attributes associated with likely elite contexts, the remains of a monumental double stairwell (architectural attribute 2B) in the early levels of Block 1A in the DK-G South area are located nearby the obviously monumental Block 1/4 Complex (Section B.1.2), suggests this particular form likely had comparable notable connotations. Additionally, the presence of opposing stairways (architectural attribute 2A) is attested only at the Stupa Complex, and at House I, Block 1, HR-A. These structures share additional distinctive features, discussed below. The restriction
of this particular feature to these two decidedly unusual buildings also suggests that opposing stairways functioned in ways other than just the utilitarian.

**Prominent Display of Column Bases**

The presence of piers or column bases (architectural attribute 3A) is attested across the breadth of Mohenjo-Daro, but in the vast majority of cases, such architectural elements likely existed for purely utilitarian reasons. In a select few cases, however, columns or piers seem to be the main stylistic focus of a particular structure, even if they still acted in a supporting architectural role.

This is most evident in the Pillared Hall, L Area, in the Upper Town so named for the prevalence of this feature, but it is also attested in those examples where piers or bases of columns served to define the external frame of a structure. This is evinced House VI, Block 7, DK-G South during the Intermediate III Period, in which the seeming entire external circuit of the structure was comprised of freestanding pillars (3A), prior to their transformation into engaged columns (Complex Attribute 1) in the following Intermediate II Period (Section 4.43). A similar design technique is evinced during the Intermediate I iteration of House III, Block 10, DK-G South, in which up to fifteen separate doorways perforated the external frame of the structure. While not consisting of piers per se, the contrasting sections of recesses and prominences would have created a similar effect as that witnessed in House VI, Block 7. The fact that both of these structures are situated directly north of the Block 1/4 complex perhaps suggests additional meaningful correlations.

**Deviant Well Copings**

As mentioned previously, a complex and integrated system of water management is one of the paradigmatic civic features not just of Mohenjo-Daro, but of Harappan cities generally (Jansen 1993). The most visible aspect of these systems are the many wells that, at Mohenjo-Daro, proliferate both in shared public spaces and within individual structures. Typically, the general profile of wells is round, regardless of the period to which they were attributed or the shape of the bricks used in their coping (that is, wedge-shaped or rectangular). The notable exceptions to this are oval-shaped wells (architectural attribute 9B) of which only two examples exist, both located in the SD area of the Upper Town.

Additionally, and on the opposite side of Mohenjo-Daro, the DK-C and DK-M areas each contain a well that, while displaying a round shaft, exhibits a square coping or well collar (architectural
Curved Walls

The rectangular, modular nature of Harappan architecture is one of its better-known characteristics. Mohenjo-Daro is primarily a city of stark edges and sharp angles, regardless of the size of a particular structure or the width of a particular thoroughfare. However, there are a few examples of rounded corners or curved walls (architectural attribute 4B) in the city. Even in those structures that feature them, however, they appear as aberrations to a largely rectilinear norm. There exist no structures that exhibit entirely rounded corners, and the record of curved walls seems to exist mostly in fragments. Unlike certain rare elements, this trait appears across the Upper and Lower Town.

Other: Enigmatic Circles and Semi-Circles

When they were explicitly addressed by the excavators (Mackay 1938:22), the brick or stone circles or semi circles (architectural attribute 11) distributed across the span of Mohenjo-Daro were interpreted as small stupas. Where they are not addressed in the reports, their appearance on the plans appears distinct from the Late Period kilns which dotted the various sections of Mohenjo-Daro. These features appear both as solitary constructions, such as in the L Area of the Upper Town, or as components of architectural complexes, such as in House I, Block 1, HR-A Area or Block 8 in the SD Area.

4.4.3 Complex Attributes: Clusters of Architectural Attributes

While all of the architectural attributes noted at Mohenjo-Daro serve to modify architectural space, certain ones seem to act in unison as constitutive components of more complex attributes, or as clusters of attributes (Table 4.2). As is evident from Table 4.2, most architectural attributes do not feature in these more encompassing clusters of attributes. These clusters are composed of either numerous instances of a single attribute, or a combination of separate attributes. In both cases these complex attributes modify architectural space. In certain cases, these complex attributes form the primary stylistic cores of the separate architectural types addressed in the following section.

<table>
<thead>
<tr>
<th>Complex Attribute</th>
<th>Constituent Architectural Attributes</th>
</tr>
</thead>
</table>

Table 4.2 Complex Attributes and their constituent architectural attributes.
(CA1) Engaged Columns  
3A - square column bases

(CA2) Internal Aisles defined by columns or piers  
3A - square column bases

(CA3) Framing Corridor  
9B - standardized rooms; 9E - long gallery rooms

(CA4) Agglomeration of Standardized Rooms  
9B - standardized rooms

(CA5) Open Spaces  
10A - unbounded open spaces; 10B - bounded open spaces

(CA6) Monumental Fronting Facades  
3B - internal buttresses; 4A - notably thick walls; 6A - gypsum mortar

While we don't understand the nuances of meaning and function that such complex attributes might have conveyed in Harappan society, their repetition suggests that they were at least partly communicative in nature, and the presence of stylistic repetition attests to the fact that certain cultural practices or ideals were purposely incorporated into the architectural cannon of Mohenjo-Daro.

(CA1) Engaged columns. This complex attribute is based on architectural attribute 3A, square column bases or piers. While many columns or piers at Mohenjo-Daro are freestanding, this particular attribute consists of piers or column bases built into a wall, either as part of the external frame of a structure, or as part of an internal wall.

(CA2) Internal aisles defined by column bases or piers - This pattern consists of aisles or rows of the piers or column bases within an internal space. This complex attribute is distinct from CA1 in that its constituent columns manifests as linearly arranged freestanding components of an aisle rather than as embedded elements of a wall.

(CA3) Framing Corridors. One of the more common complex architectural attributes noted amongst the structures throughout Mohenjo-Daro is what I term "the framing corridor", based on a combination of attributes 9B, standardized rooms, and 9E, long gallery rooms. These long and narrow features exist either as a single passageway, or as several small, shallow rooms which run parallel along one or more inside walls of a structure (Figure 4.3). As such, they serve to delineate and sometimes insulate the internal space or spaces of a structure. While short passageways are present amongst the types in Sarcina's (1978) domestic typology, those to which I refer are generally longer, usually accounting for
the entire length or width of a structure, and are most often paired with large, minimally differentiated internal spaces. The characteristics of this pattern may relate to the qualities of the city's buildings themselves rather than as a meaningful architectural design principle. Mohenjo-Daro's architecture is modular and primarily rectangular; as such, the lining of the internal frame with cells or long passages might simply result from an expedient construction tradition.

Many of the structures which support these corridors are located at intersections of main roads or other visible and prominent locations, such as Block 6A, DK-G South, and House XXVII, Block 4, VS Area. They are also regular, and perhaps defining features, of certain of the few examples of agreed-upon monumental architecture at Mohenjo-Daro, most conspicuously the Great Bath and Stupa Complex. In addition to their occurrence in plausibly public-oriented or monumental structures, framing corridors regularly occur as main features in those architectural complexes that have been described as examples of palaces or elite residences at Mohenjo-Daro (Jansen 1987; Vidale 2010). The Block 2 complex, HR-B, is perhaps the most grandiose example of the framing corridor pattern, but it also occurs in more humble, albeit still likely monumental contexts, such as in House VIII, HR-A, and House BI, Moneer Area.

![Diagram of Framing Corridor Complex Attribute](image)

**Figure 4.3** Framing Corridor Complex Attribute as evinced in the Stupa Complex, and Great Bath, SD Area (after Marshall 1931).

The fact that this attribute is present in many different locations and in structures of many
different scales suggests that it might have served as an architecturally-embedded bridging symbol between the various segments of Harappan society.

(CA4) Agglomerations of Standardized Rooms. Also present in the architectural makeup of Mohenjo-Daro are agglomerations of attribute 9B, standardized rooms. These rooms, which are most often small in size (relative to their neighbouring spaces) are often located in clusters and part of, or in the vicinity of, larger structures. While their constituent attributes do appear in Sarcina's typology (1978, 1979), most emphatically in her Blue Model, the general layouts of the clusters to which I refer are more varied. Sarcina's Blue Model structures usually sport a courtyard or other central space which acts as a connecting node to smaller cells; in addition to this pattern, standardized room clusters are also arranged so their constituent spaces are accessible by one another, and usually lack a prominent mediating node.

While many examples of agglomerations of standardized rooms consist of similar-sized cells, there are those that consist of at least two differently-sized rooms, most often appearing in groups of near-identical agglomerations within a single structure. In such arrangements, the typical pattern is for either the large or small rooms of each pair to front the street side of the structure, but not both. Such arrangements have often been termed "shops" by the excavators (Sahni 1931b:205). This pattern is demonstrated in Houses XXV and XXVII of Block 5, HR-B Area.

![Diagram of standardized room clusters](image)

**Figure 4.4** Examples of standardized room clusters, Houses II and III, Block 21, DK-G North (after Mackay 1938) and House XII, Block 2, HR-B Area (after Marshall 1931).
(CA5) Open Spaces. In contrast to the image of Mohenjo-Daro as a brick gridiron whose architectural monotony is broken only by its many streets, additional open spaces do occur in the ancient city (Group 10: External open spaces) (Figure 4.5). There are, however, notable differences in how such spaces are manifest. For example, in addition to spaces that are unbounded and accessible through several lanes and streets (such as in the southern part of Block 2, VS-A Area), examples exist in which access to open spaces is more restricted, such as directly west of House XXIII, HR-B Area, or in which they are only accessible by travelling through several distinct structures, such as is the case in Block 3, DK-G South Area, during the Intermediate II Period.

![Figure 4.5 Example of open space, Block 2, DK-G South Area, Intermediate II Period (after Mackay 1938).](image)

(CA6) Monumental Fronting Facades. The final complex attribute evinced at Mohenjo-Daro is that of the monumental facades of certain structures that front onto main thoroughfares of the city. These are primarily found along the southern side of Central Street in the DK-G South Area (Figure 4.6), exemplified by structures 8A and 9, whose thick walls, reinforced with internal buttresses and presumably held together with distinctive gypsum mortar (6A), set them apart from their neighbours, which lacked comparable frontage. The monumental nature of frontages along other stretches of road is also seen in Block 4 of the SD Area, Block 2, House V in HR-B Area, and the northern boundary of
the Block 1/4 complex in DK-G South. These patterns may have been the results of purposeful and coordinated endeavours to emphasize a particular boundary, or to proclaim meaningful information connected with the nature of roads in Mohenjo-Daro.

Figure 4.6 Monumental Facade along south side of Central Street (Blocks 6A, 8A, 9) DK-G South Area, Late II-I Periods (after Mackay 1938).

Because of the nature of the data from which these clusters of attributes were recognized, both physical and conceptual overlap exist. For example, delineating secluded open spaces from internal courtyards can be difficult, due to both the lack of clear patterns of accessibility and differential architectural preservation. Likewise, CA3 and CA4 both use architectural attribute 9B in similar, but in slightly different ways. The recurrence of these patterns, however, provide us with a starting point from which to consider the spatial logic of the city.

4.5 PROPOSED TYPOLOGY of PUBLIC ARCHITECTURAL FORMS at MOHENJO-DARO

The recognition of constituent architectural attributes, complex attributes, as well as the distribution and, where possible, chronological limits of both, led to the identification of several distinct and recurring architectural forms amid the structural mass of Mohenjo-Daro. While no such forms appear as complete copies of one another, enough similarity exists within such forms to indicate a general morphological continuity. By virtue of their frequency and contextual relationships with other forms of architecture, such forms might constitute the basis for a typology of public architecture that is closely tied to neighbourhood structure at Mohenjo-Daro. It is noteworthy that most of these forms contain at least one example of a known "public" or "monumental" building found in the Upper Town, but that the vast majority of the remaining examples of each type are located in the Lower Town.
The implications of these patterns are discussed in Chapters 5 and 6. The types presented below are based on two factors: morphology, determined on the basis of architectural and complex attributes present in each type, as well as certain other qualities in conjunction with such attributes (e.g. building size or shape) and location (Figure 4.7). However, these factors do not equally inform our understanding of the various architectural types. All types are based in the recognition of specific complex and architectural attributes arranged in recurring patterns; in addition, one type, Type F, is designated on account of a combination of specific architectural and complex attributes as well as its location.

![Diagram](https://via.placeholder.com/150)

**Figure 4.7 Illustration of the relationship between architectural attributes, complex attributes, and architectural types.**

While the proposed architectural types are composed of architectural and complex attributes, not all such attributes feature as components of the types. Taken as a whole, the proposed architectural types are primarily defined through the presence of complex attributes 3 (framing corridor), 4 (agglomerations of standardized rooms), 5 (open spaces), and 6 (monumental fronting facades), but also evince architectural attributes 1B (wide external doorways), 4A (notably thick walls), 9A (small, square central courtyard), and 9D (large internal courtyard).

The relatively small number of attributes present in the proposed architectural typology suggests that whatever communicative significance was enjoyed by the excluded attributes (Section 4.4.2), or by complex attributes 1 (engaged columns) and 2 (internal aisles defined by columns or piers), it did not result in their establishment within the broad architectural patterns suggested by the proposed architectural types. For example, despite the predilection of Mohenjo-Daro residents to place their internal wells along the eastern walls of their structures, this particular architectural attribute (7A) does not appear to correlate with any of the proposed architectural types. In fact, of the 30
architectural attributes identified, 20 of them do not manifest in the proposed architectural typology. While a very few of these absent attributes do factor as components of likely important structures in specific contexts in both the Upper and Lower towns (section 5.3), the broad communicative importance, and interpretive significance, of the identified architectural attributes, appears limited to those recognized in the proposed architectural types.

**Table 4.3 Architectural Attributes present in the Proposed Architectural Types, inclusive of relevant complex attributes.**

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<tr>
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</thead>
<tbody>
<tr>
<td>1B: Wide External Doorways</td>
<td>4A: Notably Thick Walls</td>
<td>6A: Gypsum Mortar</td>
<td>9A. Small Square Central Court</td>
<td>10A. Unbounded Open Spaces</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9B. Standardized Rooms</td>
<td>10B. Bounded Open Spaces</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9C. Entrance Gallery</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>9D. Large Internal Courtyard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9E. Long Gallery Room</td>
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</tbody>
</table>

Most of the architectural types are divisible into several distinct forms, following on the type variety logic used in the organization of artefactual typologies (e.g. Gifford 1976). What follows is a simple breakdown of the physical features of the component types of the proposed typology. Consequently, a degree of morphological overlap characterizes the following types. Functional and other interpretations tied to such forms are addressed in the following chapter.

In order to emphasize the connections between the proposed architectural types and the architectural attributes and complex attributes identified earlier, the descriptions of each architectural type is provided with examples pulled from the architectural record of Mohenjo-Daro, and also with an "ideal type" model of each iteration. As with all explanatory models, the ideal versions presented here are reductionist, and aim to simplify and clarify the diagnostic elements of the phenomena under scrutiny; that is, the proposed architectural types (Cahnman 1965:269). Specifically, they serve as "abstract interpretive schemes comprehending substantial features" (Załęski 2010: 320) of the proposed architectural types, against which the structures of Mohenjo-Daro can be compared to determine affinity. They do not represent the actual physical reality of any particular architectural type at
Mohenjo-Daro. All of the identified examples of the architectural types (Table 4.4 - Table 4.9) are approximations of their ideal versions.

4.5.1 Type A: Framing Corridor Structures

Morphologically, these structures are based on the presence of the complex attribute CA3, framing corridors, although they are not the only one of the proposed types that employs that particular complex attribute. Many of the examples of Type A structures are located at prominent intersections. The various sub-types are listed and illustrated below, followed by a table indicating the locations of all identified Type A structures, and finally a map of these locations across the surface of Mohenjo-Daro. This data is drawn from the detailed descriptions in Appendixes A-C, and summarized in Appendix D.

Varieties:

1. Type A, Form I (Figures 4.8 and 4.9): Internal space accompanied by a western and/or eastern-situated framing corridor (complex attribute 3). Smaller rooms may appear in the internal space.

Figure 4.8 Ideal version of Type A, Form I structure, illustrating the presence of Complex Attribute 3 (a) along the eastern side of the structure. These structures can also manifest with Complex Attribute 3 on the western internal wall, in addition to, or independently, of the configuration illustrated.
Figure 4.9 Block 12, DK-G South Area, Intermediate II Period (a), and Block 6A, DK-G South Area (b), Late III Period, examples of Type A, Form I structures (after Mackay 1938).

2. Type A, Form II (Figures 4.10 and 4.11): A N-S elongated internal space accompanied by a western-situated framing corridor (complex attribute 3). Smaller rooms may appear in the interior, especially along the north side.

Figure 4.10 Ideal version of a Type A, Form II structure, featuring Complex Attribute 3 (a) along the building's internal western side, as well as rooms along its internal northern wall (b).
Figure 4.11 House XXVII, Block 4, VS Area (a), and Block 9A, DK-G South Area, Late III Period (b), examples of Type A, Form II structures (after Marshall 1931, and Mackay 1938).

3. Type A, Form III (Figures 4.12 and 4.13): Internal space accompanied by northern and/or southern-situated framing corridor (complex attribute). Smaller rooms may appear in the interior.

Figure 4.12 Ideal version of a Type A, Form III structure, illustrating the presence of Complex Attribute 3 (a) along its southern internal wall. These structures can also manifest with Complex Attribute 3 on the northern internal wall, in addition to, or independently, of the configuration illustrated.
Figure 4.13  Block 1, D Section, L Area, and Houses XXXIV, XXXV, and XXXVII, Block 7, VS Area, examples of Type A, Form III structures (after Marshall 1931).

4. Type A, Form IV (Figures 4.14 and 4.15): Internal space accompanied by both eastern/western and northern/southern-situated framing corridors (complex attribute 3).

Figure 4.14  Ideal version of a Type A, Form IV structure, illustrating the presence of Complex Attribute 3 along its western (a), northern (b) and eastern (c) sides.
Figure 4.15 House III, Block 10, DK-G South Area, Intermediate II Period, and Southern Building Block 4, SD Area, examples of Type A, Form IV structures (after Marshall 1931).

Table 4.4 Type A Structures

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, I</td>
<td>SD</td>
<td>Block 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 8</td>
</tr>
<tr>
<td></td>
<td>DK-G South</td>
<td>Block 6A (LT.III-I)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 12, Houses I/V (IN.II)</td>
</tr>
<tr>
<td>A, II</td>
<td>DK-G South</td>
<td>Block 9A, House VIII (LT.III);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 11, Houses I-III (IN.III-I)</td>
</tr>
<tr>
<td></td>
<td>VS-A</td>
<td>Block 1, House VI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 4, House XXVII</td>
</tr>
<tr>
<td>A, III</td>
<td>L Area, D Section</td>
<td>Block 1</td>
</tr>
<tr>
<td></td>
<td>DK-G South</td>
<td>Block 8, House II (IN.II-I)</td>
</tr>
<tr>
<td></td>
<td>VS-A</td>
<td>Block 7, House XXXVII</td>
</tr>
<tr>
<td>A, IV</td>
<td>SD</td>
<td>Great Bath</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stupa Complex</td>
</tr>
<tr>
<td></td>
<td>SD, Southern Buildings</td>
<td>Block 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block 4</td>
</tr>
<tr>
<td>L Area, B Section</td>
<td>Blocks 9/10</td>
<td></td>
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<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>DK-G South</td>
<td>Block 10, House III (IN.III-LT.III)</td>
<td></td>
</tr>
<tr>
<td>HR-B</td>
<td>Block 5, House XXIII</td>
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</tbody>
</table>

Figure 4.16 Distribution of Type A Structures. Type A, Form I (blue), Type A, Form II (red), Type A, Form III (yellow), and Type A, Form IV (green).

Type A structures predominate in the Upper Town; with two exceptions, all examples of Type A, Form IV structures are found in the SD and L Areas (Table 4.4; Figure 4.16). Likewise, half of the noted Type A, Form I structures are located in the Upper Town. The remaining structures of this form are also concentrated in one section of the city (DK-G South), but manifest separately during two distinct chronological periods. Type A, Form III structures are divided evenly between the L, DK-G South, and VS Areas. The only kind of Type A structure which is absent from the Upper Town is Type A, Form II. Interestingly, and with the notable exceptions of the Stupa Complex and the Great Bath (again, both Type A, Form IV structures), Type A, Form II is the largest of the Type A structures.
4.5.2 Type B - Standardized Room Clusters

These architectural forms are derived from complex attribute 4 (agglomeration of standardized rooms). Its two types are based on the two separate patterns observed in this complex attribute: the clustering of similarly-sized cells, and the clustering of two sizes of cells. Type B forms can exist as a solitary structure, but most often appear as components of larger complexes. Again, as with Type A structures, the forms of Type B are listed and illustrated below, followed by a table and a map that indicate their locations. This data is drawn from the detailed descriptions in Appendixes A-C, and summarized in Appendix D.

Varieties:
1. Type B, Form I (Figures 4.17 and 4.18): Parallel rows of similarly proportioned rooms at least two spaces deep, most often located in a cluster within a solitary, relatively small structure, or attached as an appendage to larger structures. These clusters generally lack a mediating space, and as such, rooms are accessible from one another.

![Figure 4.17 Ideal version of a Type B, Form I structure.](image)
2. Type B, Form II (Figures 4.19 and 4.20): Two adjacent and asymmetrically proportioned rooms arranged in columns (orientated north-south) or rows (oriented east-west) of similarly asymmetrically proportioned rooms. The smaller rooms are usually found at the back of a structure (that is, furthest from the street); likewise, these kinds of standardized spaces are usually confined to very large structures.

Figure 4.18 Block 4, DK-G South Area, Intermediate III Period, and Block 29, DK-G North Area, examples of Type B, Form I examples  (after Mackay 1938).

Figure 4.19 Ideal version of a Type B, Form I structure, illustrating paired columns of larger (a) and smaller (b) standardized rooms.
Figure 4.20 Houses XXV and XXVII, Block 5, HR-B Area, and House III, Block 23, DK-G North Area, examples of Type B, Form II structures (after Marshall 1931 and Mackay 1938).

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure</th>
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<tbody>
<tr>
<td><strong>B, I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>Warehouse</td>
<td></td>
</tr>
<tr>
<td>DK-B</td>
<td>Block 3, House VI</td>
<td></td>
</tr>
<tr>
<td>DK-G South</td>
<td>Block 4 (IN.III-II) (+Form E II); Block 7, House IX (IN.II-I)</td>
<td></td>
</tr>
<tr>
<td>DK-G North</td>
<td>Block 21, Houses II/III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block 29, Houses I/II</td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>Block B, House VIII (Rooms 1-7)</td>
<td></td>
</tr>
<tr>
<td>HR-B</td>
<td>Block 2, House XII</td>
<td></td>
</tr>
<tr>
<td>VS-A</td>
<td>Block 4, House XXIV</td>
<td></td>
</tr>
<tr>
<td><strong>B, II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DK-G South</td>
<td>Block 6, House III (LT.III-I)</td>
<td></td>
</tr>
<tr>
<td>DK-G North</td>
<td>Block 23, House III</td>
<td></td>
</tr>
<tr>
<td>HR-B</td>
<td>Block 5, House XXV/XXVII</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block 5, Houses XXXIII-XXXVII/XLIII-XLVII</td>
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</tr>
</tbody>
</table>
Type B structures display a very different pattern than Type A structures (Figure 4.14). Only one example of Type B, Form I is located in the Upper Town, but it is by far the largest example of this form, the so-called "Warehouse". Other Type B, Form I structures, or extensions of structures, are spread throughout every section of the Lower Town with the exception of the DK-A, C, and M Areas. Type B, Form II structures are entirely absent from the Upper Town, but are found in several sections of the Lower Town, most prominently in the HR area.

4.5.3 Type C - Open Spaces at Mohenjo-Daro

As with the complex attribute from which this type is based (complex attribute 5, open spaces), the following Type C spaces do not include the intersections of broad thoroughfares in Mohenjo-Daro,
themselves open spaces which may have been functionally analogous to certain of the forms described here.

While it might seem like a relatively straightforward task, determining the presence and scope of open spaces at Mohenjo-Daro was exceptionally frustrating. Part of this derived from the lack of explicit attention given such spaces in the text, despite their obvious manifestation in the descriptions and civic plans; moreover, the differential preservation of the architectural fabric of Mohenjo-Daro precludes confident assignations of this particular form. The difference between denuded spaces, post-Harappan dismantled architecture, and purposeful spaces of civic interaction is really beyond the ability of the initial reports to discriminate. This is especially the case in the DK-G South area, whose quasi-chronological control complicated the identification of open spaces, rather than simply limiting the range of interpretive options. All posited open spaces are listed below, but further discussions will treat these with caution. The listing and locations of Type C spaces, derived from the data in Appendixes A-C, are presented below in Table 4.6 and Figure 4.18.

Varieties
1. Type C, Form I (Public Plaza) (Figures 4.22 and 4.23): Unrestricted open spaces bounded by separate structures and accessible by at least two road or laneways.

Figure 4.22  Ideal version of a Type C, Form I space (Public plaza), an open space with two points of access.
Figure 4.23 Public plazas (Type C, Form I) in Block 2, VS Area (a), and in Block A, Moneer Area (after Marshall 1931, and Jansen 1984).

2. Type C, Form II (Secluded Plaza) (Figures 4.24 and 4.25): An open space bounded by separate structures and accessible by only one road or laneway.

Figure 4.24 Ideal version of a Type C, Form II space (Secluded plaza), illustrating a single point of access.
3. Type C, Form III (Courtyard Complex) (Figures 4.26 and 4.27): An open space bounded by and only accessible through separate structures.
Figure 4.27 Courtyard complexes (Type C, Form III) in Block 3, DK-C Area, and Block 3, DK-G South Area, Intermediate I Period (after Marshall 1931, and Mackay 1938).

Table 4.6 Type C Spaces

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure or Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>C, I</td>
<td>DK-B</td>
<td>B: 1/2</td>
</tr>
<tr>
<td>DK-G South</td>
<td>Block 2, Houses I-IV (IN.II-LT.I);</td>
<td></td>
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<tr>
<td></td>
<td>Block 7, House I (Room 8) (LT.III);</td>
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<tr>
<td></td>
<td>Block 7, House VIII (Rooms 27-28, 52-53) (IN.III-IN.II; LT.III);</td>
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</tr>
<tr>
<td></td>
<td>Block 7, House VIII (Room 52) (IN.I);</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block 10, House I (Room 12) (IN.I-LT.III)</td>
<td></td>
</tr>
<tr>
<td>DK-G North</td>
<td>Blocks 13/16/29</td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>Block A, Houses I- IV</td>
<td></td>
</tr>
<tr>
<td>VS-A</td>
<td>Block 2, Houses IX-XII</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block 3/4 Interface, Houses XVIII and XXIII</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Block 5, Houses XXIX, XXX</td>
<td></td>
</tr>
<tr>
<td>C, II</td>
<td>L Area, D Section</td>
<td>Block 2 (Room 69)</td>
</tr>
<tr>
<td>MN</td>
<td>Block B, Houses III,IV,VI</td>
<td></td>
</tr>
<tr>
<td>DK-G North</td>
<td>Block 25, House II/ Block 26, House II</td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
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<td></td>
</tr>
</tbody>
</table>
| HR-B    | Block 2, House VIII (Rooms 12, 14)  
Block 3, Houses XV and XVI (Room 16)  
Block 5, Houses XXXIII, XXXIV, XXXIX  
Block 6, Houses XLVIII/XLIX Interface |
| VS-A    | A: 3, XXII/4, XXIV  
Block 4, Houses XXIII and XXIV (Room 25)  
Block 7, Houses XXXVIV, XXXV, DDIV |
| C, III  | Block 3 |
| DK-C    | Block 3 |
| DK-G South | Block 3, Houses I-VI (IN.III-I);  
Block 7, House V (Room 66) (IN.II-I);  
Block 7, House III (Room 53) (LT.II-I) |
| HR-B    | Block 2, House IX (Room 88)  
Block 2, House XI |

Figure 4.28 Distribution of Type C spaces. Type C, Form I (blue), Type C, Form II (green), Type C, Form III (yellow).

The open spaces recognized in the reports display a particularly interesting pattern. With the
exception of a single example each in the DK-G North, DK-B, and Moneer areas, all of the public plazas (Type C, Form I) are located in the VS and DK-G South areas, although those evinced in the latter area are not necessarily contemporaneous with one another. Type C, Form II structures (the secluded plazas) are represented primarily in the HR, and to a lesser extent, the VS areas. A single example each is noted in the L, Moneer and DK-G North areas. As perhaps makes sense, the most architecturally restricted kind of open space, the courtyard complex (Type C, Form III), demonstrates the least common occurrence and expansive distribution of open spaces at Mohenjo-Daro. Three examples of this form are located in DK-G South (only two of which are contemporaneous), two in the HR area, and a single example in DK-C. Strikingly, no examples of open spaces of any kind are demonstrated in the SD area of the Upper Town, the section of the city most commonly associated with public functions.

![Figure 4.29 Ideal version of a Type D, Form I structure, illustrating architectural attributes 4A (a), complex attribute 3 (b), and architectural attribute 29 (c).](image)

### 4.5.4 Type D - Long and narrow structures

This type is unusual in that it primarily based on the overall shape of the structure rather than on a combination of architectural and complex attributes. That said, several attributes do factor into this form, specifically architectural attribute 4A, thick walls, architectural attribute 9A, small, square central courtyard, architectural attribute 9D, large internal courtyard, and complex attribute A3, framing corridors.
Varieties:

Type D, Form I (Figures 4.29 and 4.30): Long, primarily N-S-oriented structures characterized by relatively few large internal spaces (architectural attribute 9D).

![Figure 4.30 House VIII, Block 2, VS Area, the sole example of a Type D, Form I structure (after Marshall 1931).](image)

Type D, Form II (Figures 4.31 and 4.32): Long, primarily N-S oriented structures characterized by numerous, mainly small internal spaces.

![Figure 4.31 Ideal version of a Type D, Form II structure, illustrating architectural attribute 4A (a), Complex Attribute 3 (b), and Architectural Attribute 9A (d).](image)
Figure 4.32 College of the Priests, SD Area (a), Block 18/19, DK-G North Area (b), examples of Type D, Form II structures (after Mackay 1938, and Marshall 1931).

Table 4.7 Type D Structures

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>D, I</td>
<td>VS-A</td>
<td>Block 2, House VIII</td>
</tr>
<tr>
<td>D, II</td>
<td>SD</td>
<td>College of the Priests</td>
</tr>
<tr>
<td></td>
<td>DK-G South</td>
<td>Block 9A, Houses V/VIII (L.T.II-I)</td>
</tr>
<tr>
<td></td>
<td>DK-G North</td>
<td>Block 18</td>
</tr>
<tr>
<td></td>
<td>HR-B</td>
<td>Block 5, Houses XXXIII-XXXVII/XLIII-XLVII (also Form B, II)</td>
</tr>
<tr>
<td></td>
<td>VS-A</td>
<td>Block 4, Houses XXV/XXVI</td>
</tr>
</tbody>
</table>
The elongated Type D structures are interesting, for they manifest over a wide swath of Mohenjo-Daro, yet constitute very few individual examples (Figure 4.21). Type D, Form I, of which a single example has been discovered, is situated in the VS Area. Type D, Form II is represented in the SD, DK-G North, DK-G South, VS, and HR Areas by a single example each.

### 4.5.5 Type E - Multi-winged structures

Taken individually, these structures contain the greatest collection of constituent attributes. These are exceptionally large buildings, usually with notably thick walls (architectural attribute 4A) centred around one or more large internal courtyards (architectural attribute 9D) with collections of standardized rooms (complex attribute 4 or entire Type B, Form I structures) and accompanied by framing corridors (complex attribute 3) on Northern/Southern or Eastern/Western sides.

**Varieties:**
Type E, Form I (Figures 4.34 and 4.35): Multi-winged structures primarily aligned along a north/south...
axis.

Figure 4.34  Ideal version of a Type E, Form I structure, illustrating architectural attribute 4A (a), complex attribute 3 (b), the presence of a Type B, Form I structure as an appendage (c), as well as architectural attribute 9D.

Figure 4.35  Block 2, HR-B Area (a), House VIII, Block 3, HR-A Area (b), and earliest construction period of Block B, Moneer Area (c), examples of Type E, Form I structures (after Jansen 1984, and Marshall 1931).
Type E, Form II (Figures 4.36 and 4.37): Multi-winged structures primarily aligned along an east-west axis.

Figure 4.36 Ideal version of a Type E, Form II structure, illustrating architectural attribute 4A, complex attribute 3 (b), the presence of a Type B, Form I structure as an appendage (c), as well as architectural attribute 9D.

Figure 4.37 Block 1/4 Complex, DK-G South Area, Intermediate II Period (a), and House I, Block 1, HR-A Area (b), examples of Type E, Form II structures (after Mackay 1938, and Marshall 1931).

Table 4.8 Type E Structures

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>E, I</td>
<td>MN</td>
<td>Block B, House I</td>
</tr>
<tr>
<td></td>
<td>HR-A</td>
<td>Block 3, House VIII</td>
</tr>
<tr>
<td></td>
<td>HR-B</td>
<td>Block 2, House V/IX-XIII</td>
</tr>
<tr>
<td>E, II</td>
<td>Block 4, House XVIII (Rooms 1-3/11-15/17-18)</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>DK-G South</td>
<td>Block 1/4 Complex (IN.III-LT.I)</td>
<td></td>
</tr>
<tr>
<td>HR-A</td>
<td>Block 1, House 1</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.38 Distribution of Type E Structures. Type E, Form I (brown), Type E, Form II (blue).

Type E structures are likewise comprised of very few examples. With the exception of the Block 1/4 Complex in DK-G South and Block B, Moneer Area, all of the Type E structures are restricted to the HR area (Figure 4.24). Again, the Upper Town is devoid of these types of structures.

4.5.6 Type F - Monumental Northwest Structures

These special types, the least numerous of the proposed architectural types, are designated as such owing to a combination of architectural attributes (1B, wide external doorways; 4A notably thick walls; 9D large internal courtyard) and complex attributes (3, framing corridors; and 6, monumental fronting facades) as well as their placement on the northwest edges of their respective mounds. They
constitute a special kind of architectural type, one based on both morphology and location, and as such preclude the necessity of an ideal type comparator.

These structures include Block 11, DK-G South, Block 7, VS-A, and Block 6, HR-B, all of which are on separate mounds in the Lower Town arranged roughly in a N-S line (Figure 4.39). All of these locations are typified by very large open spaces encased within thick walls and sport architectural forms on a scale far in excess of that of their neighbours. Interestingly, DK-A, DK-B, DK-C, and the Moneer Area lack this particular architectural type. Again, this pattern may result from partial preservation - all of the locations in which these structures are located are situated on the western edge of the Lower Town, an area which has been particularly architecturally denuded through erosion. This may also account for the lack of a comparable structure in the DK-G North area, a section with considerable evidence of erosion (Mackay 1938:146-151).

If indeed the occurrence of such large, spacious structures in the Northwest section of the Lower Town mounds is attributable to design, rather than accident, it may lend credence to Wanzke's (1984) idea of a conceptual NW/SE divide in Harappan cities, in which larger and perhaps socially more prestigious architectural elements and complex productive technologies are situated primarily in the north and west sections of Harappan cities (Vidale and Miller 2000). Similarly, and less abstractly, emulation of the monumental structures of the Upper Town (and perhaps of the social and political meaning attached to them), itself positioned to the northwest of the Lower Town, may be in evidence in the location of such structures.

![Figure 4.39](image)

Figure 4.39  Block 11, DK-G South Area, Intermediate II Period (a), Block 6, HR-B Area, and Block 7, VS Area, examples of Monumental Northwest Structures (after Mackay 1938 and Marshall 1931).
Table 4.9 Type F Structures.

<table>
<thead>
<tr>
<th>Typology Designation</th>
<th>Area</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>DK-G South</td>
<td>Block 11, Houses I-III (IN.III-LT.III)</td>
</tr>
<tr>
<td></td>
<td>HR-B</td>
<td>Block 6, Houses XVIIII, XLIX</td>
</tr>
<tr>
<td></td>
<td>VS-A</td>
<td>Block 7, Houses XXXIII-XXXVIII, DDIV</td>
</tr>
</tbody>
</table>

Figure 4.40 Distribution of Type F Structures.

4.6 Additional Correlations

The existence of structures at Mohenjo-Daro that share many features with one another, but do not conform wholly to the forms demonstrated in this typology, likely indicates that the continuity of form evinced in the individual architectural types might constitute points of morphological coherence along a spectrum of architectonic elements that were widely shared in the ancient city. The existence
of additional forms that could increase the size of the posited typology seems quite likely, as does the eventual refinement of the posited types.

One manner in which such a spectrum of traits is illustrated is by means of broad or specific similarities between structures that are not attributable solely to shared architectural or complex motifs, but rather an approximation of shape or layout that results in a common resemblance. In certain cases, such resemblances are restricted to a basic form, while in others such forms are complemented by the presence of select features. Interestingly, and in accordance with the (plausible) emulative basis of the monumental northwest structure type, there seem clear points of correlation or at least repetition between a select number Lower Town structures, and architectural complexes on the Upper Town. The possible socio-political implications of such similarities, as well as an interpretive discussion of the data as they relate to civic organization at Mohenjo-Daro are presented in the following chapter.
CHAPTER 5 Discussion

5.1 Distribution of Architectural Types and Neighbourhood Signatures

Given the small number of proposed architectural types and the meagre number of individual structures that account for such types, there are limits as to how far studies of their distribution can go. However, as demonstrated in similar studies in other complex societies, it is often the simple presence or absence of particular forms and the relation of such forms to one another that communicate the underlying cultural and political logic by which cities and public space are structured (Ashmore 1986b; Campera 2008; Coben 1006; Fritz and Mitchell 1987). This is the case with the monumental architecture that proclaimed the civic epicentres of Mesoamerican polities, for example. It remains to be seen whether this holds true for the Indus Civilization, which, as we have seen, is woefully under-monumentalized in comparison to its urban peers in other complex societies (Possehl 1998, 2002a:6). However, some interesting patterns do occur when we look at the distribution of the types, both singly, and as a whole.

Notably, not all architectural types are represented in all sections of Mohenjo-Daro. Once again, differential preservation and histories of excavation and recording likely play an important, if ill-defined, role in the presence or absence of architectural types throughout different sections of Mohenjo-Daro. In the absence of types in a poorly preserved area however, the absence or presence of the architectural and complex attributes upon which the types are based can be used to asses whether there might be remnants of the proposed architectural types. As will be recalled from the previous discussion, such ambiguity is especially apparent when considering open spaces (Type C).

Disparity resulting from differential excavation and recording is especially likely in the case of the Moneer Area, which, as discussed in Appendix A, is only partially addressed in the literature. However, the earliest accounts note significant qualitative differences in the architectural and spatial dimensions of the various sections of the city. The HR Area is noted for the scale and elaboration of its main structures; the DK-G South Area for its network of interconnected roads and lanes, and the DK-B and C Areas for its relatively small and crammed buildings (Mackey 1938:25; Marshall 1931d:17, 22). The Upper Town, of course, is the locus of what comes closest to monumental or public architecture at Mohenjo-Daro.

Although not overtly tying their assertions to the data in a manner that would satisfy current archeological sensibilities, the initial excavators of Mohenjo-Daro conceived of the various sections of
the city by sets of distinctive traits, albeit a distinctiveness mired in a common, even standardized materiality. The presence or absence of my proposed architectural types throughout Mohenjo-Daro can be used to help refine our understanding of the distinctive qualities of the various sections of the city in a more systematic manner. To that end, and following on the presentation of the distribution of each architectural type in the last chapter, I now turn to the assessing the distribution of all architectural types for each of the excavated sections of Mohenjo-Daro. As will become clear, the patterns created by the clustering of specific architectural types is a key aspect of identifying neighbourhoods at Mohenjo-Daro.

<table>
<thead>
<tr>
<th>Type A Structures</th>
<th>Type B Structures</th>
<th>Type C Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A, Form I</td>
<td>Type B, Form I</td>
<td>Type C, Form I</td>
</tr>
<tr>
<td>Type A, Form II</td>
<td>Type B, Form II</td>
<td>Type C, Form II</td>
</tr>
<tr>
<td>Type A, Form III</td>
<td>Type B, Form II</td>
<td>Type C, Form III</td>
</tr>
<tr>
<td>Type A, Form IV</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type D Structures</th>
<th>Type E Structures</th>
<th>Type F Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type D, Form I</td>
<td>Type E, Form I</td>
<td></td>
</tr>
<tr>
<td>Type D, Form II</td>
<td>Type E, Form II</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.1 Symbols corresponding to the posted architectural and spatial types.
Figure 5.2 Distribution of proposed architectural and spatial types in the SD Area (after Wheeler 1953).

SD Area

As mentioned previously, the Upper Town, particularly the SD Area, is notable for the scale and distinctiveness of its architecture (Figure 5.2). Perhaps by virtue of its monumental character, this area is of roughly the same size as the VS or DK-G North areas, despite its relatively few structures. Of these few structures, most of the ones that correlate with the architectural types proposed in this thesis are Type A structures. All but two of Mohenjo-Daro’s Type A, Form IV structures are set in the SD Area (The Great Bath, Stupa Complex, SB Block 2, SB Block 4), and Type A, Form I structures are represented by Blocks 6 and Block 8. It is possible that Block 9, as well as Blocks 3/4 were also Type A structures, based on what appear to be remnants of framing corridors (CA1), but not enough survives
of these structures to definitively assign such a label.

The SD Area contains Mohenjo-Daro's largest Type B, Form I structure, the Warehouse, as well as the second largest Type D structure, the College of the Priests (Type D, Form II). Notably absent in the SD Area are spaces or structures accommodating large assemblies of people. No Type C spaces are present (although Block 10 might have been a Type C, Form III space), nor are the largest and most spacious Type A structure, Type A, Form II. Additionally, No Type E structures appear in the SD Area.

The limited range and replication of its identified types, in conjunction with the concentration of likely specialized monumental structures and no discernible open spaces, serves to create a distinct impression for the SD Area. The sheer size of most of its structures makes this section of the city conspicuous, especially in comparison with most of the Lower Town. Following the assertion that the Type A structures were largely given over to political or ritual function and the storage and redistributive functions of Type B structures (Section 5.2), my impression of the SD area aligns with those of earlier excavators who suggested it was connected to the seat of the Mohenjo-Daro polity, if not the residence of its actual rulers (Wheeler 1953:31).

L Area

The L Area is likewise notable for its distinctive arrangement of a limited number of architectural types, although its structures are far smaller than those in the SD area (Figure 5.3). One example each of Type A, Form III, Type A, Form IV, and Type C, Form II are present in the L Area. Unlike the SD Area, none of these types pertain to its most notable building: the Pillared Hall. This structure, which does not fit into any of the proposed types, is the largest single structure of the L area, and, like its notable counterparts in the SD Area, likely served political or religious functions (Possehl 2002a:194). It is located near the thickest wall yet located at Mohenjo-Daro (Block 11) and two enigmatic circles, and might have formed just one part of a larger politico-religious complex in antiquity. Similar to the SD Area, the L Area lacks E structures.

While it does contain a single example of a Type C space, the L Area largely conforms to the pattern witnessed in the SD Area of large specialized structures with little corresponding assembly space.
Figure 5.3 Distribution of proposed architectural and spatial types in L Area (after Marshall 1931).

DK-G North Area

The DK-G North area is dominated by the Block 18/19 complex, the largest Type D structure at Mohenjo-Daro. Additionally, it sports two Type B, Form I structures, as well as one Type B, Form II structure, and two open spaces, a Type C, Form I space near its western edge, and a Type C, Form II space near its eastern limit. Most of its identified structures do not fit neatly into the proposed typology.
Figure 5.4 Distribution of proposed architectural and spatial types in DK-G North Area (after Mackay 1938).

**DK-G South**

The large DK-G South area contains examples of all of the proposed types, although not all types occur simultaneously. During its Intermediate Period iterations (Figure 5.5), this area contained one example each of all of the Type A structures, two examples of Type B, Form I structures, five open spaces (two examples of Type C, Form I, two examples of Type C, Form II, and one example of Type C, Form III), a Type E, Form II structure, and a Type F structure that also served double duty as a Type A, Form II structure. During its final stages of occupation during the Late II-I Period, the DK-G South Area contained a Type A, Form I structure, one Type B, Form II structure, three Type C, Form I spaces, one Type C, Form III space, one Type D, Form II structure, and a Type E, Form II structure.

The approximate central location of this area throughout all of its iterations is the large Type E, Form II structure, Mackay's (1938:47) "palace." This structure evinced internal changes throughout the course of Mohenjo-Daro's history, becoming increasingly less specialized and partitioned, its massive northern wall was maintained, and the structure itself basically maintained its original shape and proportions (see Appendix B). This is unlike the rest of the identified architectural types from the Intermediate Periods, all of which either transformed into unrecognizable forms or were not
represented in the archaeological record.

Figure 5.5 Distribution of proposed architectural and spatial types in DK-G South Area, Intermediate II Period (after Mackay 1938).

Over time, the architecture of the DK-G South area became increasingly less differentiated and distinct, its roads and laneways were partially rearranged, and the number of identifiable archaeological types reduced. What began as a collection of likely specialized and separate architectural units ended as an integrated and general architectural mass. Throughout these changes, however, attention seems to have been allotted to preserving the distinction of the single Type E structure around which much of the DK-G South area was arrayed.
DK-A, B, and C Areas

As explained in detail in Appendix A, the collected sections of the DK-A, B, and C areas revealed very few identifiable types (Figure 5.7). This section of the Lower Town is noted for partially-excavated, poorly-preserved and relatively crammed and crowded architecture. This should be kept in mind when considering that only three examples of the proposed architectural types were identified in this part of Mohenjo-Daro. One example each of Type B, Form I, and Type C, Form I are located in DK-G B, while one example of Type C, Form III is present in DK-C.
Figure 5.7 Distribution of architectural and spatial types in DK-A, B, and C Areas (after Marshall 1931).

Moneer Area

Similar to the DK-A, B, and C Areas, the little-studied Moneer Area only displays a few examples from the proposed typology (Figure 5.8). Specifically, The Moneer Area contains one example each of a Type C, Form I, and a Type C, Form II space, as well as one example each of a Type B, Form I structure, and a Type E, Form I structure (the former is likely an annexe of the latter). As the largest structure in the Moneer Area, the Type E, Form I structure forms a significant part of the bulk of the revealed mass of the Moneer Area.
The VS Area

The VS Area (Figure 5.9) seems far more crowded that the areas in the Upper Town, and most of its constituent architecture aligns with the range of sizes witnessed in the DK areas. Unlike the DK-G South area however, the structures of the VS Area do not seem spread around a centralized building, but rather evenly distributed over several main open spaces. The VS-Area contains one Type A, Form II structure near its western border, and another close to the edge of VS section A. A Type A, Form III structure occupies the northwestern extreme of the area. Tow Type B structures are located in its northern section, one Type B, Form I structure, and one Type B, Form II structure. The defining type in the VS Area is Type C. There are five of these spaces: three Type C, Form I spaces, and three Type C, Form II spaces. The VS Area also contains an example each of Type D, Form I and Type D, Form II. A large Type F structure, composed of the previously-mentioned Type A, Form III structure, one of the Type C, Form II spaces, an and unclassified structure occupies the northern and western part of the
Area.

Figure 5.9 Distribution of proposed architectural and spatial types in the VS Area (after Marshall 1931).

HR Area

Owing to its many large and spacious buildings, the HR Area has long been considered a likely enclave of Mohenjo-Daro's wealthy or elite (Possehl 2002a:197). Part of this assumption probably has to do with the unusual Block 2 complex, the largest architectural complex in the Lower Town, and designated as a Type E, Form II structure. In addition to this building, the HR Area hosts two other Type E structures: House VIII, Block 3, and House I, Block 1, both of which are located in the HR-A subsection.

Only one Type A structure is found in the HR Area, a Type A, Form IV building. Likewise, a single Type D, Form II structure is present. Of the six open spaces in the HR Area, four are Type C,
Form II spaces, and two are Type C, Form III spaces. Both of the latter spaces are inside the Block 2 complex. Two Type B, Form II structures as well as a Type F structure complete the identified types for the HR Area.

Figure 5.10 Distribution of architectural and spatial types in the HR Area (after Marshall 1931).

Individually, the distribution of the separate architectural types reveal associations that might illustrate localized civic traits or expressions of community identity at Mohenjo-Daro. For example, the dearth of public plazas (Type C, Form I) and the concentration of large, multi-winged complexes (Type E) in the HR area seems to fit nicely with the impression that the HR Area was the locus of the city's wealthiest members (Possehl 2002a:197). Alternately, the prevalence of public plazas, multiple connecting roadways and less spacious buildings proclaims a distinctive spatial ethos for the VS area. In order to determine whether such impressions are supported by the patterns of distribution the architectural types, the significance of the variation evident amongst the individual types, we need to understand the relation of the different types to one another.
5.2 Functional Implications of Architectural Distribution

Perhaps the most apparent of the architectural forms of Mohenjo-Daro are the Type A structures that, while evinced in most locales at Mohenjo-Daro, do not enjoy universal distribution (Figure 4.9). Where they do appear, Type A structures display a distinct associative pattern. All Type A structures are found in the direct vicinity of other Type A structures, open spaces (Type C), or near the intersections of main thoroughfares. This clustering of forms is complemented by the distribution pattern of the other types. Type B structures manifest as constituent or accessory architectural components of D and E Structures, or separately in the vicinity of open spaces (Type C). Type D structures are located adjacent to open spaces or main thoroughfares, and Type E structures, which are restricted to the HR, MN and DK-G S areas, are prominently situated along, or quite near to main streets. Type F structures, the monumental northwest structures are, sensibly, restricted to the northwest sections of the VS, DK-G South, and HR Areas.

These distributive patterns reveal that the architectural types essentially cluster in various sections throughout the city. True, not all types appear in all places, but where types do exist, they follow replicable rules of association. As there are a small number of examples of the posited architectural types relative to the great structural mass of the city, I suggest that these patterns allude to the functional interdependence of the types. The convergence of all of the posited architectural types in relative proximity to one another suggest a purposeful arrangement of civic form, as if there was a cultural template upon which the sections of Mohenjo-Daro were constructed, none identical, but all utilizing the same suite of architectural and complex attributes in the same general manner. The question remains, however: what is the nature of this "functional interdependence?" Perhaps these distributive patterns simply illustrate previously overlooked facets of the architectural canon of Mohenjo-Daro; then again, perhaps the replication and association of these civic forms is one manner in which we may identify neighbourhoods at Mohenjo-Daro.

The replication of architectural form within ancient cities is most often that associated with domestic or vernacular structures (van Gijseghem 2001:257; 270-271; cf. Trigger 2003:154) which usually account for the vast majority of the anthropogenic urban landscape, even if they don't traditionally account for the vast majority of archaeological research on ancient cities. The least common forms of constructed spaces, which typically do garner a disproportional share of scholastic attention, are those monumental forms that in most cases denote the political and religious offices and institutions which comprise key aspects of the governing apparatus of the state (Trigger 1990;
In between these extremes and exhibiting traits of both, are situated the structures and spaces which served various general civic and more specific administrative functions, but which themselves were not the residences of ruling elites nor the main settings of state institutions. Such constructs historically include a diversity of forms, ranging from examples of open spaces which facilitated generalized kinds of civic engagement, such as the Aztec epicentral plazas or Roman *agorae* (DeLaine 2008:105; M.L. Smith 2008; Stanley et al 2012) to structures that were explicitly tied to the operation or facilitation of aspects of the state, such as Classic Maya range structures, and Inca *aqllawsi* (Morris 2008:310-312; Seibert 2006). Each of these examples, while markedly different from one another owing to distinct cultural provenience, manifest as thoroughly recognizable iterations of key components of the urban setting in their own particular traditions. While these civic features are not carbon copies of one another, residents of Cuexcomate, for example, would have had little difficulty recognizing an *audiencia* in Texcoco, just as an individual from Lagash would not have had difficulty understanding the architectural cues by which an elite school was advertised in Eridu. The architectural and stylistic elements of such structures were not necessarily standardized, but shared enough general resemblance that their social and political functions were communicated in a familiar manner (cf. Coben 2006:226-228).

The general similarity within the individual architectural types, as well as their clustering distribution, leads me to consider that these spaces and structures likely advertise similar civic engagement functions. That is, I believe that the the proposed architectural types largely, though likely not exclusively, functionally pertain to the social and administrative capacity of the Mohenjo-Daro polity. We do not know which aspects of the social and administrative capacity of the Mohenjo-Daro polity were tied to such structures, but it is likely that at least some of the types helped to articulate the central authority of the polity with its constituent communities. The neighbourhoods of Mohenjo-Daro might be illustrated by means of the clustered types.

In order to understand the functional interdependence of the proposed types that lies at the heart of their clustering, it is necessary to discuss the functional capacities of the proposed architectural types. As this study has explicitly avoided examining the associated artifactual record of the structures I have examined, this will require some cautious speculation.

Type A structures likely served a range of roles, but primary among these, I believe, was facilitating political, social, and likely religious interaction. I believe this is a credible owing to the size
and layout of most Type A structures which were adequately suited to hosting assemblies for such activities.

Three of the four Type A, Form I structures are all in some regard marked as "special." Block 6A, DK-G South Area, is thick walled, built on ceramic wasters, and located at the largest intersection in Mohenjo-Daro; Block 6, in the SD Area, has an oval well, multiple bathing stations, and wide doors. Block 8, also in the SD Area, includes several examples of enigmatic circles within its internal space.

Type A, Form II structures are typified by their large size and minimally differentiated internal spaces, features that make them especially suitable for hosting enclosed ritual assemblies. Interestingly, these buildings are not found in association with Type E structures, which are also amenable to hosting assemblies. Likewise, Type A, Form II structures are not located alongside Type A, Form IV structures. Most Type A, Form IV buildings are not suitable to host large crowds of individuals; however, their most grandiose iterations, the Great Bath and the Stupa Complex in the Upper Town, certainly were capable of such functions. Similar to Type A, Form II structures, neither the Stupa Complex are situated near a Type E structure. The mutual lack of association of Type A, Form II structures, the largest Type A, Form IV structures, and Type E structures perhaps suggests that they served similar functions, or at least similar enough functions to preclude their side-by-side placement. All but two examples of Type A, Form IV structures are located in the Upper Town, and both of the Lower Town examples explicitly reference monumental structures of the Upper Town (Section 5.2).

The standardized and comparatively small spaces which make up Type B spaces suggest that they were connected with storage, although of what remains unknown. This assertion is strengthened by the fact that, with only a few exceptions, Type B always occurs as part of, or attached to, other architectural types, both Type D and Type E structures. In those cases where unattached Type B structures occur, they often do so in the direct vicinity of open spaces (such as with Block 29 of the DK-G North area), suggesting a functional connection between these types in certain cases.

While open spaces fill a number of uses, they are often given over to assemblies of people as locales of interaction (M. L. Smith 2008). I presume this to also have been the functional root of open spaces (Type C) at Mohenjo-Daro, but expect that the kind of open space dictated the manner of such interaction. Type C, Form I spaces, public plazas, for example, probably fostered relatively inclusive and nonrestrictive kinds of social interactions involving a wide swath of the Mohenjo-Daro population. Markets were a probable activity that occurred in such spaces. Type C, Form II spaces, secluded
plazas, might have also been used for this purpose, but their limited accessibility likely corresponded with less inclusive activities, such as those limited to specific neighbourhood, kinship, or other closed social groupings. The activities that took place in the restricted Type C, Form III spaces, courtyard complexes, were essentially private affairs, and as such this type should not really be considered a public space.

With the probable, but unconfirmed exception of the courtyard complex within Block 10, no open spaces at all occur in the SD Area, confirming the pattern witnessed in its dearth of Type A, Form II structures as a location bereft of locales of assembly. Similarly, the HR Area only includes courtyard complexes and secluded plazas, underscoring the rather exclusive nature of that area's inhabitants demonstrated by the size and quality of its architecture. Conversely, public plazas abound in the DK-G and VS Areas. Both the VS and the Moneer Areas lack any courtyard complexes. The majority of the identified open spaces at Mohenjo-Daro, however, are secluded plazas (Type C, Form II), suggesting a semi-exclusive or similarly bounded dynamic or sensibility was built into the architectural fabric of Mohenjo-Daro.

Type D structures are not as functionally forthcoming as the other types. They are very few in number and, like Type E structures, do not occur near Form A, Type II structures, perhaps suggesting an overlap in function or domain. Their size and prominence do render them conspicuous, as does their placement along main thoroughfares.

Type E structures are of a special class of architecture, both by virtue of their size relative to their neighbours, and the combination of architectural and complex attributes that they contain. Their exceptional status was assumed for at least three of the four Type E structures that were discussed in the original reports (structure B1 of the MN Area was not addressed until the 1970s (Jansen 1984)). House VIII, Block 3, HR-A, Block 2, HR-B, and the Blocks 1 and 4, DK-G South Area were all remarked upon by the initial excavators of structures for their monumental and exceptional qualities, and all were presumed to be residences or offices of elite personages or governing officials (Mackay 1938:46; Possehl 2002a:197-202; Sahni 1931b:190). Three of the five identified Type E structures contain, or are attached to, Type B spaces, and all Type E structures contain numerous architectural wings surrounding one or more central courtyards. House I, Block 1, HR-A Area, the Type E structure discussed in the original reports but not singled out as an example of possible elite architecture, nevertheless possesses very distinctive architectural qualities remarked upon by the excavators (Hargreaves 1931:176-177).
The diversity of internal spatial forms within Type E structures implies likely multiple functions for these large structures. The ability to host assemblies, combined with possible storage functions, production areas such as the dying vats in the HR-B Block 2 complex, and ancillary exclusive spaces, probably means that Type E structures correlated with the combined residential and official spaces of Mohenjo-Daro's elite factions (Vidale 2010; cf. Harrison 2003a, 2003b). These elites might have served as administrators or as the focal points of the kin or other social networks of MohenoDaro's neighbourhoods. Type E structures are not found in every section of Mohenjo-Daro, however, implying that the composition of the city's neighbourhoods were more complex or subject to alternate means of organization than that implied by the presence of Type E structures.

With the possible exception of the SD Area in the Upper Town, the excavated areas of Mohenjo-Daro very likely do not correspond to emic civic sections. This assertion is based on the knowledge that no such section is entirely uncovered, and as such the limits of such areas are a creation of excavation. Also, and conversely, some sections display common civic delimiting elements, such as thoroughfares, which run through excavated areas, and as such indicate the lack of correlation between the excavated area and a (plausible) emic civic one. Following this logic, VS-B, the small architectural cluster found to the east of First Street on the eastern extremity of the VS Area, may well correspond to an entirely distinct civic section than its similarly named western neighbour. Finally, if similarity of architectural features is an indication of civic identity, certain excavated areas might actually include several emic civic sections.

However, the excavated areas were in part selected for exploration and study by Marshall specifically because they were discernible sections separated by height from their surroundings. It is appropriate to recall that Marshall (1931b:12) employed "mounds" to refer to the various sections of the Lower Town, for that is what they are, circumscribed mounds elevated above their neighbouring sections of the Lower Town. While an almost continuous architectural mass and systems of roadways connected and integrated these various sections, each of the excavated areas of Mohenjo-Daro can be characterized at its historical core as a quasi-distinct tell. In this manner, the constituent sections of the Lower Town are physically, and likely developmentally (by way of process), analogous to the SD and L Areas of the Upper Town.

Keeping in mind the distinct mound-basis of the excavated areas might assist in understanding some of the broader pattern of attribute distribution uncovered at Mohenjo-Daro. One such pattern is the presence of large, spacious structures generally situated in the northwest of the Lower Town.
mounds -the Type F structures. While designated as Type F structures on account of their placement in relation to their respective mounds, Type F structures are morphologically Type A structures (with the exception of in the HR Area, which nevertheless shares architectural attributes in common with Type A structures), and likely shared similar functions, including, presumably, community assembly and ritual activities. The key difference between Type F and Type A structures is undoubtedly tied to the former's placement, something which may have served as locational reference to the Upper Town, which itself lie to the north and west of Mohenjo-Daro as a whole. This architectural allusion to the Upper Town might have signified the preeminence of this area of the city, something that might be tied to the importance of this direction in Harappan culture generally (Wanzke 1984) or, following on the same idea, Type F structures might have served to architecturally proclaim the neighbourhoods of the sections of the Mohenjo-Daro in which they are located.

This assertion aligns with one of the mechanisms by which neighbourhoods in ancient cities were demarcated: architectural aggregation (Smith 2010:137). In the case of exceedingly dense cities such as those of the Indus, such aggregation should not be construed solely along physical grounds, but communicative ones as well, including the proclamation of civic sections through specialized architectural forms.

In addition to the clustering of types evinced throughout the different sections of Mohenjo-Daro, there exist other recurring architectural forms which perhaps intimate a further degree of socio-political connectivity between select areas of the ancient city. While they manifest in a manner quite distinct from that witnessed through the distribution of the posited typology, they perhaps come closest to illustrating that at least some of the mechanisms by which the Mohenjo-Daro polity cohered were similar to those of other complex societies.

### 5.3 Additional Correlations

As stated at the close of the previous chapter, the review and analysis of available data on Mohenjo-Daro reveal a collection of repetitive architectural attributes, complex attributes, and a small but demonstrable architectural and civic-spatial typology. While certainly interesting in their own right, such patterns and forms were uncovered in an attempt to extrapolate a measure of understanding into the urban makeup of Mohenjo-Daro, specifically its constituent neighbourhoods, and shed light on some of the ways in which these neighbourhoods were both bound together and distinct. Given this
goal, it is appropriate to examine the patterns and forms with such larger issues in mind. What specifically do the above spatial and architectural traits reveal about neighbourhoods at Mohenjo-Daro?

Several considerations are required in order to effectively address this topic, such as the spatial distribution of the architectural types, their plausible functional implications, both matters addressed previously and, perhaps most critical for addressing the articulation between the centralized authority of the Mohenjo-Daro polity and its constituent neighbourhoods, the degree and manner of architectural correlation between the Lower Town and the Upper Town.

The architectural correlation between the Upper and Lower Towns is discernible both through their participation in the proposed architectural types of Mohenjo-Daro, but also through the replication or emulation of individual buildings. These buildings to which I refer are very limited in number, and, unlike the types discussed in Chapter 4, enjoy a very restricted distribution. However, their presence may hint at more encompassing aspects of Indus social and political order than those that specifically concern the urban communities implicated in the posited typology, although, as will become apparent, the two matters are obviously related. More pointedly, these other recurring forms might help clarify the nature of the relationship between the Lower Town as a whole, and the Upper Town.

It has been argued for decades that Mohenjo-Daro's Upper Town was the locus of political and religious power in the ancient city (Blumenfeld 1942:23); as was explored in earlier chapters, such arguments have largely been advocated emotively, or, at least, were based on impression rather than rigorous comparisons. The architectural record of the Upper Town certainly seems to indicate that this area of the city should be accorded distinctive study. It is the location of what comes closest, in the entirety of the archaeological record of the Indus Civilization, to architectural markers of a scale and calibre that would not be out of place in elite sections of other ancient complex societies. The elite potential of the Upper Town architecture seems especially plausible when compared to what was largely understood as the uniform and relatively diminutive architectural signatures of the Lower Town (Wheeler 1953:36).

The recognition of the architectural types discussed in Chapter 4 has rendered this simplistic dichotomy untenable. First, architectural similarities abound between the structures of the Lower Town and Upper Town. This is apparent in both the constituent architectural and complex attributes that comprise the architecture in both the Upper and Lower Towns, as well as the kinds of structures present in both areas of the city, especially Type A structures. Second, similarities of scale are also notable between the main structures of the Upper Town and select locales in the Lower Town. Many Type E
structures (the multi-winged complexes), as well as a few Type D structures, are comparable in size to the Stupa Complex and the Great Bath of the SD Area. Third, the distribution of architectural types in the SD and L areas of the Upper Town follow the same basic rules of association as in the Lower Town (see section 4.8). The argument cannot be sustained, therefore, that qualitative differences in form, or scale, or distribution, set the architecture of the Upper Town apart from that of the Lower Town. Does this then imply that the venerable notion of the Upper Town as a seat of social prestige or political ability should be abandoned? Is the Upper Town's distinction something solely owing to topography?

In a word, no. In spite of its participation in city-wide architectural forms, and its rather naturally dramatic but nevertheless purposeful topographic setting, the Upper Town looks different from the rest of Mohenjo-Daro. True, it contains no distinct structural types, but it does contain the most monumental examples of certain types. In the SD area of the Upper Town, the Great Bath and Stupa Complex, for example, are the largest iterations of Type A IV structures. The largest example of Type B I structures, the Warehouse, is also located in the SD Area, near the latter buildings. The College of the Priests, while not the largest identified Type D II structure at Mohenjo-Daro, is separated from its larger counterpart, the Block 18/19 complex in DK-G North, by a matter of a few meters. Unlike its counterpart, the College of the Priests does not dominate its immediate context by virtue of its massive scale, but is rather situated amidst comparable architectural giants.

In the L Area in the southern section of the Upper Town, there are no structures comparable in size to those of the SD area. However, elaborate and monumental iterations of common architectural attributes are evinced. The most obvious of these is the Pillared Hall, which accounts for the greatest concentration of square piers or columns (architectural attribute 3A) in Mohenjo-Daro; likewise, Block 11 presents the most dramatic example of architectural attribute 4A, notably thick walls. All of the oval-shaped wells (attribute 8B) in Mohenjo-Daro are shared between the L and SD Areas. The clustering of common architectural forms of a monumental scale, as well as the concentration of rare architectural attributes are hallmarks of the Upper Town.

The Upper Town is also set apart from the Lower Town by what it lacks. The SD area, alone in Mohenjo-Daro, contains no examples of open spaces other than thoroughfares and their intersections (with the probable exception of the poorly preserved and indeterminate Block 10), while the L area contains a single example of a Type C II space. Perhaps more importantly, the Upper Town lacks any suggestion of the non-designated, yet overwhelmingly common "domestic" structures which comprise the vast majority of the architectural mass in the Lower Town (Sarcina 1978/1979).
Despite the uniqueness of the Upper Town, there are certain of its distinctive architectural forms that do manifest in the Lower Town. These are far less prominently situated, and not nearly on the scale of their Upper Town counterparts. They are, however, further architectural instances by which the Upper Town was linked with the Lower Town. It is notable that these include three of the most emblematic structures of the Upper Town: the Pillared Hall, the Great Bath, and the Stupa Complex.

5.3.1 Pillared Hall

The Pillared Hall is one of the few obvious examples of likely public architecture at Mohenjo-Daro, and its proposed administrative function (Mackay 1931b:165) is one of the reasons that underlie the assertion for an elite presence on the Upper Town. While no similar iterations of this kind of structure have been identified at Mohenjo-Daro or any other Indus Civilization city, the Pillared Hall expresses the most extreme example of architectural and complex attributes commonly found in other areas. Specifically, the defining characteristics of this structure are its numerous brick piers or pillar supports arranged in rows. These appear to have provided the internal framework for the structure which, until its Late Period modifications (Mackay 1931b:161), was typified by a minimal degree of internal partitioning. Analysis of the architectural and spatial components discerned at Mohenjo-Daro revealed that the Pillared Hall constituted the greatest concentration of brick piers (A4) in the city. True, this trait does appear in many locations in Mohenjo-Daro, but most often it appears as an isolated feature, and is usually interpreted to have served solely a utilitarian structural role (i.e. Mackay 1938:152). The Pillared Hall is famous primarily because piers appear organized into freestanding rows (CA5) which, in addition to their structural roles, resulted in a distinct aesthetic form.

The presence of piers as wall components is also the defining trait of House VII, Block 7, of the DK-G South area, during the Intermediate III Period (See Appendix B). Interestingly, and unique to Mohenjo-Daro, this structure sports its piers on its external frame, not as internal wall components. Specifically, the north, east, and southern sides of this structure were formed by spaced columns; during the succeeding Intermediate II Period, the spaces between the columns were filled in to form solid walls. While the placement of the columns is unique, this is the only structure aside from the Pillared Hall to prominently display columns on such a (relative) scale. It is doubtful that the functional dimensions of the Pillared Hall were replicated in their entirety in House VII, owing to the many differences which set these structure apart, but the incorporation of architectural elements so obviously associated with the larger structure likely served to symbolically connect certain of their socio-political aspects.
Figure 5.11  Use of columns as external and internal framing components in (a) the Pillared Hall, L Area, (b) House VII, Block 7, DK-G South Area, Intermediate III Period), and (c) House III, Block 10, Intermediate I Period (after Mackay 1938, and Marshall 1931).

In a more muted manner, it is noteworthy to recall that during the Intermediate III Period, House III, Block 10, DK-G South Area, situated near the opposite (western) terminus of Fore Lane from House VII, Block 7, displayed what might be considered a comparable aesthetic effect to its eastern neighbour (Appendix B). House III, Block 10 did not utilize columns as did House VII or the Pillared Hall; however, its external frame was simultaneously punctuated by perhaps fifteen separate doorways. Several of these doorways were not utilized for access, opening directly onto the western edge of House I, Block 10, or were not functionally necessary, as several were placed in pairs that led into the same internal space. The utilitarian aspects of the entrances, I believe, may have had less importance than their communicative ones. The presence of so many doorways might have replicated, or may have attempted to replicate, the appearance of an external frame comprised of columns. The sections of contrasting solid architecture and empty spaces which would have resulted from so many entrances might have resembled the dappled facade of the earlier House VII. During different periods,
both House III, Block 10 and House VII, Block 7 were placed at opposite ends of the Block 1/4 Complex, and each participated in an aesthetic tradition most clearly exemplified by the Pillared Hall on the Upper Town (Figure 8.10). To date, they remain the only such structures known to have been framed, either internally or externally, by contrasting patterns of architectural mass and its absence.

5.3.2 Great Bath

The Great Bath of the SD Area is the most well known and promoted example of Indus Civilization architecture (Mackay 1931a:131). In addition to its unique architectural form, the status of the Great Bath results from its perceived functional attributes: it is the largest hydraulic structure in a city full of hydraulic structures, as well as the only large and seemingly public bathing venue in a city filled with small, private bathing spaces; in short, it is the ultimate unifying hydraulic symbol of a society that was unusually concerned with water (Jansen 1989, 1993).

An important aspect of how the Great Bath is perceived rests on its uniqueness, a factor enforced by its placement amongst other large and distinctive structures in the monumental core of Mohenjo-Daro. While a compelling argument can and should be advocated for the special status of the Upper Town, and perhaps the SD Area in particular, the assertion that the Great Bath is without architectural peers is incorrect. Several iterations of the architectural form of the Great Bath are located in different sections of the Lower Town.

In a very compelling example of how published site report data can be analyzed to reveal new information, Vidale (2010) convincingly demonstrates that the Great Bath is replicated, almost in its entirety, in a scaled-down version in the form of House XXIII, HR-B Area of the Lower Town. As described in Appendix A, the initial excavator of this structure noted the presence of a second storey and a central room ringed by smaller ones on all sides, both features surmised from the remains of the Great Bath (Sahni 1931b:202), but did not recognize its similarity in layout to the Great Bath. Central to Vidal's (2010) analysis of House XXIII is the recognition of a small, centrally-located water tank lost in the architectural details of the excavation. This oversight is exemplified in the original interpretation of the the northern and southern edges of the water tank in House XXIII. In the Great Bath, this location marks the terminus of the steps which ascend from the floor of the tank to the ground floor level of the building, while the maps for House XXIII however, illustrate these spaces as doorways (Figure 5.11; see Appendix A). An east-west oriented wall, likely a later addition, traverses the centre of the water tank in House XXIII, creating perhaps the impression for the original excavators
that the central water tank was simply an inner room subject to Late Period partitions like many others throughout the city.

The similarities between House XXIII and the Great Bath are quite striking when the plans of the two structures are compared (Figure 5.12). Both evince similarly proportioned rooms in the same relation to their respective central space as well as sharing the location of their internal wells. According to my architectural typology, both structures are examples of Type A, Form IV structures. The differences which separate the two structures are also apparent; for example, the water tank of House XXIII lacks the internal fenestrated perimeter evident in the Great Bath. Likewise, the Great Bath is many times larger than its eastern-situated counterpart and is lined with bitumen, the only known use of that material amongst Indus Civilization artifacts (Marshal 1931d:25). Taken as a whole, however, the resemblance between these structures outweighs the features which set them apart.

An additional Type A, Form IV structure that closely resembles the layouts of the structures just mentioned is House XIX, located in Block 3 of the VS-A area (Figure 5.11.; Appendix A). While its exact dimensions are not provided, this structure more closely approximates House XXIII in overall size than it does the Great Bath. Also in accord with House XXIII, it is situated adjacent to an open space. Like the Great Bath, it sports an elongated passageway along its southern edge and a large, square room on its northern edge. Similar to both, an internal well is placed near its eastern side. Its main distinguishing feature is the fact that it lacks a centrally-placed water tank; it does, however, evince a paved bathing platform in the same location, an unusual choice for such features in Mohenjo-Daro structures. Whether or not this bathing platform constitutes the eroded surface of a water tank is impossible to tell, but the spatial principles of a water-focused architectural element ensconced in the centre of a building arrayed like that of the Great Bath is certainly visible.

House XIX is not an exact replica of either the Great Bath or House XXIII, but its layout and features are suggestive of both. Perhaps this indicates that rather than being a solitary example of Indus Civilization monumentalism, the Great Bath is simply the most emphatic example of a specialized, water-focused Type A, Form IV structure. The social, political, or even religious associations tied to the symbolism of such structures is difficult to assess, but the prominent placement of these buildings (House XIX is adjacent to a Type C, Form I open space, and House XXIII to a Type C, Form II open space) implies that they may have been public in nature.
Figure 5.12 Plausible bath structures House XXIII, HR-B Area (a) and House XIX, Block 3, VS-A Area (b), alongside the Great Bath (c). Blue areas signify internal wells, red areas signify bathing platforms or bathing tanks (after Marshall 1931).

5.3.3 The Stupa Complex

The structure that enjoys the most conspicuous placement of any building on the Upper Town is the Stupa Complex (Appendix C). Its prominent location, near the eastern edge of the SD Area, is complemented by its unique internal layout; while it meets the criteria to be included in the Type A, Form IV architectural category, it is set apart within this group by its spacious interior and its notable and unique dome. As is discussed in Appendix C, this complex, which had long been understood as a Buddhist Period stupa and monastery, was in all probability a Mature Harappan construction (Verardi 1987). Its brick dome, however, was likely a creation of the resident post-Harappan society that briefly existed at Mohenjo-Daro after the fall of that city's political coherence (Verardi and Barba 1997). Whether or not this particular feature was based on a pre-existing circular construction at this location is unknown, but the presence of functionally confusing circular constructions are one of the recognized architectural attributes attested in various sections of the city, such as those in connection with the Pillared Hall and Blocks 1 and 2 in the HR-A Area (Appendixes A and C).
Unlike the Great Bath, the Stupa Complex does not have a diminutive correlate in the Lower Town. While it adheres to the parameters of a Type A, Form IV structure, its massive internal space and multiple chambered surrounding corridors have not been duplicated. However, two of the defining architectural attributes of the Stupa Complex do manifest in tandem within a single structure in the Lower Town. Opposing stairways (architectural attribute 2A) and enigmatic circles or semi-circle arrangements (architectural attribute 11) only occur together in the Stupa Complex and in House I, Block 1, HR-A Area. Likewise, both of these structures evince a raised internal platform in conjunction with these attributes (Figure 5.12; see Appendix A for a full description of House I, Block 1, HR-A).

The relation of these elements to one another is different in the two structures, however. The sequence of encountering these elements, as determined by the architectonic features of the buildings, dictates that in the Stupa Complex, one would first access the baffled stairs, ascend to the raised platform, and then come upon the circle feature. For House I, Block 1, the enigmatic circle is first encountered, then the baffled steps which lead to the raised platform. No other internal features seem to link these structures. House I is not a Type A structure at all, but rather a Type E structure. In contrast to the prominent placement of the Stupa Complex, House I is tucked away next to a small lane in the HR Area. It is, however, the largest complex positioned on the eastern extremity of its particular mound, the same relative position enjoyed by the Stupa Complex in the SD Area.
Figure 5.13 Shared traits between House I, Block 1, HR-A Area (a), and the Stupa Complex, SD Area (b). Yellow areas indicate raised platforms, red areas indicate enigmatic circles, and blue areas indicate opposing stairways (after Marshall 1931).

The co-occurrence of particular and restricted architectural traits in both the Stupa Complex and House I, as well as the similar placement of both structures in the same location on their respective mounds, suggest that such factors were likely understood to operate together to form a communicative whole. That is, these separate structures were vested in the same specific symbolic tradition, and may have housed similar kinds of activities, or at least have been understood as two examples of a pointedly meaningful and restricted civic form.

5.4 Civic Correlation and Architectural Style

How then are we to understand the patterns which have emerged from the analysis of the Mohenjo-Daro reports and site plans? In other examples where archaeological urban data have been analyzed to reveal prominent cultural information, the data in question were complemented by ancillary iconographic, textual, or other historical information. For example, Classic Maya cityscapes have been
understood as integral socio-physical components of a religiously-based and politically contingent worldview only as long as the Classic Maya writing system has been (mostly) translated (Ashmore and Sabloff 2002); likewise, our knowledge of the ceque system, various huacas, and other physical manifestations of landscape-defining ritual circuits which were integral components of Inka and earlier Andean understandings of place relies on ethnohistorical and historical data (Coben 2006:228-232; Swenson 2003:276). Archaeology alone presents the most robust and emphatic manner in which to illustrate behavioural patterns, but on its own rarely offers us the all important anthropological perspective needed to translate such patterns into meaningful and specific cultural knowledge (Trigger 2008b:190-191). This is especially the case where the dichotomy between function and utility is exposed for the simplistic construct that it is, especially in societies, like that of the Indus Civilization, that demonstrate a certain, but ill-defined involvement in exceedingly complex means of social organization. Regardless of the herculean efforts of comparative linguists and the questionable drive by certain South Asian nationalists to tie the Indus Civilization to specific extant historical traditions (Bergunder 2004; Thapar 1989:212), the fact remains that Indus Civilization scholars still lack any ancillary historical information to assist in making sense of its material culture. The civic patterns revealed in the present study are similarly limited.

This of course does not mean that we lack options for trying to refine how we understand such patterns. The Indus Civilization is (mostly) generally understood to represent an idiosyncratic, yet clear example of a politically complex society by means of comparing its defining traits with those of other, more robustly appreciated complex societies. We can similarly glean a measure of knowledge of the information in the Indus civic patterns by looking to how similar civic patterns in other cultures communicate general organizational principles (Trigger 2004b). This does not mean that the idiosyncratic cultural meanings tied to civic patterns in a particular culture will be transposed onto those discerned in another, but rather that this comparison relies on the notion, argued by Blanton (1982:428-429) and Trigger (1968; 2003:44, 120-121), that basic principles such as spatial organization are closely aligned with forms of social organization. For all the legitimate variation and exceptions that exist within different social typological categories, the social investment in certain orientations, such as hierarchical ones, do generate generally recognizable responses to particular social matters (Trigger 1976:35). In this case, cities, and the architectural and spatial patterns by which they are organized, are usually seen as exclusive to complex societies (Trigger 1985:345; van de Mieroop 1999:28; cf. Smith and Montiel 2001:247-248). Furthermore, cities have been argued to demonstrate a
limited range of means by which they were spatially arranged (Trigger 2003:105-110). While we simply cannot know how the civic patterns uncovered herein relate specifically to the ephemeral and abstract dimensions of Mohenjo-Daro society, we can rely on the empirically-demonstrated tendency for cities to employ such patterns to generally inform and limit our interpretive possibilities. With this interpretive guide in mind, I now compare key components of the architectural patterns observed in the neighbourhoods of Mohenjo-Daro with those known from other ancient cities. Primarily, these examples are drawn from the cities of the Classic Maya, both because I can speak with authority on their civic layouts, and because Classic Maya cities have been previously subjected to similar methods of analysis to those I employ for Mohenjo-Daro. (e.g., Ashmore 1991; Ashmore and Sabloff 2002).

5.4.1 Points of Difference: Architectural Density and Decoration

Many structural and superficial differences separate cities from distinct cultural and historical traditions. One obvious point of difference between them is the degree of architectural density, a factor which might result from cultural and historical circumstances, ecological ones, or both. The cities of the Indus Civilization and Mesopotamia, like those of Medieval Europe, for example, consisted of clusters of monumental architecture surrounded by densely packed architecture organized in different ways, most often enclosed within a city wall (Van de Mieroop 1999:63-65; Weber 1921:80-81). Beyond this barrier, settlement usually continued, but increasingly spacious the farther one travelled from the city centre and into the hinterland. In contrast, the Classic Maya, the Khmer, and other civilizations that existed in an aggressively verdant setting, were not as physically centralized as those of the Indus Civilization. Usually, these cites consisted of one or more epicentral cores (the “downtowns” of the city), comprised of civic and religious monumental architecture, markets, and elite residences (Ashmore 1991; Ashmore and Sabloff 2002), surrounded by a sprawling mix of residential structures, nucleated architectural clusters, urban gardens, and water containment features (Smith 2011b:54-56; Scarborough 1998). This kind of spacious, non-orthogonal sensibility presented a marked contrast to the agglutinated nature of more densely settled early urban centres, like those of the Indus Civilization and Mesoptamian cultures, in which most structures are interconnected and which were punctuated by relatively few non-enclosed open spaces. Interestingly, one of the traits of low density cities in preindustrial agrarian-based societies, and part of the reason for their relative spaciousness, is that components of the agricultural system are embedded directly into the physical fabric of the cities (Isendahl and Smith 2013). This is well attested in such large low density urban
centres as Angkor, Cambodia (Fletcher 2012:288), and in many Classic Maya cities, such as the profusion of agricultural terraces interlocked with residential and civic architecture at the city of Caracol, Belize, an arrangement which led researchers Chase and Chase to term it “a garden city” (1998). While water storage or access facilities are obvious features of Mohenjo-Daro, comparable evidence of urban agricultural infrastructure (other than, presumably, that related to storage) is absent.

Formal architectural properties are also variable between different civilizations, but are often connected to the manner of urban density (Webster 1998:7). Classic Maya architectural traditions, for example, can be defined by two key concerns: aggregation and the external (that is, outside) orientation of most daily practices (Kubler 1961; Pollock 1965). To begin with the later point: as with most preindustrial populations, the majority of the Classic Maya, both urban dwellers and their rural brethren, were daily engaged in activities that required they spend the vast majority of their waking hours out-of-doors. Aside from their particular activities and occupations, the external orientation of Maya architecture can in part be explained as a response to the tropical climate in which the Maya are situated. As a result of this, most Classic Maya architecture is rather shallow by comparison with that from more temperate or arid climes, like that in which Mohenjo-Daro is situated. The interior spaces of most Classic Maya buildings functioned as sleeping and storage, and occasionally cooking areas. In many cases, the plazuela group itself (the base constituent element of Mesoamerican architecture) itself was comprised of separate structures given over to these functions (Leventhal 1983). Most of social and domestic interaction, as well as craft production and entertainment took place in the central courtyard (plazuela). In contrast, the architectural arrangement of structures at Mohenjo-Daro seem to imply an internal focus, with daily activities presumed to have focused around internal courtyards (see Section 3.7).

The presence of open spaces, regardless of their placement inside or outside of a structure, implies the potential for communication and social interaction. As Miller (1998:191) states for larger, civic architecture: “[t]he silent physical spaces, the plazas and the open courts, form voids for the reception of structures and assemblages, particularly by large numbers of individuals.” The degree of external space as a focus of architectural planning is specific to different societies, as assemblies and similar activities can occur within structures like the Pillared Hall, for example, just as they can in unbounded plazas (e.g., Harrison 2003a:179-182; Moore 1996:793). However, the precise composition of those who partake in such interaction is undoubtedly affected by their ability to access such spaces.
The other overarching aspect of low density cities which serve to separate them from the
crowded manner of Mohenjo-Daro architecture is their reliance on the principle of aggregation (Fry
2003:155; Proskouriakoff 1963:xv), which results in structures typified by mass. Although there are
other factors to consider, this characteristic can be largely understood as a direct result of the physical
properties of the building materials themselves combined with the particular architectural technology
employed by such societies as the Classic Maya (Abrams 1987; Littman 1962). The literal and
conceptual foundation upon which all ancient Maya architecture was based is the platform. This is,
quite simply, any level and sealed surface upon which structures are placed. However, in only very rare
circumstances are such surfaces composed of the natural ground level, even in locations where the
topography is relatively flat and level. The common practice was (and is) to create an artificial
platform from an aggregate of limestone boulders, packed fill (earth, clay, broken ceramics and other
waste and to seal this surface with a coating (variable in its thickness) of plaster, rendered from “soft”
limestone (Pollock 1965:398). While the various sections of Mohenjo-Daro, as well as the bases of
certain large structures, such as Block 19 in DK-G North, are likewise constructed by means of large
platforms, the techniques of massing brick and earth did not usually extend to the superstructures
themselves.

Such were however, put towards the construction of the buildings in many low-density cities.
With the exception of the smallest of wooden structures, Classic Maya architecture was (almost)
exclusively based on rubble-core masonry. A rubble and aggregate interior (usually partitioned into
interior segregated pens defined and supported by retaining walls) was encased in backing masonry,
ballast (for floors) and faced with (sometimes several rows of) dressed facing stones, and then covered
with plaster (Littman 1967; Loten and Pendergast 1984). This technique was used in most aspects of
Classic Period masonry projects (except in the thinnest of walls and roofs), and helps to account for the
relatively thickset nature of such structures, as this technique requires a certain threshold of mass in
order to remain structurally stable. The thick walls characteristic of Classic Maya structures owing to
this technique also account for the meagre internal room space of such structures (Proskouriakoff
1963:xv-xvii). This also accounts for the squat nature of Classic architecture; except in very rare cases,
structures do not exceed two storeys in height, owing to the limit of vertical construction possible given
the weight of walls and floors constructed in this method (Pollock 1965:390). The discussion of Indus
Civilization architecture in Section 3.7 presents a very different architectural tradition than that
discussed here.
A significant point of difference between Mohenjo-Daro and other ancient cities is the general manner of aesthetic expression that is vested in architecture and civic space. Teotihuacan's neighbourhoods employed distinctive decorative and stylistic elements which served to proclaim their collective identities (Manzanilla 2015), and the Classic Maya vigorously incorporated political, religious, and cosmological imagery into decorative architectural façades (Driver and Wanyerka 2002; Marcus 1987). Additionally monuments, both free-standing and architectural, communicated historical and religious information throughout the cities of ancient Mesopotamia and Egypt (Baines 2006:262; Winter 2008). As has been stated previously, Mohenjo-Daro and its civic brethren are notable for the almost complete lack of decoration or visible differences in architectural style.

Despite the differences which might separate the appearance and density of their architectural traditions, the underlying spatial and social organization of most ancient cities is similar, likely rooted in the shared hierarchical basis of their respective cultures. These hierarchically-informed similarities hinge on three points: the presence of a spatially-segregated monumental core, the presence of discernible culturally-specific patterns in civic layouts, and the presence within the cities of elite residences. The role of directionality in civic plans, density of architecture, the duplication of particular architectural forms, and the degree of architectural ornamentation are culturally-specific Indus points of distinction that affect the manifestation of these common urban factors.

### 5.4.2 Monumental Epicentre

Like their modern counterparts, many ancient cities evince a monumentally-dominated civic core, or several monumental cores (Ashmore 2005; Janusek 2004:136; Stone 2007:225). The purposeful demarcation of civic segments is common in ancient cities (Smith 2010:146), and was facilitated through both concentrated monumentalism and physical separation (e.g., Bisht 1989; Meyer 2007; Perumaki-Brown 2013:578-580). However, the logic by which civic cores or epicentres in particular were demarcated relied on the structural basis of complexity itself; specifically, the investment of political and social agency in particular offices and social segments, such as the governing apparatus of a state and the religious, bureaucratic, and other means by which it operated (e.g. Stone 1987:127). In almost all ancient complex societies for which we have evidence, such apparatuses and the social worth, prestige, and value to which they were tied was glorified through architectonic display and entrenched in a centralized fashion (Trigger 1990). This display was
achieved though the concentration of monumental form within the confines of civic epicentres. From a purely aesthetic perspective, many ancient urban epicentres operated as repositories of hypertrophic architecture (Trigger 2003:565).

Amongst ancient Mesoamerican and certain Andean cities, for example, centres were usually those areas of the city in which were ensconced the structures that pertained to the principal political and religious offices of the state (e.g., Hirth 2008:279-280; Morris 2008:302-303). Often, these epicentres included locations for public and private assembly, shrines, temples, culturally-specific structures such as Classic Maya ballcourts, and, in some cases, necropoli (Alconini 2008:67; Ashmore and Sabloff 2003; Loten 2003; Moore 1996:792).

In many cultural traditions, one dominating principle was the demarcation of areas of political and social importance from the more common structures and spaces that comprised the bulk of the cities. Such demarcation was marked through various methods, but mainly through architectural agglutination, architectural separation, or stylistic pronouncements, mechanisms that correlate in large degree with Smith's (2011a) identification of common methods of neighbourhood separation. As with other analytical tools, there do exist discrepancies between the ideal forms of the conceptual models and how these manifest archaeologically.

The Classic Maya, for example, always paired architectural agglutination or separation with stylistic means of differentiation. The spatial separation of Classic Maya civic cores from the from the surrounding bulk of their urban centres is evinced in several civic layouts, such as those of the massive cities of Caracol, Belize, (Chase and Chase 2001b) or Tikal, Guatemala (Fry 2003:143-144). In both of these examples, series of raised roads (sacbeob) serve not only to integrate relatively isolated clusters of elite architecture, but to sever the epicentre itself from the surrounding city. In conjunction with raised platforms and architectural complexes which are accessible only from the epicentre, such roadways facilitated the enhancement of epicentre boundaries (Shaw 2001).
At Copan, Honduras, all of the epicentral structures and spaces are physically connected (Martin and Grube 2000:190). A large plaza defines the northern portion of this civic section, but it is importantly bound on all sides by interconnected concentrations of elite and monumental architecture. This is most pronounced to the south of the plaza, where the acropolis, and seat of the ruling institutions of the polity were located. This raised complex mass of residences, administrative structures, secluded courtyards, and pyramidal platforms was typified by restricted accessibility. Smaller, less prestigiously decorated architecture and architectural clusters were located near, and in some cases, quite close to the epicentre, but cannot be confused with the latter as they remain isolated neighbours which did not enjoy spatial integration with the separated bulk of the city core. In a
different manner, the epicentre of Tonina, Mexico, was distinguished from the greater city primarily through vertical separation (Martin and Grube 2000:176); the larger part of Tonina's epicentre was built along the face of a hill, its components narrowing as the core ascended. Finally, Classic Maya city epicentres were sometimes advertised solely or primarily through architectural indicators; the centres of Cancuen, Mexico (Cook et al 2006:631), and Aguateca, Guatemala (Sharer and Traxler 2006:410), were demarcated largely through the distinguishing quality and scale of their architecture, rather than through agglutination or separation.
Figure 5.16 Epicentre of Tikal, Guatemala (after Mosher 2010:38).

A similar pattern of concentrated monumentalism combined with physical separation is evinced on the Upper Town in Mohenjo-Daro. As general points of comparison, the differences which separate the architecture of Classic Maya epicentres and the multiple monumental cores of ancient Mesopotamian urban centres from that of their cities as a whole is far more pronounced than at Mohenjo-Daro, but the differences in relative scale are just as apparent. The largest examples of Type A, Form IV, and Type B, Form I structures are located in the SD Area; likewise, the most monumental iterations of architectural attribute 4A (notably thick walls) and the monumental fronting facade complex attribute are located in the L and SD Areas, respectively. As has already been noted, the Great
Bath is the largest of the limited number of water-focused buildings at Mohenjo-Daro, and the Stupa Complex and Pillared Hall are both the most emphatic examples of select combinations of civic elements found elsewhere in the city.

Figure 5.17 Epicentre of Tonina, Mexico (after Mosher 2010:61).

'The Upper Town is also physically demarcated from the rest of the city, a separation in fact far more pronounced than that witnessed in many other ancient cities. The large space which separates it from the Lower Town has thus far yielded no evidence of habitational occupancy, leading to the interpretation that this area was purposefully avoided for such activities. The vertical demarcation of the Upper Town from the rest of Mohenjo-Daro is well attested, as is the fact that the Upper Town itself is largely an interconnected anthropogenic creation. According to any of the physical measures described above, the Upper Town meets the qualifications which define ancient urban epicentres.
5.4.3 Civic Layout Patterns

In addition to their monumental epicentres, many ancient cities are notable for the recognizable patterns of their civic layouts (Ashmore 1991, 2002; Houk 2003). This was generally not a situation owing to either orthogonal design or a standardized civic template, but rather a set of related spatial principles steeped in broad political and cosmological concepts that were materialized through architecture and related civic elements (Guderjan 2004; McAnany 2001; Reese-Taylor 2002; Wheatley 1971; cf Smith 2005; Šprajc 2005). For the ancient Maya, particularly in the Late Classic period (c. 600-900 A.D.), two main civic forms predominated, thought by many to have been tied to long-standing hegemonic political networks dominated by the polities of Tikal and Calakmul, respectively (Mosher 2010:6). Individual components of the separate civic plans are largely identical; where the plans differ, it is primarily by arrangement of elements, not the elements themselves (Iannone 2005:30-32; Mosher and Jones 2008). The broad similarities in form shared by the components of these civic layouts, forms shared throughout the architectural cannon of the Classic Maya and, in some cases, throughout Mesoamerica, have led scholars to postulate that a combination of common cultural tropes as well as pointed emulation of the architectural schematics of early and influential polities may lie at the core of such practices (Laporte 2003; Schele and Kappelman 2001). We do not know if such practices lie at the core of the cannons of Indus architecture, but the replication of architectural attributes in buildings at Mohenjo-Daro does suggest the presence of a unifying cultural ideal (see also Section 3.7).

A close look at the constituent elements of urban civic plans indicates that several of them follow replicable rules of association, rules by which architectural patterns are set that serve to encode and communicate culturally-pertinent political, religious, and social knowledge. A quick overview of Classic Maya civic layouts may help to appreciate the demonstrated patterns at Mohenjo-Daro, by examining a few of the paradigmatic civic layout components from the Tikal and Calakmul-based plans: Twin-Pyramid Group Complexes in the Tikal plan, and plaza-framing E-Groups in the Calakmul plan.

The civic plan of Tikal has, as one of its central tenets, a focus on what Mayanists refer to as the Twin Pyramid Group Complex (Jones 1969). This is an architectural group, the eastern and western limits of which are signified through the placement of (generally) four-sided stepped pyramids with radial stairways. These pyramids terminate in platforms which lack temples and are separated by a
plaza. To the northern extreme of this plaza is a roofless structure within which resides a stela or stelae commemorating an ancestral figure, ruling monarch, or various combinations of the two. Opposite this building, on the southern terminus of the plaza is located a single-roomed range-like structure with nine separate doorways (Ashmore 1991). The symbolism of this particular arrangement has been argued to reference Classic Maya understandings of religion and politics, and their conflation, as well as cosmology, as the opposing pyramidal platforms were situated where the sun rose and descended, points of a solar circuit that were tied to connotations of rulership, and was thought to have been directly employed to those ends in a civic context (Ashmore 1989, 1991).

At Tikal the Twin Pyramid Group Complex is one of the most regular recurring architectural patterns. Permutations of this complex exists throughout the epicentre and beyond, and is manifest in various sizes and varying degrees of architectural elaboration. Importantly, the Twin Pyramid Group Complex makes its most emphatic impact on the civic layout of Tikal in that it defines the epicentral core of that city, specifically the area of the Great Plaza, the political nucleus of the Tikal state (Harrison 2003b:103). Whether manifest in truly monumental scale, such as in the epicentral core, or in more modest, less lavish iterations, the Twin Pyramid Group Complex was a clearly planned and often replicated architectural component of Tikal. By way of association, the various elements which comprise it, while common in the Classic Maya architectural canon, are not known to exist singly in this ancient city. Many of the capital cities of states historically aligned with the Tikal polity also evince this architectural pattern (Mosher 2010), lending credence to its purported communicative role.

In contrast, one of the main architectural patterns evinced in the epicentre of Calakmul and its affiliates is the presence of an E-Group, which is either placed in the centre of, or which provides the eastern and western borders for, a main, north-south oriented epicentral plaza (Folan et al 2001). E-Groups are an interesting architectural arrangement, both because they divert from the traditional solitary mound or platform-based logic of Classic Maya architecture, and for their likely astronomical functions (Aimers and Rice 2006). E-Groups, so named after their initial identification in Group E, at Uaxactun, Guatemala (Hansen 1998:63-70; Ruppert 1940), are comprised of two main architectural elements: a solitary pyramidal platform, and an elongated north-west aligned platform, typically surmounted by three evenly spaced small structures. The solitary pyramidal platform is placed on the west edge of a mediating space (a plaza) directly opposite and with unhindered visible access to the central structure on the opposing platform, which is situated to the east of the mediating space.
Functionally, these structures served as a kind of calendrical observatory for the summer and winter solstices and the fall and spring equinoxes (M. Miller 1999:29).

Just how the temporal rhythms of the heavens figured into the political dimensions of Calakmul and its subordinate polities is unclear; in fact, it might have not been a factor at all, as the accuracy of many E-Groups has been called into question and not all E-Groups in other cities conform to the classic arrangement (Aimers and Rice 2006; Guderjan 2006). Such variability likely reinforces the notion that the social or political ideas to which they alluded were more important than their observational efficacy; hence, the prominent role of E-Group in defining the epicentral core of the Calakmul-aligned polities. This is especially meaningful as E-Groups are not unknown at Tikal (Laporte 1993); their placement, however, is distinct from the Calakmul pattern.

Both the Tikal-based Twin Pyramid Group Complex, and the central placement of E-Groups in the Calakmul-based civic patterns illustrate how architectural patterns might encode political, general cultural, religious, or other kinds of knowledge. They also demonstrate that, like language, architectural meaning is largely vested in association and arrangement (Hillier and Hansen 1984; Lawrence and Low 1990; Preziosi 1979). The separate elements which comprise the E-Groups and Twin Pyramid Group Complexes proliferate in the corpus of Classic Maya architecture, and thanks to the rich textual and iconographic sources available to us from this period, we understand the individual connotations attached to them can be altered when they manifest as part of an ordered architectural arrangement (Becker 2004; Fash 1998; Mosher and Jones 2008).

The knowledge that functional or other kinds of meanings vested in architecture is contextual can serve us in trying to come to terms with the patterning evident in my architectural typology at Mohenjo-Daro. Like the Twin Pyramid Group Complex or the E-Groups, the different components of the typology display regular rules of association (Section 5.2). With the exception of the Type F structures located in the northwest corners of the mounds upon which the HR-B, VS-A, and DK-G South are constructed, general proximity of architectural types, rather than specific orientations, seems the rule at Mohenjo-Daro. The directional focus fundamental to Classic Maya architectural communication (Ashmore 1991; Coggins 1980; Fuson 1969) suggests that clustering of architectural types at Mohenjo-Daro might conveys broader, more inclusive social meanings than simply functional interdependence.
Figure 5.18 Epicentral Distribution of Twin Pyramid Group Complexes, Tikal, Guatemala, and epicentral E-Groups at Calakmul, Mexico, and Naranjo and Yaxha, Guatemala (after Mosher 2010:38-39).
5.4.4 Elite Residences and Administrative Institutions

The identification and location of elite residences and administrative state institutions is especially important for understanding the organization of the Indus Civilization cities as the rulers of this civilization have proven so elusive. One of the benefits of a robust historical counterpart to the archaeological record in many other civilizations is that many of the more prominent offices and institutions of political administration, such as kings, nobles, bureaucrats, are more easily discernible though their material remains (Haviland and Moholy-Nagy 1992). That is, in certain contexts, specific architectural forms can often be correlated with their socio-political uses (Fash 1998; M. Miller 1998; see also Trebsche 2009). Likewise, in select cases, specific architectural conglomerations have been identified as the residences or offices of known historical individuals (Ehrenberg 2008:106; Stuart 1992); usually, such locales are imbued with pointed stylistic and decorative indicators that proclaim their inclusion in the hierarchic political order of their particular civilization (Saturno 2009; Winter 2008). Such aesthetic cues, in conjunction with the recognition of restricted kinds of architectural and spatial forms, have been utilized to help interpret the functional and utilitarian significance of similar architectural conglomerations which lack corroborating textual evidence (Freidel and Suhler 1999; Iannone 2005). The result of this is a refined method for identifying the buildings in which the institutions of a state, including the residences of their ruling officers, were housed (Loten and Pendergast 1984; Martin 2001).

One of the dominant models which has emerged from such studies is that the main institutions of many complex societies comprise both public and private aspects; for example, at Tikal, its central Great Plaza and connecting saboebs likely provided the setting for public ritual and political spectacle, while the adjacent Temples I and II, located atop the pyramidal platforms on either end of the Great Plaza, were likely highly restricted spaces which remained inaccessible to all save religious and political specialists. Similarly, the Central Acropolis, likewise perched on the edge of the Great Plaza, combined offices and functions of the Tikal state with private residential ones for the person and family of its highest office (Harrison 2003; Reese-Taylor 2002).

The architectural conflation of public-administrative and private residential functions at the heart of a city's epicentre, or in one of its defined administrative or elite enclaves, replicates a hierarchical spatial pattern common throughout archaeologically and historically known complex societies (Christie 2006; Cooper 2006:76-77). The predominant spatial template for the civic cores of
many (if not most) ancient cities lies in the conflation of personal, public, productive, and storage spaces tied to ruling political offices. In addition to combining associated functions within the usually monumental architectural forms that form the focal point of the civic core, the structures of specialist producers, merchants and other service providers tend to cluster near said focal point, and thus underscore the stylistic demarcation of the epicentre from its surrounding context, as described previously (Earl and Smith 2012).

It is important to note that this pattern of architectural form did not always or necessarily imply the residence and offices of the ruler of a polity. The same conflation of administrative and residential space with attached producers and retainers is displayed for example, amongst lower-level Classic Maya nobles (Schele 1991). In all but the most hypertrophic of ways, the aesthetic, functional, spatial means by which the ruling offices of a Classic Maya state were advertised were replicated within the lower levels of its political hierarchy. This is aptly demonstrated by Lucero (2007:419) who demonstrated that the architectural clusters which pertained to lower ranking state nobles, located at some distance from the civic core of a polity, were distinguished from those of the ruling offices mainly by scale and grandeur, but not by arrangement. A similar pattern is evident in the differences which separate the various "bath" structures, "warehouses" and "stupas" of the Lower and Upper Town at Mohenjo-Daro.

The debate over the particular functions of known Indus Civilization architectural forms has yet to expand beyond a limited number of specialists (Cork 2011; Manuel 2008; Sarcina 1978, 1979; Wright 2011:117-119). Despite this, it is interesting to note that the combination of differentially accessed open spaces with restricted-access smaller rooms, and evidence of storage and production, are all enshrined within the confines of a distinct monumental form are evinced at Mohenjo-Daro: its Type E structures. This is most noticeable in the Type E, Form I Block 2 Complex of HR-B Area, and the Type E, Form II Block 1/4 Complex of DK-G South (Figures 4.20 and 4.21). Both of these agglomerations evince the internal open spaces, (presumed) storage facilities, restricted small-room wings, and evidence of production commonly associated with the administrative and residential locus of political offices at Classic Maya, Mesopotamian, Andean, and other cities (e.g., Chase and Chase 2001; Kolata 1997). Likewise similarly, they are surrounded by smaller structures which could possibly have been the residences or other structures of retainers, attached producers, or even extended kinship affiliates. Mackay (1938:47) was likely close to the typological mark when he labelled the Block 1/4 Complex of DK-G South a "palace", for it fits the criteria of such an edifice from other know
archaeological cultures. The HR-B Block 2 Complex, with artefactual evidence closely suggestive of political authority (such as the presence of pillar stones), also fits this description. While evincing less robust corollary evidence by comparison, Block 1, HR-A, and Type E, Form II structure, and House VIII, Block 3, HR-A, a Type E, Form I structure, also seem structurally comparable. I suggest, then, that the presence of elite-based residence and activities are displayed in the form of Type E structures at Mohenjo-Daro, and quite possibly certain of the Type D structures as well. I suggest that the replication of such forms is in line with the common social structure of complex societies, whose ruling offices are generally restricted to a related, or at least inter-connected social stratum (Covey 2003:348; Haviland 1977; Marcus 1987; Trigger 2003:142-143; Yoffee 2005:16). The presence of multiple elite residences which differ in scale and degree of aesthetic attributes, is an expected aspect of the civic plans of even a highly centralized complex society. A main distinguishing point of elite residences at Mohenjo-Daro is that while they seem to form the physical nucleus of those neighbourhoods in which they are located, none of these are located in the Upper Town, that section of the city that must have served as monumental and symbolic epicentre of the polity.

5.5 URBAN CHARACTER of MOHENJO-DARO

This brief examination of selected traits from Classic Maya cities allows us a comparative foil against which we can critically consider the observed civic patterns and elements of Mohenjo-Daro. While Mohenjo-Daro differs on many points with Classic Maya cities, such as the nature and degree of overall urban density, blatant monumentalism, and the physical properties of its constituent architecture, there are many points of similarity in terms of its general urban organization. These points of similarity make defensible the argument that Mohenjo-Daro exhibits the architectural and spatial hallmarks of a monumentalized and separated civic epicentre (the Upper Town), the purposeful and replicated articulation of particular architectural forms throughout its urban area (notable city layouts), and locales typified by the conflation of monumental, public, and productive areas (the likely existence of elite-based residences). Combined with the vast scale of its coordinated public works and standardization of expressive elements, it is reasonable to conclude that Mohenjo-Daro, rather than being an urban manifestation of an enigmatic social order, was similar in its urban structure to most other historically attested complex societies.
These points of convergence with Classic Maya cities, however, do not necessarily implicate the recognition of all of the parameters by which specific neighbourhoods were demarcated or otherwise signified in Mohenjo-Daro. Rather than being able to observe clearly delimited neighbourhood groupings, the current essay has revealed a set of essentially stylistic architectural and spatial traits which, in certain permutations, most likely formed the cores of differing urban communities. Primary among such traits is the posited architectural typology. The replication of specific architectural forms, and the convergence of such forms in a patterned manner, likely signifies functional interdependence of the forms, an interdependence which of necessity carried specific social meanings. Given the scale and formal characteristics of most of the architectural and spatial types, I am inclined to consider their functional roles tied in some fashion to social interaction, the reiteration of local identify, and civic administration; that is, primarily as public architecture (Fitzsimons 2007; Jansen 1980b; M.L. Smith 2008; Topic 2003; Trigger 2004a). Certain of the broadly distributed complex attributes likely served to indicate different social meanings, if not at a neighbourhood level, then on an individual structural basis. This is particularly the case for the monumental northwest structures and monumental fronting façades, architectural markers that declare the presence of monumental or otherwise exceptional structures.

These different urban communities were encapsulated within the distinct quasi-tells of which Mojenjo-Daro was comprised. While not all excavated areas of the city necessarily correlate with entire and discrete urban communities, the topographical distinction of the different excavated areas may factor into the ways in which constituent urban communities, and their corresponding social segments, were demarcated. If the populace of Mojenjo-Daro adhered to the structuring behaviours evinced in many other ancient urban complex societies, such demarcated social segments were socially and economically varied, but ultimately held together on a community level as much by symbolic or real kinship identification as they were by mechanisms of state administration (Hastorf 2003; McAnany 1995). Especially in city-state contexts, such identities often formulated around highly localized networks which had at their core a unifying legacy derived through shared descent, but which were themselves internally hierarchically segmented (Joyce 2001; Keith 2003). In such societies, familial or other kinship-based social segments cross-cut the various class-based structures which dominated complex civilizations (Gillespie 2000; Netherly 1993). The tension between lineal affiliation and class is one of the classic tensions of complex societies historically, and is well attested, again, amongst the Classic Maya (McAnanay 1995; Iannone 2002). Following on this logic, many of the Type E
structures probably correlated with the authoritative lineal seats of such social segments, and partly 
presided over the social and productive capacity of Mohenjo-Daro society.

This study has therefore revealed two distinct yet interwoven aspects of the civic structure of 
Mohenjo-Daro. On the one hand, there is evidence for the presence of administrative, state-based 
public architecture which probably served to integrate the various segments of the city into a politically 
cohesive whole. The redundancy of form replicated throughout much of the city implies the 
distribution of a "package" of social and political services and behaviours focused on individual urban 
communities. The monumentalization of such forms on the Upper Town symbolically integrated the 
various urban communities of Mohenjo-Daro into a civic whole, and emphasized adherence to the 
corporate aesthetic of the Indus Civilization generally. On the other hand, the multi-winged complexes 
(Type E structures), which do not appear in the Upper Town, evince many of the hallmarks of 
traditionally understood palaces, areas in which specifically localized understandings of identity, 
affiliation, and authority were concentrated. At and near certain Type E structures, this authority was 
emphasized through the incorporation of rare civic elements that are prominently displayed on the 
Upper Town (such as as pillars and baffled staircases) in addition to more broadly distributed 
(presumed) symbols of legitimacy in Indus society (such as ring-stones). We see then, both 
centralizing and decentralizing forces at play in the civic makeup of Mohenjo-Daro.

As such, Mohenjo-Daro is remarkably similar in its civic makeup to cities known from other 
civilizations. Political complexity is, after all, never wholly centralized nor dispersed, nor is the 
balance between the two ever realistically portrayed, as the communication of underlying social 
structure is an inherently political undertaking (Smith 1999). As Yoffee (2005:91) states, political 
complexity is most efficacious when it is rendered "simple", when the intricacies and contradictions of 
social structure and political organization, kinship and kingship, and the shifting trade-off between state 
authority and local autonomy are distilled into culturally appropriate symbols (or slogans!) designed to 
blur their distinctions. One such very effective manner to achieve this is by means of the civic space in 
which such complexity was reified (Renferw 2008). Considered in such a manner, Mohenjo-Daro, as 
with all cities, probably incipiently operated in a transformative manner that both affirmed the broad (in 
this case, aesthetically corporate) socio-political order of which it was a part and in which it was 
embedded, but which nevertheless harboured locales of specific, perhaps even contradicting and 
exclusive identities.
CHAPTER 6
CONCLUDING REMARKS: Harappan Political Complexity and Comparative Urbanism

6.1 Qualitative Analysis of the Published Mohenjo-Daro Data

Using a narrative-based qualitative analysis of published archaeological data for Mohenjo-Daro, I have provided new insights into both how this data is understood, and how it can be utilized to critically examine established narratives of broad structural aspects of the Indus Civilization. For Mohenjo-Daro, my analysis has resulted in a modification to the established narrative associated with its political and civic structure, with the revelation of previously unacknowledged architectural forms in a typology of public or civic architecture, open spaces, and elite residences. These components of the civic character of Mohenjo-Daro are part of an architectural tradition that was steeped in the particular corporate-aesthetic basis of Harappan political expression. I propose that the noted clustering of public architectural forms, especially as they appear in conjunction with elite residences, form the cores of distinct neighbourhoods within Mohenjo-Daro, neighbourhoods which are likely also intimately tied to the underlying political structure of the Mohenjo-Daro polity.

Previous interpretations of the relationship between the political and social dimensions of Mohenjo-Daro suffered from a reliance on secondary or tertiary interpretations of the primary data itself (Cork 2011), a narrow or limiting comparative purview from which to try and assess the finer details of its socio-political structure (Wheeler 1968), or a lack of explicit examination of Mohenjo-Daro as an city (Mackay 1938; Marshall 1931). In most cases, such investigative shortfalls can be attributed to the scholastic proclivities of the eras or traditions of which the respective scholars were a part, rather than negligence or a lack of scholarly vision. The particulars of Mohenjo-Daro's excavation history itself have also been a decisive factor in how interpretations of its civic and political dimensions have been approached: few locales of its size or illustrative import are typified by its short history of sustained excavations, and few still by the great temporal lag between such excavations and the present. Perhaps most daunting of all is the inconsistency of the published data by which Mohenjo-Daro is known to scholars. In this and other manners, the study of the particulars of Mohenjo-Daro does present a decided challenge to the interested scholar.
My qualitative analysis of Mohenjo-Daro has resulted in the ability to speak in broad terms on selected aspects of its civic makeup in ways that were not possible previously. These points are best explained through a brief discussion of the main results of the present study: the architectural typology, the nature of the relationship between the Upper and Lower Towns, and the matter of the DK-G South Area.

### 6.1.1 Architectural Typology

The revelation of recurring, standardized (or at least exceedingly similar) architectural forms located throughout Mohenjo-Daro lends credence to the often asserted but rarely rigorously engaged adage that Harappan society was politically complex. The presence of redundant architectural forms within an urban setting not solely linked to residence is one of the more common, though lesser discussed, indicators of the presence of the governing apparatus of a state (Flannery 1998:21-22; A. Smith 2003:235-236; Trigger 2003:564-565). Whether in the form of elite-based schools, regulated market areas, military barracks, production spaces, locations for local administration, or a myriad of other particular functions, civic architecture is not always monumental in expression, but is often standardized or equipped with common identifying elements. Such structures often play significant roles in defining or signifying both the civic core of an urban centre, as well as the various segmented neighbourhoods of which a city is composed (Smith 2010:140). At Mohenjo-Daro, the replicating forms appear to be indicative of both.

Functional interpretations for such forms are tenuous, yet still plausible. The various Type A structures, those stylistically dominated by the framing corridor complex attribute in conjunction with large internal spaces, were likely given over to public assembly functions. Type B structures, identified by clustering of standardized internal spaces quite likely served storage functions, while Type C structures were not structures at all, but rather various kinds of open spaces in which the assembly of people for a host of different activities could have been facilitated. The functional designation of Type D structures was likely divided between grand residential units (Form I) and administrative functions (Form II). Type E structures were likely the residences of elite personages, or at least the symbolic focal point of elite lineages, neighbourhood identity, or other constituent socio-political groups.

These architectural forms adhere to a loose association; while not subject to clear principles of directionality, all forms occur within the proximity of select other forms. While the exact rules of such an association have yet to be exhaustively examined, there does appear at Mohenjo-Daro a core
architectural syntax replicated to varying degrees throughout the city. I interpret this patterning as evidence of the central role of the functions attached to such forms for both localized assertions of identity and the overarching civic structure of the city, both of which were expressed through the corporate sensibilities of Harappan society. With the significant exception of the Upper Town, the patterning of the architectural forms in most parts of the city cluster in the vicinity of Type E structures, those complexes which I understand as probable elite residences. In line with the organizational proclivities of other complex societies, it is likely that such residences and clusters of public architecture formed the cores of separate urban neighbourhoods.

Notable differences do exist between these neighbourhoods in terms of their architectural patterns, however. While the largest expressions of these architectural forms are found on the Upper Town, this area was interestingly devoid of Type E elite residences, Type C open spaces, or Type A, Form II structures, the largest of the posited typology buildings which may have functioned as areas of public assembly. The retention of these forms within the Lower Town supports an understanding of the integrated, yet also insular or at least segmented nature of the neighbourhoods of the Lower Town. The various architectural forms noted at Mohenjo-Daro therefore encapsulate and spatially illustrate the oft-cited tension between centralizing and decentralizing tendencies which lie at the core of complex societies.

6.1.2 The Upper and Lower Towns

This tension between centralizing and decentralizing tendencies at Mohenjo-Daro alluded to above was perhaps mediated in part through the shared architectural symbolism which expressively bound together the different areas of the Lower Town with one another, as well with the Upper Town. As explored earlier (Section 3.9.6), the Upper Town of Mohenjo-Daro correlates with the civic and monumental epicentre of the ancient city. It houses the largest structures of the city, the most monumental expressions of the proposed civic typology, and, in concert, likely was a locus of polity-wide political authority, albeit one without any definitive indication of an elite residence.

Just as the Upper Town houses monumental examples of common Lower Town civic architectural forms, the Lower Town evinces stylistic references to uncommon civic elements which are prominently displayed on the Upper Town. These include the use of columns in external facades, the rearrangement of the defining internal elements from the Stupa complex, and the presence of diminutive Great Baths, as discussed in Section 5.3. It is apparent that both the posited civic typology
and the less common civic elements have their communicative bases firmly in pan-Harappan cultural ideals. What is less apparent is whether such manifestations are emulative in operation, and, if so, the general direction of that emulation, from the Upper Town to the Lower Town, or the opposite.

Ascertaining the direction of emulation is exceedingly difficult to distinguish from simple cultural participation, as *all* architectural forms in Mohenjo-Daro were ultimately based on pan-Harappan cultural ideals. Additionally, the quest to separate the emulator from the emulated might distract from critically appreciating the usual role of emulation, which acts as a means to align a particular group with overarching and recognized authoritative or otherwise legitimating cultural symbols (Jennings and Yépez Álvarez 2001:144; Mosher 2010:6; Schele and Kappelman 2001). The presence of identical symbols arrayed in largely identical manners in otherwise disconnected sections of the city surely advertised a shared participation in the social particulars to which such symbols were tied. Whether the Lower Town examples adopted Upper Town symbols of authority, or whether the Upper Town appropriated and monumentalized neighbourhood-based Lower Town architectural traditions, both sections of the city were united in a broad program of stylistic symmetry, a symmetry that likely had socio-political currency, and which was expressed through the same homogenizing and corporate aesthetic as were numerous other elements of Harappan material culture (Ratnagar 1991:50, 55).

### 6.1.3 The Matter of DK-G South

In addition to its enigmatic manner of displaying socio-political complexity, the Indus Civilization is notable for the gradual and relatively gentle demise of its political apparatuses (Possehl 1997). There was no marked or traumatic societal collapse which pronounced the loss of statehood comparable to, for example, the Classic Maya lowland polities, nor a point which heralded the emergence of a new social order, like that of feudal Europe from the remains of parts of the Roman Empire. Both of these phenomena were characterized by the large scale abandonment of cities and a loss of the political culture in which authority was vested (if not so the symbols by which that authority was displayed (Rice et al 2004; Tainter 1988:148-151). Collapse or serous political transformation in the case of the Harappan world, and especially at Mohenjo-Daro appears both more protracted and relatively peaceful, despite the presence of the various "tragedies" which littered its post-Harappan surface (Dales 1964). The main markers of the retreat of political authority from Indus Civilization cities is the eventual abandonment of previously standardized elements in favour of new ones: new
ceramic forms, novel seal shapes and iconographic elements, and, especially evident at Mohenjo-Daro, the adoption of new construction practices and and the emergence of a new civic spatial logic (Possehl 1997; Wright 2010:320-324). It is only later, at some point after these developments, in the absence of any assertion of a new political order, that Mohenjo-Daro and the other cities of the Indus Civilization were abandoned.

The architectural and layout changes which occurred during the eclipse of political authority at Mohenjo-Daro are most evident in the DK-G South Area. Despite the exceedingly poor chronological control of Mohenjo-Daro's civic data, the level-by-level alterations noted in the DK-G South area provide us with a rough but suitable lens through which to try and understand the architectural and spatial transitions which coincided with the decline of the standards provided by a unifying political authority, and can indeed inform general changes in the city over time.

6.1.3.1 The History of DK-G South

In spite of the inadequacies of its chronological system and the incomplete nature of its excavation, the DK-G South Area does present us with a series of slightly more temporally-refined snapshots of the urban form at Mohenjo-Daro. While the earliest level unearthed at Mohenjo-Daro, the Intermediate III Period, is not completely excavated (as explained in Appendix B), this "level" displays several examples of likely public architecture in what is perhaps the most prominent clustering of monumental forms and civic elements found outside of the Upper Town. In particular, the Block 1/4 Complex, along with Block 1A, 7 (Houses VI and VII), 10 (Houses III and IV), 10A, 11, and 12 display a concentration of monumental architectural features (such as thick walls) and unique aesthetic traits (the prominent display of columns) combined with spacious, and in some cases unified, internal spaces. The Block 1/4 Complex, Block 12 and Block 11 specifically adhere to this pattern, leaving the impression that this section of Mohenjo-Daro was typified in its early stages by large, spacious structures distinguished by special decorative norms.

The architectural record becomes more complete in the succeeding Intermediate II Period. In this phase of the DK-G South Area, the internal character of the Block 1/4 Complex is more crowded than previously, sporting distinct rooms, especially in its southwestern quarter, but the overall spaciousness of its main central wing remains. It is in this period of its history that it most closely resembles the typical pattern of palace structures known from other cultural contexts, as the division of space and artefactual remains indicate a heightened engagement with craft specialization. This is echoed in the emergence of likely functionally-based architectural forms in adjacent blocks, as in
House IX, Block 2, as well as the emergence of elements apparently oriented to the Block 1/4 Complex, such as the monumental western façade of Block 5. A similar retention of internal spatial proportions (likely with a continuity of function) is evident in Blocks 11 and 12. While more crowded than in the Intermediate III Period, this stage of the DK-G South Area appears to have been constructed along similar architectural sensibilities.

The following Intermediate I Period is notable both for a reversal of the differentiation of internal spaces in the Block 1/4 Complex witnessed in the previous period, as well as a rearrangement of some of the spatial and architectural features that marked this section of Mohenjo-Daro. It is at this point that House III, Block 10, incorporated over a dozen door frames into its façade, perhaps in an attempt to reference the external columns of the earlier House VI, Block 7. Blocks 11 and 12 seem to retain their basic spatial and architectural parameters, yet Blocks 2, 5, 12 and a large portion of Block 10 evince the same pattern of internal spatial agglomeration as witnessed in the Block 1/4 Complex.

By the Late III Period, we witness a more complete picture of the DK-G South Area, as this is the period to which the entire area was uniformly excavated. We also see the real beginnings of a change in both the architectural methods, noted by the excavator as the proliferation of poor quality masonry (e.g. Mackay 1938:101-102), and the the spatial logic to which the area adhered for the previous three stages of its existence. In this period, Block 11 exists only as a small remnant of its former self, restricted in scope to its eastern wing and devoid of its defining internal space. Consequently, it is no longer recognizable as a Type A structure. Likewise, Block 12 does not resemble its former typological designation. Block 12A essentially disappears from the archaeological record at this point, as does most of the southern section of Block 9, and most of Blocks 2, 3, and 7. The independence of the various Block 10 structures largely disappears at this time, and its remaining buildings are amalgamated into a single mass, one which transects Fore Lane to adhere onto the northern face of the Block 1/4 Complex. Perhaps most dramatically, the defining locus of the DK-G South Area, the Block 1/4 Complex itself, appears in a fragmentary state; it is partly infilled, several of its sections no longer connect, and its eastern Block 4 appendage no longer manifests as a Type B structure; (nor, for that matter, does House IX, Block 7.

The transformation of the DK-G South Area is complete by the last stages of its existence in the Late II-I Periods. This iteration of the area witnessed a rearrangement of the connecting alleys and lanes by which the area was divided, as well as a erection of composite blocks of architecture marked by hyper-internal partitioning and novel means of doing so. Block 12 was bisected by a wide lane, and
its northern and southern extremities formed the cores of new structures. Block 11 disappears entirely
form the archaeological record at this point, and Block 10 merged with parts of Block 9, and perhaps
parts of the western fringe of the Block 1/4 Complex, to form a single large structure typified by
numerous internal divisions and which lacked any central space. Large sections of the southern parts
of Block 9, including parts of lanes, were seemingly given over to craft production, as noted by the
erection of several kilns, a feature also noted for Block 2. Much of the northern sections of Blocks 8
and 9 were typified by a profusion of crowded architecture that incorporated the previous separate
spaces of the monumental structures which fronted Central Street. The Block 1/4 Complex at this time
manifests as a fragmentary shell of its former self, largely devoid of any defined internal spaces, and
perhaps carved up into separate structures on its western edge.

The trajectory of the DK-G Area then, is largely one of declining architectural specialization
coinciding with a loss of the spatial precepts that informed its initial formation. This initial formation
was decidedly monumental in its composition, and adhered closely to the broad pattern of posited
public architecture clustered near a likely elite residence (the Block 1/4 Complex). The likely pinnacle
of the specialized nature of this space was reached in Marshall's Intermediate II Period, before a series
of changes which led to the eventual loss of its public architecture, along with the long-standing
integrity of its road system, by the Late II-I Period. Interestingly, the monumental façades of the
northern edge of the DK-G South Area (Blocks 6A, 8A, and Block 9, House XI) were maintained, as
was the northern face of the Block 1/4 Complex, even as their internal spaces were given over to
decidedly mundane activities.

In all, three interconnected trends inform our understanding of the changes which transpired in
the DK-G South Area over the course of its existence: the gradual disappearance of monumental
spaciousness, the loss of (posited) public architecture, and the selective retention of certain
monumentally-based aesthetic elements. Several of these trends are also witnessed in other sections of
Mohenjo-Daro, although they are largely devoid of the chronological framework utilized in the DK-G
South Area. The partial infilling of likely administrative or otherwise public spaces in House V of
Block 2, HR-B (see Appendix A), the rearrangement of the internal space of the Pillared Hall
(Appendix C), and the reorganization of the northern section of the Great Bath to accommodate craft
production (Appendix C), all occurred in the later stages of their respective occupations; likewise,
several examples exist of what the excavators of the VS Area considered later partitioning of
previously spacious structures (Sahni 1931:215a). By the same token, the care taken to maintain the
monumental north face of the Block 1/4 Complex in DK-G South, despite the assumed abandonment of its internal spaces, is mirrored in the retention of the monumental western and southern façades of Block 18/19 in DK-G North, while its internal spaces simultaneously present a virtual warren of crowded and overlapping partitions. Overall, the latest periods of occupation of the DK-G South Area bear only general resemblance to its initial layout and character.

What emerges, initially, is a kind of urban organization typified by the clustering of public architectural forms which largely articulate with the spatial focus of the area: the Block 1/4 Complex. Spacious public structures and smaller, likely residential and production areas were integrated by a series of well defined and long tenured streets and lanes, a pattern that persisted for the majority of the occupation of the area. During its later stages, this area was typified by the subdivision or disappearance of public architectural forms, the agglutination of probable domestic and productive spaces, the abandonment or reorganization of its connecting arteries, and the dissolution of the discrete and presumed specialized spaces of its defining and largest architectural complex. Simultaneously, certain aesthetic elements of this area which had their origin in the early stages of the area were preserved. Such gradual, but marked changes to the layout and organizational character of this urban space likely reflects the changing relationship of this section of the city's overall political structure, or indicate a notable shift in such structure. Indeed, the pattern of marked change accentuated by the incorporation of historical architectural or decorative references is one witnessed numerous times in societies which have persisted in the face of socio-political collapse, or at the very least persisted through periods of significant socio-political transition (Alcock 2000; Hansen 1998; Hinton 1990:110-113).

6.2 THE CIVIC NATURE of MOHENJO-DARO

The widespread presence of public architectural forms, the existence of shared and possibly replicated civic elements across the Lower Town and the Upper Town, as well as the marked changes in the spatial character of the DK-G South Area noted from the present study allow us to say several things about the urban nature of Mohenjo-Daro. Perhaps the most apparent of these, is that there existed at Mohenjo-Daro a notable localized urban-civic infrastructure, one presumably linked to the city's governing apparatus that articulated with Mohenjo-Daro's neighbourhoods by means of functions and services tied to the aforementioned civic architecture. Along with its well attested record of standardized and monumental public works, the recognition of Mohenjo-Daro's public architecture
enables us to appreciate further how the overall structure of this city resembled those of other ancient civilizations. Like other elements of its civic material culture, Mohenjo-Daro's public architecture adhered to the culturally-appropriate confines of Harappan expressive culture. The confines of Harappan expressive culture were most relaxed in the Upper Town, the area in which public architecture is presented in its most hypertrophic forms, but also an area that was the most formally restricted as its architectural types rarely deviate from those of the proposed typology. While we cannot clearly translate the nature of the relationship between the Lower Town and the Upper Town, it is clear that the latter was a locale in which the architectural symbols of the governing apparatus, or the architectural symbols of the unifying ethos of the Mohenjo-Daro polity, were most emphatically displayed.

Secondly, the existence of sprawling monumental forms (Type E Structures) surrounded by clusters of public architecture, and in which production and symbols of legitimacy were centred, contributes to the elusive evidence of socio-political elites or factions in the city. That these factions held political agency is attested by their relative scalar magnitude, their investment in rare civic elements, and the fact that in most cases they form the spatial cores of the disparate areas of which Mohenjo-Daro was comprised. As such, it is likely that Mohenjo-Daro neighbourhoods consisted of some permutation of spatial proximity, productive activity, and civic engagement centred around those locales in which elite-led factions were invested. In certain cases, such as the DK-G South and Moneer areas, the different mounds upon which the areas were located likely informed the boundaries of these neighbourhoods; in others, such as the HR area, which evinces several Type E structures, the mechanisms of localised civic identity may be somewhat more complex. We still cannot yet say with certainty where the boundaries between the various urban neighbourhoods are located, or the manner or degree to which they were integrated by ways other then through a broad adherence to a generalizing aesthetic, but in many cases the results of this research allow us to speak more firmly about the spatial and interactive nuclei of such urban sections.

Finally, the chronological overview of the DK-G South area allows us to note that the broad trends in architecture and spatial organization that were bound to administrative or civic-organizational issues, including the existence of civic buildings and a focus on elite-led factions as the basis of neighbourhood structure, enjoyed a limited tenure at Mohenjo-Daro. This tenure roughly corresponded with the duration of public institutions connected to central authority, such as those that lay behind the erection of the Pillared Hall or the Great Bath, as well as established cultural methods manifest in
certain quotidian endeavours, including construction techniques and the dominance of standard ceramic forms. The authority once vested in and expressed as broadly-recognizable symbols synonymous with central authority were reworked, perhaps largely through cultural attrition, as mere palimpsests of their former incarnations.

This broad and yet limited view of the changing nature of Mohenjo-Daro leaves us with two intertwined interpretations on its civic organization. One is that Mohenjo-Daro was fundamentally composed of discrete neighbourhood clusters that were comprised of social formations based on the productive, social, and perhaps political capacity of "large houses" with their attached bodies of specialists, united with one another through various means. If such formations followed similar patterns to those known from other complex societies, they were likely adhered though actual and metaphorical kinship. Such local, kinship-derived forms of association formed one aspect of the myriad manners in which urban societies were structured, together with class-based identities. As has been stressed, identities are always complex and multifaceted, and articulating one's place in a social setting is always a matter of contextual, and often contradictory selection (Kopytoff 1999). In many ancient urban societies, the main structuring principle by which a ruling class adhered and through which they ruled lower classes was essentially a heightened expression of patrimony (Hastorf 2003; M.L. Smith 2005:839; Trigger 2003:142), an essential kinship-based aesthetic trope (Gillespie 2000).

The other interpretive statement that can be made of the civic nature of Mohenjo-Daro is that in spite of their basis in localized and perhaps kin-based identities, its constituent urban groups were enmeshed within and expressively subservient to a dominant homogenizing ethos which stressed the socio-political commonality of the polity (or at least relevant symbols of such) over the factional nature of its civic organization. This is attested by the insertion of standardized civic architecture as key elements of the cores of the different urban areas, as well as by the extremely diminutive public role allocated to markers of distinction; for example, differences in the composition of mortar. Where they do appear, such material means of differentiation are most often restricted to the internal spaces of architectural complexes. Examples of such include the restriction of ring stones and column capitals to the interior of the Block 2 Complex in HR-B, and the presence of ornamental brickwork in the interior of House II, Block 2 in the DK-B Area. The relegation of material means of differentiation to areas of low conspicuousness is paralleled in several classes of material culture at Mohenjo-Daro, and indeed throughout the Harappan world, as illustrated through the caching of valued metals or other wealth items (Rissman 1988), and purposefully marring the distinction of differentially valued materials used

Both of the main interpretive points derived through this study illustrate the mixed heritage of Mohenjo-Daro's social and political order, one which the present analysis confirms was visually expressed in a distinct fashion relative to many other ancient complex societies, but which exhibits some operational and structural similarities to most other ancient complex societies (Smith 2007, 2010). The simultaneous division of urban societies into separate spatial and social clusters which adhered through their own local identity, as well as into a civic body unified under authoritative state mechanisms and legitimating symbols, are common, indeed, expected conditions of complex societies (Yoffee 2005:38-40). Their interplay at Mohenjo-Daro is unusual owing to the subtlety by which conflicting identities were materially mediated.

In conclusion, I have shown that the civic nature of Mohenjo-Daro is discernible by means of qualitative architectural analysis; such analysis, in turn, revealed a collection of variously shared traits through which the main organizational principles of the city and urban society could be understood. These organizational principles demonstrate that both centralizing and decentralizing forces are pivotal components of Mohenjo-Daro civic society, and likely pivotal components of the ways in which its broader political structure, and perhaps those of other Harappan polities, adhered.

6.3 REMAINING ISSUES and FUTURE DIRECTIONS

Although I have demonstrated the effectiveness of narrative-based qualitative analysis of published material in addressing some of the outstanding issues of Mohenjo-Daro's urban structure, I would be remiss if I did not address the study's shortcomings and drawbacks. These centre around inconsistencies in the conclusions, the nature of the data employed, and the implications of the results of the present study.

Despite the overall interpretation derived from the present study, not all of the sections of the city fell nicely into the general patterns. Relative to other sections of Mohenjo-Daro, the Moneer Area, and the DK-A, B, and C area are notable for the relative lack of posited architectural types. Currently, no explanation for this discrepancy exists apart from the unique history of excavation and recording for the Moneer Area. Likewise, and most importantly, the vast majority of the structures at Mohenjo-Daro do not display evidence of the identified civic elements to warrant consideration into the posited typology. While this makes sense that only a limited number of structures were given over to either
elite or civic purposes, it also may indicate that there exist several additional stylistic or other elements which informed architectural order at the city that escaped the particular manner of analysis employed in the present study.

The interpretations drawn from the present study only work insofar as the data upon which it is based hold up to scrutiny. As previously stressed, the data utilized in this study suffer from several faults, most pressingly the proclivities of scholarship removed from the present by nearly a century, but also simple matters such as completeness and consistency. Many structures of Mohenjo-Daro are under-reported or omitted form the records, and while I did my best to integrate multiple lines of evidence in the analysis, there are parts of the city on which I was ill informed, and which were represented only by figures on a map. Likewise, in spite of earnest and longstanding attempts, and goodwill from both sides, I was not able to access the unpublished scholarly research on Mohenjo-Daro by the Aachen Research Project, research that is explicitly focused on the developmental matters of the city's architectural record (G. Toubekis, personal communication 2009). While I hold that the conclusions of the present study have been derived through a rigorous qualitative assessment of the available sources, such findings should ultimately be examined in light of the architectural analysis of Jansen and colleagues (RWTH Aachen Moenjo-DaroCD-Rom Project), once available, especially for their potential to highlight the chronological shortcomings of the published data, and, when political conditions permit, against the actual civic remains of Mohenjo-Daro itself.

Nevertheless, the results of this study are important for future analysis of the architectural and civic material of other Harappan cities. While Mohenjo-Daro currently comprises the most complete record of civic and architectural information for large Indus Civilization cities, other cities wait to be fully described architecturally, and numerous smaller Harappan towns exist which can be investigated for correlations or corrections on the patterns advanced herein. The patterning of civic architecture and the sharing of selected civic elements has yet to be explored in other urban contexts. Such investigations might also inform whether or not Mohenjo-Daro presents as a typical Harappan city. Additional aspects of the centralizing and decentralizing tensions within Harappan cities can be explored to refine our understanding of the likely numerous parameters of the civic dimensions of Harappan society; matters pertaining to production, ethnicity, and numerous other qualities can be investigated within the rough neighbourhood framework presented herein. It would be particularly interesting to understand the role, if any, the distinct urban neighbourhoods played as a means of
fostering or maintaining extramural identities in light of recent research indicating numerous foreign origins of individuals buried at Harappa (Valentine et al 2015).

6.4 SYNOPSIS

The close reading of the available sources on Mohenjo-Daro and analysis which it enabled have revealed previously unknown or unacknowledged dimensions of the urban structure of this most iconic Indus Civilization city. While Mohenjo-Daro certainly appears, at least comparatively, as a city bereft of architectural differentiation, it is actually one that evinces numerous, yet subtle internal means of distinction. Mohenjo-Daro, like most other cities from most other complex societies, was spatially organized into discrete neighbourhood clusters. These clusters were primarily arranged around monumental complexes, centres which were likely focal points of local, elite-based identities, as well as of production and civic organization. Administration was facilitated through a standardized typology of public architecture which was embedded within such neighbourhoods, and which was pronounced most emphatically and prominently within the functional civic epicentre of the city - the Upper Town. The connection of the Upper Town to the various segments of the Lower Town is further demonstrated by the replication of monumental forms found in the former in diminutive or incomplete fashion in the latter. The iconic Great Bath and Stupa complexes are both reproduced in the Lower Town, and stylistic allusion to the Pillared Hall and possibly to the College of the Priests is also evinced.

The recognition of the urban structure of Mohenjo-Daro and the architectural and spatial elements by which it cohered demonstrates the value in the qualitative analysis of narrative-based data. Applying recent, and importantly, comparative-based theoretical frameworks to published information largely overlooked by means of its incompatibility with dominant quantitative analytical methods, has resulted in the generation of novel perspectives of the urban and social-political organization of this seemingly paradigmatic Indus Civilization city. Perhaps most importantly, the present study has allowed the urban dimensions of the Indus Civilization to be firmly embedded within broader comparative studies of complex societies, something from which the study of the Indus Civilization, as well as the archaeology of complex societies as a whole, will benefit.
APPENDIX A: THE LOWER TOWN EXCAVATIONS

The Lower Town consists of six main excavated areas, many of which are further divided into still smaller sections. These areas are the initial DK Area (which is effectively a conglomeration of the spatially discrete DK-A, DK-B, DK-C section), DK-G North, DK-G South, the Moneer Area, VS Area (divided into section A and section B), and the HR Area (again, divided into section A and section B). What follows in this chapter are brief discussions of these areas, and examination of their pertinent architectural and civic features. Rather than replicating the information effectively summarized in the initial reports (Mackay 1938; Marshall 1931a), this chapter presents the framework for a broad qualitative analysis of the Lower Town, and pays particular attention its distinctive features and patterns.

A.1 VS AREA

Named for M.S. Vats who led initial excavations in this part of the city in 1923 (Jansen 1993:60; Lahiri 2012:306-309), this sizeable part of the Lower Town occupies its lower west side, north of the HR Area, and quite a distance south and west of the of the DK-G and Moneer Areas, respectively (Figure A.1). In relation to the Upper Town, the VS Area sits to the east, directly opposite the L Area, and hugs the western edge of the Lower Town. It is demarcated from the HR Area to its south by an east-west depression that runs the width of this section of the Lower Town. Daya Ram Sahni, the archaeologist who succeeded Vats as the excavator of the VS Area (and later Director-General of the Archaeological Institute of India), understood this depression to signify a broad thoroughfare that in antiquity traversed the Lower Town (Sahni 1931a:214).

The equation of this depression with an ancient roadway is one of the more interesting corrections that have emerged from the later IsMeo-Aachen University Mission's reanalysis of the original reports. Jansen (1984:43) argues that this particular depression, at least in regions between the VS and HR Area, is actually part of the naturally varied topography of this part of the city. The sloping sides of this depression, leading upwards from its centre to the VS and HR areas, consist largely of architectural debris, in particular, structural terraces. This suggests that, rather than following along the limits of an already determined east-west thoroughfare, the VS and HR Areas gradually expanded
either *into* or *from* the space of the depression. Had there been a thoroughfare in this area prior to the emergence of the VS and HR Areas (and, to be certain, Jansen does not explicitly claim that such a

![Figure A.1 VS Area, Lower Town (after Marshall 1931).](image)

feature did not exist), over time the VS and HR Areas would gradually have appropriated this passage, a practice for which there is precedent in other areas of Mohenjo-Daro. Alternatively, the north and south ridges of this natural depression could have been built upon, and therefore served to highlight the natural topographic line of demarcation between these Areas.

The VS Area is divided into two sections. The larger is Section A, the southern part of which is located along the western edge of First Street, while the northern part extends from First Street westward almost to the sloping western edge of the Lower Town. Together, both parts of Section A contain seven blocks of architecture. Section B, by far the smaller of the two sections, comprises two blocks opposite the southern extremity of Section A, on the east side of First Street.
A.1.1 VS Area Section A
A.1.1.2 Block 1

Figure A.2 Block 1, VS Area, Section A (after Marshall 1931).

Block 1 is comprised of Houses I - VII and is bordered by Lane 1 to the north and First Street to the east (Figure A.2). The most southerly of these is House I, which Sahini (1931a: 215) described as a "substantially built structure of much larger size than the common run of private dwellings in this city." Although badly eroded (the southern limits of the structure could not be ascertained), enough of it was preserved to note that it contained nineteen rooms, was multistoried, of exceptional width (approximately 44m), and sported unusually large rooms and a large, central courtyard. Sahni (1931a:215-216) assigned this House to the Intermediate Period.

What presently is divided into Houses II-V was, according to Sahni (1931a:215), initially a single structure measuring approximately 26.5m x 19.6m. This complex, found directly to the north of House I, sported several external entrances in antiquity, the most prominent of which fronted onto First Street. As in DK-G South Block 1 (Section 5..), the main entrance of this large structure leads into a foyer with four sink pots and a well. In its initial incarnation (Intermediate Period), this structure boasted at least one large, open courtyard and two internal stairwells (Sahni 1931a:216-217).
A.1.1.3 Block 2

Block 2, directly to the north of Block 1, includes several distinct buildings (Figure A.3 and Fig.A.4). House VIII, which is located in the southern part of Block 2 (Figure A.3) and fronts onto First Street, is a long (32m) and narrow (c. 10m) building composed of 15 rooms, the most northerly of which was an open courtyard. While this building was similar to Block 1 in that it was equipped with a well alcove near its eastern wall, we remain unsure whether it also served as an entrance room, for all indications of external doorways have long since eroded (Sahni 1931a:218).

Directly north and northwest of House VIII is House XIII (Figure A.4). This large, multi-storey complex once contained 28 rooms, three of which were internal courtyards. Several of the large rooms in this house are surrounded by series of smaller rooms, not all of which appear to have been primarily residential in nature (for example, baths, dedicated stairwells). Of note is the spacious Room 76, near the northeast corner. This room contained evidence for windows and fragments of carved alabaster lattice, which Sahni (1931:219) presumed fit into the window recesses.

![Block 2 diagram](image)

**Figure A.3 Block 2 (South), VS Area, Section A (after Marshall 1931).**

Block 2 is also notable for what will become apparent as a rare arrangement at Mohenjo-Daro: a collection of smaller houses facing onto an open space. Accessible from its northeast and southeast
corners by alleys (Lane 1), this large open space (roughly 16.5m x 6m), is flanked on its southern, eastern, northern, and western sides by Houses X, XI, IX and XII, respectively (Sahni 1931a:221-222).

![Figure A.4 Block 2 (North), VS Area, Section A (after Marshall 1931).](image)

A.1.1.4 Block 3

Northwest of Block 2 is Block 3 (Figure A.5). This block is bordered by Lane 2 on its southern limit and by Lane 4 on its western edge. Lane 3 partially bisects the block in an east-west manner.
Although this block contains at least five architectural complexes, Sahni (1931a:222) notes that, at time of publication, only two Houses had been excavated, Houses XVIII and XIX. Both of these structures are bordered by Lane 3 to their south, and are separated from one another by a narrow lane (House XVIII is to the west of House XIX). While both Houses seem generally aligned with Lane 3, the lane that separates them becomes increasingly narrow as one heads north away from Lane 3, to the point where the two structures almost run into one another. How these structures relate to one another chronologically would certainly be interesting, for their opposing sides (west on House XVIII and east on House XIX) follow the orientation of Lane 4 and the northwestern wall of Block 3, respectively.

House XVIII is similarly portioned to Block 2, House VIII in that it is long and narrow (approximately 24m x 8m), and composed of multiple storeys and rooms, including internal courtyards (Sahni 1931a:222). House XVIII is, however, less internally complex. House XIX, on the other hand, contained two internal courtyards and a well in addition to evincing multiple storeys.

Directly south of House XVIII, Lane 4 meets an open space bounded on the east, south, and west by Houses XXI, XXII, and XXIII of Block 4, respectively. Again, a lack of chronological control prevents us from appreciating the historical relationships that characterized these spatial configurations,
but the presence of a deep excavation (DDIII) on this spot did confirm that the area is built on sundried brick filling, the material of the platform upon which this section of the city was built. Whether this area was used in antiquity as a plaza remains uncertain, but a possibility nonetheless.

This area of Mohenjo-Daro is most famous for the "VS Tragedy" (Possehl 2002a:206), which refers to the presence in Lane 4 between Houses XVIII and XXXIII of six skeletons, apparently left in situ at the time of these persons collective deaths. Sahni (1931a:222-223) postulates that the reason for their demise is likely owing to "the results of a tragedy." Sahni concludes that these remains date to a Period after the decline of political authority at Mohenjo-Daro.

A.1.1.5 Block 4

Block 4 is a very large area located west and southwest of Block 3 (Figure A.6). It is bounded on its south by Lane 2, on its east by Block 3, on the north by Lane 3, and on its west by Lane 5. The notable structures of this section of the VS area are Houses XXVI, XXV, and XXXVII.

Houses XXV and XXVI, the former directly north of the latter, were both created upon the foundations of a large house of the Intermediate I Period (Sahni 1931a:226-7). While Sahni (1931a:226-7) does not indicate in any detail the age distinctions between these two structures, he does claim that the slightly smaller House XXVI, formed from the southern portion of the large structure, is the older of the two. This structure lacks an internal courtyard, but contains an internal drain. It consists of 11 rooms, at least three of which Sahni determined to be so small that their only function could have been as storerooms. House XXV, on the other hand, in addition to being slightly larger than its southern neighbour, boasts an internal courtyard (Room 47) and evidence of an upper storey, but has no internal drain.
Figure A.6 Block 4, VS Area, Section A (after Marshall 1931).

While these two structures share a foundation and an encircling wall (at least the western wall), there is a semi-open space between the buildings (Room 51). This is accessible from the eastern lane that separates House XXVI from House XXIV; in theory, this lane also demarcates House XXV from House XXIII, but north of this open space alluded to above, this lane narrows to the point of being impassable. Although not enclosed within either House, this open space contained several large pots near the eastern limit of the building in an arrangement similar to that seen in the eastern-situated entrance foyers of Block 1.

The very large House XXVII borders upon the western wall of Houses XXV and XXVI to its east, with Lane 3 to its north and Lane 5 to its west. This structure consists primarily of a vast internal courtyard ringed with small rooms. Its surrounding walls measure approximately 34m x 20m, and the surviving rooms (primarily along the western wall and in the northeastern corner), averaged about 3 m in width (Sahni 1931a:228). Although remnants of other possible rooms are evident in the centre of the building and possibly along the eastern wall, the vast majority of the internal space of this structure is devoid of internal partitions, similar to that witnessed in the open areas of Block 2 (this trend will appear again in Block 7). A deep trench (DDI) sunk into the southern end of the courtyard did not reveal any buried structures, but did reveal further evidence of the brick platform upon the VS Area is built (Sahni 1931a:227-228).
A.1.1.6 Block 5

Block 5 consists of the remains of possibly three structures (Houses XXVIII, XXIX, and XXX) on the south side of Lane 2 (Figure A.7), for which we have little detail. Architectural information for House XXVIII is completely absent, but Sahni (1931a:229) designates both it and House XXIX to either the Late II or III Period. A total of nine rooms make up the the preserved portions of House XXVIII and House XXIX, aligned along the north edge of the former buildings. House XXX appears slightly more architecturally complex, sporting a possible entrance courtyard on its north side (Room 13) surrounded by several small rooms. As with its eastern neighbours, House XXX lacks detailed architectural description. The majority of the section of the report dealing with Block 5 is instead devoted to a possible hoard of copper objects (seven axes or celts and three dishes) recovered in Room 11 (Sahni 1931a:129-130).

A.1.1.7 Block 6

Sahni (Sahni 1931a:230) eloquently introduces Block 6 with the comment that it consists of "two structures of mouldering brick." This Block (Figure A.8) is situated at the far western limit of the VS Area. Opposing House XVII of Block 5 on the west side of Lane 5, and abutting Lane 3, are Houses XXXI and XXXII of Block 6, as well as several additional rooms whose relationship to House XXXII is uncertain. Sahni (1931a:230) notes that these 'floating' rooms were part of a "solidly built structure" contemporary with House XVII.
House XXXI appears to be in a state of preservation too fragmentary to discern its layout. House XXXII is notable for the row of small, similarly sized rooms along on its eastern side, which stand in contrast to its larger central space.

A.1.1.8 Block 7

Block 7 is situated north of Lane 3 and west of Lane 4 (Figure A.9). This section is interesting in that, like Blocks 2 and 4, it is a large area devoid of any structural remains (Sahni 1931a:230). Unlike the small structures which ring the open space in the south of Block 2 or those that form the western limits of House XVII in Block 4, however, no buildings seem to face directly onto the open space of Block 7. This space is flanked by two large structures, however; House XXXIII on its eastern flank, and a large structure consisting of Houses XXXIV - XXXVIII on its western one.

![Diagram of Block 7](image)

Figure A.8 Block 6, VS Area, Section A (after Marshall 1931).

House XXXIII, which has Lane 4 on its east, is very poorly preserved in its northeastern and southwestern sections. These are so badly eroded that the assignation of their opposing segments (that
is, the northwestern and southeastern sections) to a single structure is quite unclear (Sahni 1931a:230-231). Sahni assigned this structure to the Intermediate Period.

Houses XXXIV-XXXVIII, which appear to be interconnected, at least by means of a shared perimeter wall, also have their origins in the Intermediate Period but subsequent modification and a lack of thorough excavation have resulted in their being little understood, even by typical Mohenjo-Daro standards (Sahni 1931a:231). As Sahni (1931:232) claimed of one of these structures "[t]here is nothing of interest to be recorded..."

![Figure A.9 Block 7, VS Area, Section A (after Marshall 1931).](image)

**A.1.2 VS Area Section B**

Discussion of that part of the VS-Area designated section "B" is unfortunately omitted from the report (cf. Possehl 2002a:206). The accompanying maps, however, allow a basic description of the layout of the relevant structures.

Section B comprises only two blocks, both of which share their western boundary with the eastern edge of Street 1 (Figure A.10). The larger and more southerly one, Block 1, is separated from Block 2 on its north by the eastward continuation of Lane 1 in Section A. With the exception of a few outlying rooms on its eastern flank, all of Block 1 is encased within a perimeter wall that appears to be
very thick, perhaps on par with the northern wall of Block 1, House 1 in Section A (Sahni 1931:215). This encasing wall is broken near the block’s southwest and northwest corners, allowing access from Street 1 to two separate structures (House I on the south, and House II on the north).

House I comprises the vast majority of Block 1. According to the numbered rooms on the report plans, its contains eleven discrete spaces. The largest and most accessible of these in relation to the entrance are located in central and southern parts of the structure (Rooms 13 and 18, respectively). A collection of smaller cells run along the eastern wall of the structure beside these large spaces, while an ill-defined room and what appears to be a stairway project beyond the eastern wall of House I.

![Figure A.10 Blocks 1 and 2, VS Area, Section B (after Marshall 1931).](image)

The northern portion of House I is composed of three enclosed spaces. On the east, Room 11, a room that is many times longer east-west than it is north-south, leads into Room 10, a sizeable room with pavement in its southwest corner and what may be two doorways on its eastern wall, leading to a space beyond the confines of the block. To the west of Rooms 11 and 10 are Rooms 7, 8, and 9, all of which collectively form a large, unitary space. The only well in House I is at the junction of Rooms 7 and 9. While this well is near the street, its placement in the northwest of the structure is not in keeping with the dominant pattern of eastern well placement at Mohenjo-Daro.
House II is comprised of five internal spaces. Rooms 1 and 6, each of which form narrow and long rooms or passages on the west and south side of the house, respectively, meet at the southwest corner of House I, where the only doorway of the structure is located. Room 4 is arrayed similarly to Room 1, but located on the eastern side of the structure. Unlike Room 1, it does not appear to articulate directly with Room 6.

At the far eastern end of Room 6, a doorway leads into Rooms 2 and 3, which together form the innermost space of House II. These rooms, along with rooms 1 and 6, have polished brick paving, a feature in Mohenjo-Daro most commonly associated with presumed bathing platforms.

North of Lane 1 and directly across from the northern face of House II is Block 2. Like certain other blocks in Mohenjo-Daro, this is composed of a single structure, House III. Its sole entrance seems to be located on its south side, providing access to Lane 1. The entrance opens onto a paved foyer (Room 1), which itself opens onto a larger central space (Room 4), also paved. Smaller rooms are located in the northwest corner (Room 5) and along the structure's eastern side (Rooms 3 and 2). In contrast to the its southern neighbour, but, as will be made clear, in alignment with general Mohenjo-Daro pattern, the sole well of Block 2 is placed in its southeast room.

A.2 HR AREA

"[S]ituated in the south quarter of the main group of mounds" (Hargreaves 1931:176), the HR Area, so named for excavator H. Hargreaves, is large, complex, and the setting for some of the more remarkable architectural features of the Lower Town (Fig A.11). As Possehl (2002:197) notes, the HR Area has, since its initial archaeological exploration, provided the most salient architectural examples for the existence of entrenched social differentiation at Mohenjo-Daro, an understanding that is largely at odds with the general narrative of the egalitarian emphasis of Indus Civilization social structure.

This very large section of the Lower Town (Figure A.11) is almost comparable with DK-G in terms of its areal extent (Figure 1.1). It is located on the southwestern extremity of the Lower Town, south of the east-west depression that spans the width of the Lower Town, and is directly south of the VS Area. It is partitioned into two main sections that are separated by the north-south First Street that, as stated in section 4.5, runs at least as far north as the upper limits of the DK-G Area. To the east of First Street is HR-A section, and to the west the larger HR-B section. Several north-south streets and east-west lanes segment these sections into several smaller urban parcels.
It appears that the initial settlers of the HR Area took advantage of the varied natural topography in this section of the city, which is between the long east-west depression at its north already described, and a similar one to its south. With the ongoing architectural accretion and enhancement of these boundaries over time, the HR Area "would appear to have belonged to a portion of the town which formed a precinct apart from the rest" (Jansen 1984:43).

Figure A.11 HR Area, Lower Town (after Marshall 1931).

A.2.1 HR Area Section A

This section of the HR Area comprises four blocks of architecture (Figure A.12). Block 1 is located at the extreme south of this part of the HR Area, and seems to consist of a single mass of integrated buildings that are collectively designated House 1 (Figure A.13). This House is east of Deadman's Lane and south of South Lane. The features beyond its eastern and southern limits are poorly defined or understood (Hargreaves 1931:176).
Figure A.12  HR Area, Section A (after Marshall 1931).

House 1 has a very unusual arrangement. As Hargereaves (1931:176) stated, the most conspicuous quality of this complex is that the northern section is quite elevated relative to its southern section and also seems differentially aligned. These differences in elevation and alignment complements the seeming difference in layout of the northern and southern sections of this House. The northern section (consisting of Rooms 17-30, or possibly only 17-26) is dominated by a spacious, centrally-placed room (Room 18) flanked by smaller rooms on both its eastern and western sides, while the southern section is made of of three asymmetrical groupings of rooms, interconnected only by the presumed southern entrance to the complex.
One of the southern groupings seems to have served as an axial passageway connecting the northern and southern parts of this complex. Its primary room is the narrow Room 13, which begins at the presumed entrance of the complex and terminates at Courtyard 10, which itself articulates, in an indirect manner by means of opposing eastern and western stairways topped by baffle entrances, with the large Room 18 to the north. This particular and highly restricted manner of architectural accessibility, although commonly evinced in the monumental or palatial architecture of other cultural traditions, is highly unusual at Mohenjo-Daro. This distinction is emphasized by the unusual brick ring set into the centre of Courtyard 10, whose utilitarian or symbolic purposes remain unknown.

Immediately north of Block 1 across South Lane is Block 2 (Figure 4.14), which is also bounded by Deadman's Lane to the west and High Lane to the north. This large agglomeration of architecture is partitioned into four Houses (II-VI) whose origins lie in the Intermediate Period. Like many other large structures at Mohenjo-Daro, there is evidence that they were rebuilt and subdivided during the later days of occupancy at Mohenjo-Daro (Hargreaves 1931:179).
Figure A.14 Block 2, HR Area, Section A, with House V (in grey) of Block 4, HR Area, Section A (after Marshall 1931).

House II is set within the western portion of Block 2, and has weathered the millennia better than House IV to its east, which is largely dismantled. Much as in House I, Block 1, this structure features a northern courtyard accessed by means of a north-south passageway (Room 5), although this particular passageway is not axially aligned as in the former house, rather being situated along the eastern flank of the House. The northern limit of Room 5 is coincident with an east-west wall that effectively demarcates this structure into a southern section, marked by spacious, interconnected rooms, and a northern one, characterized by a large courtyard and a series of quite small rooms along the western flank of the building. These smaller rooms include a well and evidence for additional stories. One of these small rooms, by virtue of its contents, seemed to have served as as storage area (Hargreaves 1931:179-180).

Sharing a western boundary along Deadman's Lane with House II is House III. In addition to being contiguous with House II on its western side, House III borders House II on the former's northern and eastern sides. This House contains two courtyards, one quite large (Room 13) and one more diminutive (Room 17). The smaller one leads into a small chamber (Room 18) on the southwest corner of the structure that contains a well, which is almost directly opposite the well in House II (Hargreaves
1931:180). As witnessed in the DS and DK-G Areas, the well was easily accessed from what is presumed to be the structure's main entrance (in this case, from the west by means of Deadman's Lane).

The northern section of House III displays unusually thick walls with built in drains, likely indicating the existence of an upper storey complete with bathing platform or some other water-related feature. The presence, in the most northerly situated of the rooms, Room 15, of "well-fitting earthenware drain-pipes, with spigot and faucet joints, embedded in masonry" (Hargreaves 1931:180) lends credence to this possibility. The masonry into which the drain is embedded connects to the subfloor drain, which snakes its way through the House until it exits on the western side.

Deadman's Lane does not extend beyond the northern limits of House III, where it is abuts House V before veering sharply to the west to meet First Street. The northern trajectory of Block 2 north of House III is continued instead by House VI. While elements of this House date to the Intermediate Period, Hargreaves (1931:181) claims that most of the structure can be placed within the Late Period. Perhaps an indication of such a temporal discrepancy is paralleled in the lack of alignment of House VI with its southern neighbour. House VI is oriented more to the northwest than the remainder of Block 1. Had Deadman's Lane extended past House III in antiquity, it would have been cut off by the erection of House VI, whose northwest corner rests on House V. North of House VI is High Lane, which travels east-west except, like Deadman's Lane, where it navigates House V (in this case, travelling north for a short distance) before adjoining First Street. While quite diminutive in comparison with its southern neighbour, House VI likewise has exceptionally thick walls that would have supported additional storeys, an interpretation augmented by the presence of stairways in this structure.

The nonconforming alignment of House VI and its rectangular general morphology left a wedge of space (tapering towards the west) between it and House V. This area was notable for remnants of Intermediate Period architecture (Hargreaves 1931:182). The large area east of House VI and northeast of House III (and directly north of House IV) was found to contain a deep infilling of bricks (possibly an ancient plaza?).

North of High Lane is Block 3, which, while not as extensive as either Blocks 1 or 2, harbours an exceptionally large structure in House VIII (Figure A.15). In a passage that betrays the frustration that must have accompanied his attempts to understand Mohenjo-Daro architecture, Hargreaves (1931:182) exclaims that this structure was "at once well-preserved, and present[s] an intelligible plan," a claim not often replicated by early excavators of the city. As with most other large structures at
Mohenjo-Daro, this building dates to the Intermediate Period, had multiple storeys, and contained at least two large courtyards. Unlike the pattern demonstrated in Block 1, House 1, or in the houses of Block 2, where internal courtyards were only accessible by traversing several rooms, the first space (Room 5) that one enters by means of House VIII's main entrance from High Lane is a courtyard. This room, in turn, opens directly onto the largest of the courtyards, Room 18.

In addition to serving as an entrance room and the point of accessibility for the rest of the House, Room 5 also articulates with Room 6, a small chamber in which a well is located, continuing the trend that wells are often placed close to buildings' entrances. The large internal courtyard, Room 18, is flanked on its southern and eastern sides by a series of small "mean and insignificant", cell-like rooms (Hargreaves 1931:183). Materials for a bathing platform and horizontal and vertical earthenware pipes are evident in the several of these rooms (Hargreaves 1931:182).

Room 18, which forms the nucleus of House VIII, also articulates with one room to the north (Room 14) and, by means of said room, to two others west and northwest of Room 14 (Rooms 15 and 16, respectively). Unlike the small rooms that surround the courtyard on the eastern and southern sides, these rooms are sizeable; Room 16, for example, is almost as spacious as Room 5, the first of the internal courtyards. Later additions in the Late Period subdivided Room 16 and cut off its access to the rest of House VIII (Hargreaves 1931:183).

Of the more notable, yet subtle distinctions of House VIII are the large sizes of the bricks used in the southern wall of Room 5 (35.56cm x 17.78cm x 8.89cm, in contrast to the far more commonly utilized bricks which measure 29.84cm x 14.6cm x 6.35cm), and the apparent inclusion of gypsum in the mortar for the entirety of the structure (Hargreaves 1931:183).

The matter of gypsum mortar serves to highlight the differences of opinions of the excavators and the rapidly changing knowledge of architectural matters over the course of the Mohenjo-Daro excavations. Hargreaves insists that the use of gypsum as mortar is particular to House VIII, perhaps serving to distinguish this structure and its interpretive importance. Marshall, however, disagrees, and in an editorial note he claims "[i]t has since been ascertained that gypsum is used in combination with mud in most, if not all, of these buildings" (Hargreaves' (1931:183). Whether this claim related specifically to the HR Area or Mohenjo-Daro as a whole is unclear, but the discussion was taken up under Mackay's tenure as director of excavations. He claimed (Mackay 1938:162) that what was initially considered a high degree of gypsum in mortar at Mohenjo-Daro was later revealed to be later, natural intrusions into the mortar in the form of selenite. The majority of the mortar at Mohenjo-Daro,
contra Marshall, was mud-based (1938:598). However, the purposeful use of a specific gypsum cement was attested in Late Period repointing of joints in structures along Central Street in the DK-G Area. As will be discussed in sections 4.51, 6.1.7, 6.1.9 and 6.1.10, this stretch of Central Street is notable for the collection of architecturally distinct structures, such as 6A, 8, and 8A in DK-G South, and Block 18 in DK-G North. Such distinction would seem to accord with Hargreaves' initial claims on the notable nature of House VIII.

![Diagram of House VIII](image)

**Figure A.15** Block 3, HR Area, Section A (after Marshall 1931).

In addition to the implications of its architectural (and assumed social) distinctions, House VIII is also analytically important as it features in one of the few published studies of the Aachen Mission's structural chronology analysis of buildings at Mohenjo-Daro (Jansen 1984). This analysis demonstrates that this structure was initially comprised of rooms 13-16, which in Marshall's report account for the far northern reaches of House VIII. As the structure is portrayed in the initial reports (and as is illustrated in Figure A.14), the southwest exterior wall of Room 15 forms the northeastern boundary of a short, unnamed lane that serves to separate House IX on the north from House VII (and the western portion of House VIII) on the south. As the original core of House VIII only extended as far south as this lane, there is little reason to doubt that, during the first phase of House VIII, this lane
did not extend still further to the east (Jansen 1984:46). At least three additional periods of expansion occurred between the original and final forms of House VIII (Jansen 1984:46-49).

The architectural history of Block 3 seems tied to that of House VIII. At some point either after or during the western and southern extension of House VIII, House VII was added in a single construction episode, and House IX over the course of two construction episodes, in an east to west fashion (Jansen 1984:46). In addition to providing a degree of developmental finesse to an otherwise unreliable narrative of architectural growth at Mohenjo-Daro, this revised chronology allows examination of two important and novel interpretive issues. The first of these is the architectural primacy of House VIII for Block 3. It definitively preceded the other structures in the block, and as the younger structures were structurally dependent upon House VIII, we are obliged to question whether such architectural relations are coupled with corresponding social ones for the people residing in House VIII and its surrounding buildings. The second issue is that we need to critically examine one of the implicit guiding principles of Indus Civilization urban planning; namely, that streets operated to form the spatial framework by which the city was ordered. The fact that the growth of Block 3 from the east to the west took place in separate stages (specifically witnessed in the construction of House IX) runs counter to the established wisdom of the pre-planned orthogonal layout of the city. The example of Block 3 indicates that it was the spatial patterns of pre-existing construction practices that largely accounted for the streetscapes of Mohenjo-Daro. Jansen (1984:46) states that the fact that the architecture following the course of First Street would appear to have been built last, [is] an indication that this street line did not serve as an urban planner's orientation system for the structural expansion of the town but rather that the architecture was simply aligned along this axis.
Unfortunately, Hargreaves (1931:184) only mentions Block 4 (Figure A.16) insofar as it contains a cesspool at the junction of Deadman's Lane and First Street. Houses X-XV, all of which comprise the area between Deadman's Lane in the east and First Street in the west, are omitted without explanation from the report. While little definitive or novel information can be gleaned from the report maps, some generalizations can be made about these structures.

All of the houses of Block 4 are smaller than those in Blocks 1-3 of this part of the HR Area. Likewise, it appears as if single structures account for the entire width of Block 4; that is, the same house structures border on both Deadman's Lane and First Street. This is a different situation than in other sections of Mohenjo-Daro, which are more than one discrete building wide. Lastly, most of the structures in Block 4 seem dominated by large internal spaces juxtaposed with smaller, cell-like rooms set on the east or west of the internal space of the structures.
A.2.2 HR Area Section B

As previously noted, section B of the HR Area is far larger than the HR-A section. It is bordered by First Street on the east, and by the sloping edge of the Lower Town mound on the west. Lane 3 runs along most of the southern stretch of this section.

Figure A.17 HR-B Area, sections HR-B 1, HR-B 2, and HR-B 3.

Although it is the larger part of the Area that was named for him, Hargreaves only partially excavated the HR-B section, specifically the northernmost 45m of the west side of first street, comprising parts of what is now known as Blocks 1 and 2 (Sahni 1931b:187). For reasons which are left unexplained in the reports, Sahni, the excavator of the VS Area (see section 4.1), took charge of the excavation of the remainder of the HR-B Area and authored the chapter in the Marshall report (Sahni 1931b).

Owing to the not inconsiderable size of the HR-B section, I have divided it into three more-or-less equally sized agglomerations of architecture for the purposes of the present discussion (Figure
A.17). I have labelled these sections HR-B 1 (Section A.2.2.1), HR-B 2 (Section A.2.2.2) and HR-B 3 (Section A.2.2.3).

A.2.2.1 HR-B 1

The easternmost subsection of HR-B is bounded on the east by First Street, on the west by Street 2, and on the south by Lane 3. Lanes 2 and 1 demarcate a larger central section from small southern and northern ones, respectively. Blocks 1, 2, and 3 are all found within this subsection.

![Figure A.18 Block 1, HR Area, Section B (after Marshall 1931).](image)

The four (perhaps only three) Houses within Block 1 all date to the Late Period (Sahni 1931b:188). A well inside the entrance of House I, the most northerly of these structures, displays evidence periodic rebuilding, likely to keep pace with the gradual increases in height of the structure in which it is placed. This well, which accompanied a bathing platform, was composed of standard Indus wedge-shaped bricks with the exception of its upper courses, for which regular rectangular bricks were used. The ballast of Room 3 in House I is comprised of burnt brick nodules (Sahni 1931b:189).

Block 2 (Figure A.20), located south of Block 1 between Lanes 1 and 2, is the largest concentration of contiguous architecture in the HR Area, and measured roughly 75.5m in length by 44m in width (Sahni 1931b:189). As with the majority of the remaining buildings at Mohenjo-Daro, the structures from Block 2 exhibit a mix of predominantly Intermediate and Late Period architecture, the latter largely derived from or built upon the later. The trend witnessed in other areas of the internal
subdivision of larger Intermediate Period houses into several Late Period ones is also present in this part of the HR Area; however, this particular subsection of HR-B is notable for the scale of such processes. Bearing in mind all the previously mentioned caveats about the difficulties with the chronological framework of Mohenjo-Daro, the initial excavators of this part of the city postulated that the vast majority of Block 2 (all but Houses VI-VIII) comprised a single structure.

The centre and focal point of this structure would have been Room 70 of House V, a massive, raised, and almost entirely enclosed courtyard (Sahni 1931b:190). Although reconstruction of access patterns is not without issues (see section...), several small, cell-like rooms of the same Intermediate Period age as Room 70 line the southern and eastern faces of the courtyard. House V articulated directly with First Street by means of the eastern rooms, one pair of which (Rooms 74 and 75) feature short stairways leading up from the street level.

Directly north of and running parallel to the width of Room 70 is a long, narrow hallway that opens onto a series of small rooms. In addition to containing one of the three or four wells that may have originally belonged to this complex, these rooms seem to have served an antechambers to two very unusual rooms: 54 and 49.

Figure A.19 Block 2, HR Area, Section B (after Marshall 1931).
Room 54, which is north of Room 70 and likewise separated from First Street on its east by a row of small rooms, is the larger of the two at roughly 12m in width by 7.6m in length. During excavation, it was revealed that the doorways of this room were bricked in and the room itself was entirely infilled, possibly to create a base or support for a later superstructure that no longer exists. Further excavation revealed that this room originally articulated on its north side with Room 49 by means of a corbelled doorway; importantly, Room 49 was similarly infilled (Sahni 1931b:191).

Room 49 has a number of distinctive architectural features. It is remarkable among the buildings at Mohenjo-Daro in that its corners sport no right angles, making for a rather odd, slightly parallelogram layout (Sahni 1931b:191). The walls of the room contain evidence of substantial cross beams running north-south. Despite the corbelled archway that connected this room with Room 54 to the south, Sahni (1931b:191) believed that the main entrance to this room was from the east, by means of Room 50, a small chamber that lay between Room 49 and First Street.

Important evidence that may help to reveal the purpose of Room 49 is found in the many stone rings, apparently column bases, that were recovered on the floor of the southern portion this room. Sahni (1931b:191) makes the point of differentiating these rings from the undulating types common at Harappa, but implies that they are of the same category of object as the latter. Carved capitals, "with spiral volutes resembling Ionic capitals" were also located in Room 49, as well as the nearby Rooms 50 and 47 (Sahni 1931b:191).

North of Room 49 are several rooms attributed to the Late Period, but which Sahni (1931b:192) suggests were two large rooms during the Intermediate Period. This interpretation is seemingly based not only on the similarity and continuity of wall construction, but on the manner of paving recovered at levels comparable to the Intermediate Period floors in Room 49.

House IX is located directly west of House V, specifically bordering Rooms 57, 59, 60, and 70 of the latter structure, and, along with House XIII comprised the western wing of the large structure during the Intermediate Period, terminating at Street 2. Sahni (1931b:195) notes that only four distinct Rooms (66, 85, 86, and 87) in this house had been thoroughly excavated to Intermediate Period levels. Rooms 85, 86, and 87 form a north-south line of small chambers that connect to a long, "L" shaped hallway through wide doorways on their western sides. This "L" shaped hallway contains a well on its southern arm and acts as a mediating space between the rooms to its east and Street 2 to its west.
The other Late Period building on the west side of House V is House XIII, which, as Sahni (1931b:198) notes, "has come down in a much ruined condition." This House is linked by means of a drain channel with House V to the east.

The southern wing of the large Block 2 structure is encapsulated in Houses X-XII, which run east-west from First Street to Street 2, bordered on their southern side by Lane 2. The majority of their internal structure apparently resulted from partitioning in the Late Period. The easternmost of these, House X, is notable for the presence of a brick-lined gypsum plaster pit kiln in Room 135 and possible dying vats embedded into the floor of Room 134. Sahni (1931b:197) notes that the Late Period wall dividing these rooms runs over the top of one of these vats, but he does not make clear if the floor itself can be correlated with the Intermediate Period. House XII, the westernmost of the southern wing structures, exhibited a paved floor (Room 107) similar to those in Houses V and IX. Room 104, which served as the entrance foyer articulating this House with Street 2, contained a column ring similar to those recovered from House V, Room 49 (Sahni 1931b:198).

If Sahni and Marshall's initial inclinations are correct, this Block 2 complex comprising Houses V, and IX-XIII would almost have equalled in size the massive structure comprised of Blocks 18 and 19 in the DK-G North Area (described in section 4.5). Additionally, and unlike Blocks 18 and 19, this complex had primary and unmatched frontage along the largest thoroughfare in Mohenjo-Daro, First Street. In addition to its massive size, the unusual architectural configurations that characterize this complex, such as distinct paved floors, raised internal courtyards, pillared rooms, the use of smaller chambers to mediate access to the internal core of the complex, and widespread evidence suggestive of elite craft goods and production (present in Houses VIII, XII, Sahni 1931b:194-196, 198), work together to encourage the conclusion that Block 2 comprised the architectural locus of an elevated social symbolic function. As Sahni (1931b:190) stated "[t]he spaciousness of its courts and general massiveness of construction suggest that this building could not have been an ordinary private house." I would venture further, and state that the Intermediate Period complex that comprised most of HR-B, Block 2 meets the vast majority of the etic archaeological criteria that designate a palace complex (cf. Christie et al 2006; Kolb 2012:150-153).

As Sahni's (1931b:190) comment makes clear, the view that this particular architectural complex corresponds with the seat of a civic authority at Mohenjo-Daro is not a new one, although not one rigorously pursued through subsequent archaeological research. A recent exception to this is the work of Massimo Vidale (2010). Vidale's reanalysis of the the HR-B Area, in which both the artifactual
and architectural signatures of Block 2 were scrutinized, concludes with support for Sahni and Marshall's initial interpretation, but with the important caveat that the entirety of the HR-B Area comprised a spatially-extensive palace complex (see Chapter 8 for an extended discussion of this perspective).

![Figure A.20 Block 3, HR Area, Section B (after Marshall 1931).](image)

Block 3 (Figure A.21) lies directly south of Block 2, and comprises Houses XIV - XVII. It is separated from Block 2 by Lane 2, and its eastern and western borders are First Street and Street 2, respectively. As with Block 1 of this subsection of the HR-B Area, Block 3 largely dates to the Late Period. An interesting holdover from the Intermediate Period is found in House XIV, Room 1. This room, which has been attributed to the Intermediate Period phase of the building's existence, forms a long, narrow, north-south verandah on the eastern side of the block that is set several metres lower than the Late Period phase that comprises the remainder of the structure. This disparity is due to the much lower elevation of First Street during the Intermediate Period than in the Late Period (Sahni 1931b:199).

**A.2.2.2 HR-B 2**

This subsection is the central of three that comprise HR-B Area. It is framed by Steet 2 on the east, Street 3 on the west, and Lane 3 on the South. Lanes 7 and 5 further divide this section into smaller architectural agglomerations. Blocks 4 and 5 make up this part of the city.
Figure A.21 Block 4, HR Area, Section B (after Marshall 1931).

Block 4 is located northwest of Block 3, opposite the southwest corner of Block 2 across Street 2, south of Lane 4 and Block 5, and north of Lane 3 (Figure A.22). It is separated form Blocks 8 and 9 to the west by Street 3. In contrast to most of his other descriptions of the HR-B area, Sahni (1931b:201-202) does not provide any indication of the relative ages of the buildings or parts thereof in Block 4. Given the presence of architectural features that elsewhere correspond with the Intermediate Period, however, we maybe fairly confident in assigning most of the structures in this block to the Intermediate Period.

The dominant structure in Block 4 is House XVIII, which occupies all but the western fringe of the block. This House, which takes the form of a large "inverted letter L" (Sahni 1931b:201), measures approximately 39m on its longest (western) side, and 27m on its next longest (northern) side. It features a large courtyard (Room 8) accessible directly from Street 2 and Lane 3. Adjacent to the latter entrance is a very small cell that Sahni (1931b:201) interprets as a guard room. As with other large structures at Mohenjo-Daro, House XVIII evinces multiple stories, a well placed near a main entrance, and a series of small rooms emanating from a large, open space.

A large plaza or courtyard comprises a significant portion of the western side of this structure. However, unlike the courtyard mentioned above, this room is not directly accessible from the outside. It is, in fact, the most internally-situated room in the House XVIII. This central courtyard has a line of small rooms on its eastern and southern sides, slightly larger ones on its north, and is bordered by the backs of Houses XIX-XXII to its west. A narrow north-south space may have linked these structures to
one another, as well as to House XVIII. The intimate access afforded these small western structures to House XVIII led Sahni (1931b:202) to interpret them as in some manner attached to the larger structure. In this sense, the configuration of Block 4 shares much with the intersection of Blocks 3 and 4 of the VS-A area (Section 4.114 and 4.115), exceptional only in that the courtyard with which the separate houses articulated formed the nucleus of an enclosed, rather than open, space.

Block 5 (Fig. 4.22) is located directly north of Lane 4 and Block 4, and likewise shares Street 3 as a western border. It lies west of Blocks 1 and 2, across Street 2. This block, like the others in the HR Area, contains a number of quite sizeable structures and shares traits with the Blocks 2 and 4 of the VS-A Area (Section 4.1) in that several of its constituent buildings are long and relatively narrow.

![Diagram of Block 5, HR Area, Section B](image)

**Figure A.22 Block 5, HR Area, Section B (after Marshall 1931).**

House XXIII, located in the southeast corner of Block 5, is of particular interest (Figure A.22). This "complete and well built dwelling building of the Intermediate Period" (Sahni 1931b:202) measures approximately 19m north-south, and 15m east-west. Its walls are particularly thick, and internally demarcate 14 separate rooms. With the exception of a large, centrally-situated room, all of the rooms are relatively small, and ring the central one on all sides. This House evinces multiple stories, as well as a second storey verandah placed directly above and sharing a perimeter layout with
the large central room on the ground floor. The likely entrance of this structure faced directly onto Street 2, and contained a well (Sanhi 1931b:202).

Bordering the southwest of House XXIII is House XXIV, the layout of which is largely unintelligible, and which was assigned a Late Period date (Sahni 1931b:203). Immediately to its north is a large open space that Marshall's report does not address. This space, which lies south of House XXXI, and east of Houses XXXIX and XLI, appears to form a similar secluded plaza or other enclosed semi-private space analogous to that provided by the central courtyard of House VIII in Block 4 to the south. However, owing to the lack of detail available for this section of Block 5, we can ascertain little about it with any degree of confidence.

Lane 6 is a short, mainly north-south alleyway tucked between two stretches of architecture west of the upper part of Street 2 (Figure A.24). The structures that flank Lane 6 (XXVI and XXVIII on its western side and XXV and XXVII on its eastern side) Sahni summarily dismissed as "feeble structures of the Late II Period" (Sahni1931b:203). At the northern terminus of Houses XXVII and XXVIII, Lane 6 creates a right angle and continues east to meet Street 2. North of the east-west portion of Lane 6 is House XXIX, a large structure of the Late II Period that is built on and of Intermediate Period materials (Sahni 1931b:203-4).

House XXX is another building of note in Block 5. It is a long, relatively narrow structure wedged between two other long, relatively narrow structures and accessed by means of Lane 7 on its western side. This almost rectangular House is oriented approximately north-south, and is roughly 24m in length and 11m in width. Like House XXII, the walls of this structure are exceptionally thick, and likely served as foundation walls to support a superstructure that has not survived. This interpretation is strengthened by the fact that the nine rooms of this building were infilled and, as Sahni reports, no doorways for the chambers of this structure have survived (Sahni1931b:204). The view of the excavator was, based on the exceptionally large foundation walls which comprise its remaining architecture (for which no measurements are provided), that this structure served a sacred function, although the precise nature of that sacredness is not unarticulated.

Directly west of House XXX, and extending south along Street 3 until the terminus of Block 5 at Lane 4, is an interesting collection of quite small interconnected houses that share an almost uniform overall orientation and internal layout. These structures (Houses XXXII to XLVII) are all encased within a contiguous block of architecture. With the exception of the southernmost of these structures (XLII, XXXIX, XLI, and XL), the Houses are arranged in direct opposition, separated by a central
alley that bisects the complex of which they are a part into almost identical halves (Sanhi 1931b:204-205). Most of these structures consist of only two distinct rooms with the one fronting the internal alley by far the smaller of the two. Sahni (1931b:205), drawing an analogy from contemporary Indian commercial sectors, argued that this complex represented a similar activity at Mohenjo-Daro, and that such buildings are ancient Harappan shops.

The commercial, or at least, non-residential or administrative nature of activities in these buildings is implied by at least one example, in Room 103 in House XLIII. In addition to housing a well (one of only two in this complex), this room sported a "neat brick paving" with depressions for holding ceramic pots. A proliferation of pointed base goblets was recovered from the floor of this room and from the sink pit adjacent to the House's entrance from Street 2. On the basis of such evidence, Sahni (1931b:205) argues that in antiquity this House served as a piau or water hut, common drinking establishments in historic South Asian bazaars.

**A.2.2.3 HR-B 3**

The final subsection of the HR-B Area lies to the west of Street 3, and comprises Blocks 6-9. Lanes 8, 9, and 10 further subdivide this mass into smaller units.

![Figure A.24 Block 6, HR Area, Section B (after Marshall 1931).](image)

Block 6 consists of a single, large, and little-understood building, House XLVIII (Figure A.26). This structure, which occupies the extreme northwest corner of the HR Area, was in such a state of decay that, outside from assuming its exceptional nature by virtue of its size, those who excavated it
were at a loss to explain it in any detail (Sahni 1031b:206). The coverage of this building in the Marshall report simply states that the majority of this structure consisted of a large courtyard in what was presumably the northern part of the structure, and "two or three rooms on the south side" (Sahni 1931b:206), one of which contained a well surrounded by a paved surface. The surviving southern perimeter wall of this structure has been shown to run perpendicular to Street 3 for at least 27m.

Directly to the south of the perimeter wall of House XLVIII stretched an area of Block 7 (Figure A.25) that Sahni (1931b:206) described as "devoid of any structures except portions of two or three small-sized rooms, apparently of the Late Period...and a thin carelessly built wall along Third Street." This space, which abuts Lane 8 on its southeast corner and House XLIX along the remainder of its southern flank, was only discussed further in relation to the small collection of artifacts recovered through its excavation. Owing to this lack of attention in the report, as well as the uncertain articulation of this space with its neighbouring structures, we cannot with any degree of confidence, speculate on its historical associations. However, the very fact of its existence should incite curiosity, especially as all other open spaces at Mohenjo-Daro are enclosed in a formal or associative manner to adjacent architecture. In a very densely occupied city where space seemed to be at a premium, the presence of unattached open space demands further attention.

![Figure A.25 Block 7, HR Area, Section B (after Marshall 1931).](image)

The most northern structure of Block 7 is House XLIX, which lies south of the large space mentioned above, and presents an interesting and confusing amalgam of rooms with wells and multiple
bathing platforms that Sahni (1931b:207) attributes to the Late Period. Marshall, in an editorial comment on this building, believes that this House is a portion of the "edifice of importance," or House XLVIII, and apparently the open space to its south (Sahni 1931b:207). Aside from proximity to said open space, Marshall provides no additional reasoning for his opinion.

A structure that has intrigued scholars since its excavation by Marshall's team is House L, located south of House XLIX across Lane 8. Sahni (1931b:208) draws an explicit comparison between this structure and House XXX of Block 5. He argues that both Houses served as supports for large, now-absent superstructures that belonged to the Intermediate Period. Like its eastern counterpart, the small rooms that comprise this House were infilled with sundried brick, and its walls were remarkably thick and contained no traces of interconnecting doorways.

House LI, located between House L on its west and Street 3 on its east, may very well have been either a later addition or a contemporaneous extension of House L. Alternatively, the smaller northern rooms of this House may have comprised an entirely separate structure. Both the northern section (Rooms 13-16) and the larger rooms of the southern section (Rooms 17-26) have separate doorways, but both sections communicate internally by means of an integrating passage. The central part of House LI (Rooms 17 and 18) may have comprised an internal courtyard (Sahni 1931b:208).

The building south of House LI along Street 3 appears as a north-south-oriented version of the small, two-room cells that comprised the northwestern corner of Block 5, which were postulated to be commercial in nature. So confident was Sahni (1931b:208-209) in this interpretation that he breaks with convention and labels this structure Shop LII, rather than the standard House LII (emphasis added). For the sake of continuity, I do not employ the label "shop."

Houses LIII, LIV, and LV are spread, east to west, between House LII and the western edge of the HR Area, and all are bordered on the south by Lane 9. House LIII, like its eastern neighbour, is a narrow structure consisting of only a few rooms (three, in this case, compared to House LII's two rooms). The furthest room from the Lane 9 entranceway is the only room that "could be called a living room or bedchamber" (Sahni 1931b:209). Between this room and the entranceway one traverses two rooms, the first of which has the remains of stairs, and the second may have been a small courtyard. House LIV is a seven-room structure featuring evidence of a second storey and an internal courtyard in its northeast corner. The final house along Lane 9 is House LV, which is so poorly preserved that little can be discerned about its architectural character other than the presence of a probable bath in the central room. In terms of contributions to our understanding of Indus Civilization society, this House is
noteworthy as the location in which was located the famous "dancing girl" bronze statuette. This small piece of sculpture, with its jaunty stance, nudity, and impression of fluidity and movement, notably contrasts with the slightly serene and severe nature of the "priest-king" statues recovered from Mohenjo-Daro (Possehl 2002a:113-115). A hint of this difference is evident it Sahni's (1931b:209) description of the artifact, which he claims was "executed with some primitive vigour."

South of Lane 9 is Block 8, which is composed of Houses LVI - LXIV, structures that exhibit a range of size and architectural traits (Figure A.26). Diverging from his practice for most of the HR-B area, Sahni (1931b:210-212) does not provide any indication of the relative ages of the structures in Block 8. Houses LXI, LXII, and LXIII, all of which front on and open onto Street 3, Sahni (1931b:210) interprets as shops, presumably by virtue of their relatively simple internal layout and small size. Of these, House LVI, southwest of the intersection of Lane 9 and Street 3, is the most internally complex, and contains a separate living portion not accessible from the "shop" portion, which fronted Street 3.

![Figure A.26 Block 8, HR Area, Section B (after Marshall 1931).](image)

Houses LVII, LVIII, LIX, and LX, which collectively comprise the western portion of this block, are all badly deteriorated, and their architectural arrangements incomplete (Sahni 1931b:211-212). Of these, Houses LVIII and LIX appear to have been quite small, and the rear portions of House LX were infilled with sun-baked bricks. House LXIV, which borders on Lane 10 to the south, is also
very heavily eroded, and little of its internal layout is discernible. However, based on an evaluation of its exterior (south) wall, Sanhi (1931b:212) suggests that it was a structure of "some importance."

South of Block 8 is Lane 10, which runs westward from Street 3, widening as it does so before veering to the south past House LXVI. At this point, the lane switchbacks to terminate in a set of stairs that ascend to the west, an area that Marhall left unexplored (Sahni 1931b:212-213). South and east of Lane 10 is Block 9, which consists only of two adjacent Houses: House LXV, which borders Street 3 on the east and Lane 10 on its south, and House LXVI, to the west of House LXV (Figure A.27). Sahni (1931b:213) again provides no indication as to the ages of the Houses, but asserts that they did originally comprise a single structure.

House LXV forms most of the eastern half of Block 9, and has a simple layout with two entrances onto Street 3, three rooms and evidence of an additional storey. Interestingly, Sahni (1931b:213) claims that a short east-west wall that separates the two adjacent entrances was "obviously meant, as in some other buildings, to secure privacy to the woman folk."

Figure A.27 Block 9, HR Area, Section B (after Marshall 1931).

The remaining structure in Block 9, House LXVI, opened onto Street 3 by means of a narrow hallway wedged south of House LXV. Although of slightly different proportions, and exhibiting corbelled "openings" in two of the walls of the southern rooms, this House is, as Sahni (1931b:213) makes clear, nearly identical in its internal layout to House LIV of Block 7 (cf. Figure A.26). It originally would have had multiple storeys, a courtyard on the north, and smaller rooms on the south and west. Much of the southern part of House LXVI was covered in ash and related debris, as in the adjacent southwest portion of Lane 10 to the west of this structure (Sahni 1931b:213).
A.3 DK AREA

As with all the excavated sections in the Lower Town of Mohenjo-Daro, the DK Area is named after one of its initial excavators, K.N. Dikshit (Jansen 1993:53), one of the principal scholars who worked under Marshall at Mohenjo-Daro. The DK Area has several distinct sections that together stretch across the northern and eastern parts of the Lower Town mound (Figure 1.1). The earliest excavation in this part of the city is the roughly 400m long Trench E, which ran eastwards from near the eastern limit of what would come to be known as DK-G Area on the western edge of the Lower Town Mound (Possehl 2002a:207-208). In short order, Marshall explored the the A, B, and C sections, south of Trench E near the eastern side of the Lower Town. South of these areas, and far to the east of the VS Area, is DK-I/J, more commonly referred to as the Moneer Area (Jansen 1989:178). The vast expanse of the DK Area precludes a comprehensive summary discussion; the scale and the particulars of each section's excavation require that each be given individual treatment.

A.3.1 DK A, B, C, and E Areas

In terms of their exposed and excavated portions, all three of these sections conjoined are much smaller than DK-G, but nevertheless are quite large by any other measure; in the published accounts, these sections comprise 20 architectural blocks and dozens of Houses, some of quite remarkable complexity and with decorative embellishment and other unusual features (Figure A.28). That said, Mackay's (1931c) report of Dikshit's excavations is atypically understated regarding the unique aspects or possible implications of these sections' notable features (that is, in contrast to the flare with which he would address the excavations of the DK-G area a few years later (Mackay 1938)). Most of the distinctive features that Mackay reports for the DK-A, DK-B, and DK-C Areas are buried in the mass of standard details common to the recounting and enumerating nature of archaeological reports.

This may have been due in part to the fact that Mackay was mainly reporting the work of a colleague (K.N. Dikshit) and that, by his own estimation, the majority of the architectural remains in the DK-A, B, and C Areas, mostly date to Marshall's "Late" Phases. These periods Mackay associated with a decline in the general competence of Mohenjo-Daro's architectural artisans, and which he would later associate with the unravelling of the Indus Civilization's political and social order. In his introduction to the DK Area in the Mohenjo-Daro report, he states, with some disappointment, that
[p]rovisionally, the buildings of the DK Area, which was excavated by Mr. K. N. Dikshit, have been divided into three Periods, which can be distinguished more or less clearly from one another on the quality of the masonry. Throughout this chapter these Periods and the strata corresponding with them will be termed Late, Intermediate, and Early.

The Late or uppermost stratum consists mainly of buildings whose masonry is vastly inferior to that of the Intermediate; and in the quality of its masonry this in turn is inferior to the Early. Thus, as far as our experience goes, the buildings of the lowest levels are the best; there was a steady degradation in the art of building as the levels of the mounds rose (Mackay 1931c:233).

Regardless of his tone, Mackay clearly understood the importance of some of the notable features of this section of the city, and related them in his account, although he often did conflate "interesting" with "well-built." Some of the more notable features of this section are as follows.
A.3.1.1 DK-A Area

![Diagram of DK-A Area](image)

Figure A.29 DK-A Area (after Marshall 1931).

DK-A is the smallest of the DK components with 4 blocks arranged in two architectural clusters. Blocks 1 and 2 are found on the south, and 3 and 4 are located on the north of a bisecting east-west lane (Figure A.29). The dividing lane generally parallels the orientation of other east-west streets in the city except where, at the western limit of the DK-A excavations, it angles slightly to the northwest (Mackay 1931c:233). DK-A is immediately south of the eastern limit of DK-C, and northwest of the Moneer Area.

The creation of Rooms 1-3 of Block 1 in the Late Period from what in the Intermediate Period was a single space (Mackay 1931c:233) foreshadows the kinds of increasingly partitioned spaces that seem to correspond with the advent of later stages in the urban development of Mohenjo-Daro. Although on an individual basis such changes might appear as nothing more than simple architectural alterations resulting from the haphazard choices of individual households, when considered as a whole in the context of the city, and especially in light of the breakdown of "large houses" into smaller, historically and functionally anomalous ones, it can be understood as part of a larger, societal shift. The dimensions that Mackay reports for Block 1 are rather small, but seem to imply a much larger phenomenon, as discussed in Chapter 8.
This trend of literally constructing a new spatial order from the architectural skeletons of the older one is also highlighted in the shift of aesthetics of construction and the use of building materials. Room 2, of Block 2, also from the Late Period, incorporates two distinct sizes of bricks in its walls and floors (28 x 12.7 x 5.7 cm and 25.4 x 12.7 x 6.35 cm), materials that Mackay (1931c:234) suggests, the builders were scavenged from other, older structures.

Of additional interest is the northern portion of Block 4, specifically Room 4, in which a large "rectangular pier" in the centre of this degraded building is a prominent feature (Mackay 1931c:235). The pier descended below the limit of the excavations, and was evidently part of an older (that is, Intermediate Phase) construction. How or if this unusual remnant of an earlier building was connected to the badly eroded and poorly described possible shrine directly north of this room is not understood.

A.3.1.2 DK-B Area

In addressing the DK-B section, Mackay again makes the point that this area mainly dates to the Late Period, as evinced by its generally substandard architecture (1931c:236). However, despite this claim, there are several structures that appear to show, in a confusing manner, continuity from earlier Intermediate Period.

The description of the DK-B Area is one of the more difficult sections of the initial reports to follow, owing to the lack of continuity in recording methods with the presumed standards employed over much of Mohenjo-Daro. As alluded to in Chapter 3, the various rooms which comprise DK-B are arranged in relation to whole Blocks, rather than Houses. Likewise, while Mackay (1931c:234-238) speaks of Block 2 as "apparently being made up of two or more buildings," the demarcation between them is not clear, nor is it so for the any Block in DK-B. Undoubtedly, distinguishing separate buildings suffers from both the lack of chronological control in the excavations, and, as Mackay notes several times, millennia of erosion and brick robbing. In conjunction with the piecemeal excavation of DK-B, these factors obfuscate a clear appreciation of this areas' architectural record. Block 1 (Figure A.30) is a perfect example of such confusion. Mackay (1931c:236) stated that this partly excavated component of the DK-B Area contains "the remains of one or more houses" which have "comparatively little interest about them."

One structure which Mackay felt was based upon an Intermediate Period predecessor is House
II, of Block 2 (Figure A.31). Mackay (1931c:236-237) believed that at least the southern wall of this structure, by virtue of its size and "quality," was a holdover from a time before the Late Period (astute readers will note that the accompanying figure for this structure does not readily evince such a wall). Of greater significance for our purposes is the unusual design of this building, which sports three short, narrow, east-west aisles connected by a central north-south aisle, placed under the main floor of the structure in what is essentially a sub-floor crawlspace. The connecting north-south aisle seemed to open directly onto the lane onto which the southern edge of House II abutted. The space under the floor that contains these aisles is only about 122 cm in height; given this low height, and the fact that the northern and western walls of the room situated above the capping floor are embellished with decorative brickwork, Mackay suggested that this was no simple residence, but rather a *hamman*, or Turkish bath. The underlying aisles, complete with flue, in the form of the accessible centre aisle, would have served as the hypocaust to the decorated room above on a smaller scale, but in a similar manner, to the hypocaust that Marshall envisioned for the "Granary" or "Warehouse" in the Upper Town (Section 6.)
In addition to its non-standard features, this structure is of special importance to Indus scholars because within the aisles of the posited hypocaust was found the most generally iconic image of the Indus Civilization: the statue of the Mohenjo-Daro "Priest King." Although Indus Civilization specialists do not uniformly believe this to depict either a priest or a king (Possehl 2002a:115), this small statue (roughly 17.5 cm in height) has served as the rather serene face of the Indus Civilization since its discovery, and graces the covers of numerous academic and popular works on Harappan society (e.g., Possehl 2002a). While debate on its meaning in, and even cultural affiliation with Moheno-Daro and the Indus Civilization persists, the relative dearth of statuary of any kind recovered from Indus sites affords this artifact a special place in the imagination of Indus scholars. Mackay (1931c:237), for his part, simply noted that it was "a fine steatite statue."

Immediately north of House II in Block 2 is House III, the central courtyard (Room 3) of which contains a 122cm x 183cm pier (its height is not specified) faced with one course of brick, but rubble-filled (Mackay 1931c:237). This House contains a stairway with a central landing and a drain, which it shares with the rest of the block before the drain enters the North-South street that marks the limit of Block 2.

Regardless of its internal confusion, Block 2 is clearly defined externally by the Intermediate Period walls bordering its western and southern flanks, along with the presence of an integrative drain.
system and an array of architecturally unusual traits (such as the conflation of stairways in what is roughly the centre of the block, the unusually small and dispersed nature of the rooms, the thin-walled solitary pier, and the steam bath) imply that whatever buildings did comprise this block at its onset should be considered functionally interrelated.

Block 3 (Figure A.32), is situated on the west side of the street opposite Blocks 1 and 2. Mackay states that this Block, which forms a contiguous stretch of architecture along with Block 4 to its north, is composed of four separate Houses (Houses V - VIII).

![Figure A.32 Block 3, DK-B Area (after Marshall 1931).](image)

Like Block 2, Block 3 displays a jumble of architectural features which complicate the assigning it to a specific chronological period. This is typified by the southern wall of House V, the southernmost extension of this Block. Mackay states that this wall, although part of a Late Period structure (House V) was constructed upon an Intermediate Period wall (Mackay 1931c:238). This Intermediate Period wall was fashioned atop an earlier Early Period wall that was characterised by brickwork that is "unexpectedly similar to that sometimes seen in the Late Period" (Mackay 1931c:238). Interestingly the (presumed internal) walls this structure rest on brick kiln wasting, in sharp contrast to the fact that most of Block 3's walls are built atop Intermediate Period walls that incorporate bricks of different sizes in a random fashion, an architectural practice that will become
apparent as one of the characteristic signatures of the later periods of occupation at Mohenjo-Daro (Mackay 1931c:239).

Block 4 (Figure A.33) is located directly north of Block 3. It is comprised of several Houses, although the state of preservation evinced in many of them is such that the excavators remained unsure of the precise number (either seven or eight). This is specifically the case with Houses XI and XII, which Mackay (1931c:240) suspects might constitute a single building. On the east side of this structure is located what was interpreted as a masonry bench, leading Mackay (1931c:240) to suggest that its associated structure (possibly including Houses XIII and XIV) served as a shop.

![Figure A.33 Block 4, DK-B Area (after Marshall 1931).](image)

**A.3.1.3 DK-C Area**

The DK-C section is the largest of the initially excavated segments of the DK area. It consists of three main architectural clusters: a northern cluster, comprised of Blocks 1-4, which is bordered on the south by a wide east-west thoroughfare; an eastern cluster, which lies south of the aforementioned thoroughfare, and is laid out in a roughly northwest-southeast alignment containing Blocks 5-12; and a southern cluster, Blocks 13-16, which is immediately to the east of Section B, Block 2, and runs eastwards almost abutting Block 11 of DK-C. Owing to the dispersed nature of the DK-C Area, I
arrange the following discussion by means of these separate areas. Readers should note that this division is not employed as an organizing principle by Mackay (1931c).

**A.3.1.3.1 DK-C Northern Cluster**

This section of the DK-C Area (Figs. 4.34 and 4.35) is bounded by the large street to its south and bisected into two sub-sections by a north-south lane. Blocks 1 and 2 are found west of the lane, and Blocks 3 and 4 on its east.

![Diagram of Blocks 1 and 2, DK Area, Section C (after Marshall 1931).](image)

Block 3 is of particular interest, as it has similarities with the overall layouts of other large, functionally diverse structures in the Lower Town. It displays a large internal courtyard surrounded by at least nine segmented and interconnected rooms, an internal well on the east side of its southern edge, and evidence of multiple stories, all within Intermediate Period walls (Mackay 1931c:243-244). The problems with confidently assigning this structure to the same class as that of Block 2 of HR-B Area, however, lies in its badly eroded nature and the interdigitation of Intermediate and Late Period architecture. The lack of discernible doorways in particular makes adequate architectural reconstruction impossible. That being the case, Mackay (1931c:244) himself believed this structure distinct enough in its internal composition to consider Dikshit's belief that it might have served some
kind of religious capacity, one of Mackay's few forays into explicit interpretation beyond a strictly developmental or functional concern in this particular report. While its state of decay precludes a confident assignation, it certainly warrants further consideration as a distinct, and perhaps socially important, structure.

![Figure A.35 Blocks 3 and 4, DK Area, Section C (after Marshall 1931).](image)

**A.3.1.3.2 Eastern Cluster**

The westernmost area of the eastern cluster is occupied by Block 5 (Figure A.36), which consists of a single large structure, seemingly at odds with the typical dimensions of Mohenjo-Daro domestic structures. Mackay comments on this structure's anomalous character, noting that the very stout northern wall and the somewhat thinner, but none the less important, wall on its western side are too thick for those of an ordinary house. And Room 6...also seems too spacious for the usual dwelling house (Mackay 1931c:245).

As with most other large structures at Mohenjo-Daro, Block 5 contains a well, this one almost directly south of the well of Block 3, and likewise in the south-east corner of the building. Block 6 is composed of two separate buildings, both of which were poorly and briefly described by Mackay.
(1931c:246). It is situated at a higher level than Block 5, and presents a jumble of poorly understood architecture deriving from the Late and Intermediate phases.

The mass comprising Blocks 7 and 8 (Figure A.37), found to the southeast of Block 5, is likewise architecturally confusing, most notably for the lack of most of the internal doorways, making it impossible to reconstruct access patterns accurately (Mackay 1931c:246). Block 7 sports ceramic waste (specifically brick kiln waste) as a foundational material. Like Block 3, Block 8 appears to consist of an Intermediate frame and a mishmash of Intermediate and Late internal partitions. This structure contains a northerly situated well, a small bath on its eastern side, and two large brick piers in the middle of a large, central room (Room 5). In Room 14, a small cubicle on the western edge of the structure, a bronze and copper hoard was recovered from under the floor (Mackay 1931c:247).

Block 9 (Figure A.37) is located directly east of Blocks 7 and 8, on the other side of the north-south lane that provides the eastern boundary of that section of the town, and north of the lane that separates it from its southern neighbour, Block 10. As with many of the structures in this portion of the DK Area, Block 9 was subject to only basic excavations, and the full extent of the structure remains unknown. Mackay (1931c:247) notes that this structure's elevation was higher than its neighbours in the C section of the DK Area, an interesting fact that was not explored further, perhaps owing to
incomplete exposure. From what was uncovered of this block, Mackay inferred that "several" houses (with no specific number) were discernible in its configuration. Taken as a whole, its layout sports several similarly shaped and sized rooms along its southern edge, separated by a large, partially bisected internal space from a collection of poorly articulated rooms that crowd its northern reaches.

![Figure A.37 Blocks 7-9, DK Area, Section C (after Marshall 1931).](image)

Mackay (1931c:248) states that Block 10, located south of Blocks 8 and 9, is comprised of four houses (not identified in the report or on the plans) that date primarily to the Late Period (Figure A.38). As with his assessment of Late Period architecture generally, Mackay cites the quality of the architecture and construction techniques as evidence for this assertion. Owing to the incomplete excavation of this section of Mohenjo-Daro, the relation of these houses to one another is poorly understood. Mackay devotes most of his space on this block to a discussion of its wells. Of particular note is the western well, located in Room 14, which revealed a "feature not observed before at Mohenjo-Daro": a square well coping (Mackay 1931c:248). This feature, 53cm on a side and 60cm high, was placed on top of an Early or Intermediate Period well, composed of typically wedge-shaped bricks. The coping itself was made from two distinct sizes of bricks, a Late Period construction strategy found elsewhere at Mohenjo-Daro that Mackay previously associated with the recycling of older material.
Blocks 11 and 12 (Figure A.39) comprise the northern and southern sides of the main east-west street in this part of the DK Area. As is typical for this section of the DK-C Area, these blocks, along with the remaining sections of DK-C, are very briefly described in the report. Mackay's account of Block 11 is most notable for its mention of ornamental brickwork on the short outside (western) wall of chamber 26. Most of this external wall is covered by the wall of a neighbouring structure, and Mackay gives no indication if this pattern is visible on other parts of the structure. Confusingly, while Mackay (1931c:249) claims that this ornamental pattern is "common in the Late Period", the accompanying margin notes state that this manner of decoration is an "unusual arrangement of bricks", perhaps indicating a further instance of disagreement between Marshall and his crew. Block 12 is barely exposed; so little clearing occurred in this block that Mackay (1931c:250) declines mention of this section save for his assertion that the observable architecture likely dates to the Intermediate Period.
Figure A.39 Blocks 11 and 12, DK Area, Section C (after Marshall 1931).

A.3.1.3.3 DK C Area Southern Cluster

Figure A.40 Blocks 13-16, DK Area, Section C (after Marshall 1931).

With the exception of a few isolated rooms and related sections of an unassigned structure, Block 13 occupies the north side of the dividing road between Blocks 11 and 12 (Figure A.40). It is found west of Block 11, while the rest of the DK C section (Blocks 14, 15, and 16) stretches westwards, where the furthest reach of Block 16 abuts Block 2, Section B. Of these four blocks,
Mackay says almost nothing, except that Block 14 was likely "quite an important building", perhaps owing to its thick walls and prominent position relative to its neighbours (Mackay 1931c:250). As with most of this part of the DK Area, the various rooms and structures of blocks 13-16 do not show coherent patterns or other pertinent features in their plans. Rather than the courtyard-centric layouts of most structures in other areas of the city, those of DK C present what are likely only bits and pieces of their overall architectural signatures, probably as a result of their barely exposed state. Consequently, and with only a few notable exceptions, the A, B and C sections of the DK Area offer the least architectural and spatial congruity with the other parts of Mohenjo-Daro.

A.3.1.4 DK-M Area

The initial DK Area trench is notable for two distinct clusters of architecture, termed by Marshall (1931c:251) Sections E and M, respectively (Figure 1.1). Section E, near the western edge of the Lower Town mound, comprises what would later be known as Block 11 of DK-G South, and as such is described in the following chapter (see section ...). The other locus of architecture, Section M, is located roughly halfway along the length of the trench, and consists of an agglomeration likely comprised of at least three separate structures, Houses I-III (Figure A.41).

In this cluster, Houses III and I are west of a lane upon whose eastern edge sits House II. At least House I and II are situated on raised platforms (Mackay 1931c:252). House II, the largest of the structures, is notable for its thick walls and an internal layout that features a central, square space (Rm. 8), a northern courtyard (Rm. 3 and possibly Rm.6), and a corridor of rooms aligned in a north-south manner along its inner eastern flank. Several spacious, east-west-oriented spaces comprise its southerly reaches. House I also runs along the aforementioned lane, has sections of comparably built walls, but is much less extensive than House II, comprised as it is of perhaps as few as four internally demarcated spaces. Its central room (1) is notable as it features the remains of two brick piers (0.89m x 1.15m) and a buried cache of jewellery that included a complete necklace of barrel-shaped carnelian beads (Mackay 1931c:252-253).

House III, which Mackay does not describe, seems an odd fit with the other structures. While Houses I and II are aligned with the lane by which they are divided, House III is angled more emphatically to the east, so much so that its northeastern corner abuts the northwestern one of its neighbour House I. As a result, the gap between these structures widens considerably as one proceeds south, much as in the cases of Houses V and VI, HR-A.
Aside from the particulars of the structures, the most intriguing aspect of this section of the DK Area is the square coping of a round well to the north of House I. This particular, presumably stylistic element is only attested by one other example at Mohenjo-Daro, Block 10 of Section C, DK Area.

![Figure A.41 Houses I-III, DK Area, Section M (after Marshall 1931).](image)

### A.4 MONEER AREA

The DK-I, DK-J, or "Moneer" Area, is perhaps the least generally understood and described of the various locales in all of Mohenjo-Daro. This is mainly due to the fact that this section was primarily excavated between late 1933 and early 1934 (Urban 1987; cf. Possehl 2002a:206), and thus was not included in the reports by Marshall (1931) or Mackay (1938). With the exception of a few brief notices in the Annual Reports of the Archaeological Survey of India during and shortly after its excavation, as well as in Wheeler's (1950) unpublished map of Mohenjo-Daro, the academic study of the Moneer Area was largely absent. As a result, it was effectively forgotten until 1979 when it was "rediscovered" by George Dales and Michael Jansen (Jansen 1984:141). According to Dales (1982:99), the correct designation for this section of the Lower Town is a matter of some confusion, as the labels "DI-1", "DI-i", "DK-B" have all been applied to the Moneer Site. He claimed that he was "told directly by the Director of Archaeology in Karachi that the area so designated...is the DK-B/Moneer Site." It is
not explained whether this term implies that the Moneer Area is a sub-section of the earlier excavated DK-B Area (Mackay1931c).

The discovery of its physical location followed the discovery of the field notes of its excavators, Q.M. Moneer and K.N. Puri, in the archives of the Mohenjo-Daro museum (Jansen 1984:141). While these notes provide the basic details of the area and a list of the artifacts discovered therein, they did not include the detailed, structure-by-structure account that typified the published reports, or that these reports aimed to provide. While the Moneer area did form an important piece of the reanalysis of Mohenjo-Daro, its peripheral nature relative to the bulk of the excavations has resulted in it remaining little represented in the broad historical narrative of Mohenjo-Daro.

![Figure A.42 Moneer Area, Lower Town (after Jansen 1984).](image)

The layout and description of the Moneer area presented below has of necessity been garnered from sources which derive from the work of the IsMeo-Aachen Mission reconstruction project. These lack the flamboyance of interpretation (or speculation) characteristic of the Marshall or Mackay reports, other than Dales' (1982:99) comment that its "architecture gave a very different feeling from other parts of the city." While avid speculation or reductionism devoid of anthropological foundations
is undesirable, many sections of the Moneer Area are presented without even basic descriptions, and the majority of the Moneer Area receives very little explicit coverage. Of necessity, most of the description here comes directly from the pertinent maps.

While Jansen and colleagues have retained the Block, House, and Room conventions of the early reports, their specific recording system employs letters rather than numbers for blocks (such as Block A, rather than Block 1, for example). Further modification of the recording system comes in the form of concatenating the Block and House designations (for example, House I of Block A is displayed as House AI), and the use of enumerated directions rather than names for streets and lanes (N-S-1, N-S-2, etc.) (Jansen 1984:143). For the sake of consistency with the sources, the following description of the Moneer Area adheres to the same practices.

The Moneer Area comprises approximately 10 000m² and is located approximately 200m east of the eastern limits of the VS Area, and roughly 130m south of the DK-A, B, and C areas (Jansen 1984:138) (Figure A.42). As its five blocks of architecture (A, B, C, D, and E) were explored separately from the remainder of the city, and as its peripheries remain unexcavated, we cannot speak of its boundaries precisely; however, several streets and lanes serve to demarcate its various internal sections. What follows is a basic characterization of Blocks A, B, and E. Blocks C and D, located on the eastern peripheries of the Moneer Area, were only partly uncovered during the rediscovery of this area, and no plans of them are available.

Block A is the southermost of the blocks in the Moneer Area, and accounts for most of the architectural mass south of the main east-west artery in that part of the city (Figure A.43). It is defined in the north by this street (labelled E-W-5) and on its eastern boundary by the other primary road, N-S-5. Its western and southern limits remain unexplored and ambiguous, the western one marked by a lack of architectural mass, while the block likely continues to the south under the unexcavated material (Jansen 1984:147). In all, Jansen and colleagues ascertained through excavation that this block was comprised of 12 structures.

House AI is located in the northwestern corner of the block, separated from its eastern neighbour, House AIV, by a short but wide laneway (N-S-I) that leads to an apparently public open space, around which the western houses of the block are arrayed. House AI contains nine discrete spaces, the largest and central of which likely formed an internal courtyard, and another a passageway that connected the courtyard to a southern doorway (onto the open space to the southeast of House AI) (Jansen 1984:147).
Situated directly south of House AI is an elongated stretch of architecture containing House AII. It is encased within a perimeter wall that is basically in alignment with the western wall of House AI. House AII is roughly half as wide, east to west, as House AI; the eastern side of both House AI and AII, form part of the western limit of the open space just described. House II appears to contain five internal spaces, the northeast corner of which is largest, and may represent a courtyard. It also appears to contain a well in its entrance room on its southeast corner.

House AIII is a small structure directly opposite the southeast extremity of House AII, and separated from the latter by a narrow lane, N-S-7, that runs south from the open space to parts unknown. It has three internal spaces, with the largest again set in the northeast corner. The northern face of House AIII provides the southern wall for the internal plaza or open space of Block A.

On the eastern side of the street labelled N-S-1 is House AIV. It forms the extreme northwest corner of the main bulk of Block A (House AIV through to House AXII), all of which is enclosed within a shared perimeter wall. The manner in which House AIV communicated with its neighbours,
or the manner in which most of the various Houses of this part of the block communicated with one another, is not readily apparent from the published maps (Jansen 1984:143; Urban 1987:Figure 6, 7). Based on room numbering listed for with House AIV, it appears that it was comprised of only two internal spaces, one of which accounts for almost the entirety of its internal space. This disparity allocated space raises the important point that House AIV may have been just one component of a larger complex, especially considering the ambiguous space to its south, which could be part of House AIV, but whose room numbers overlap with House AIV. Alternately, the long and narrow House AVIII to the east of House AIV, or the small House AV to its south might also have been connected to the former in some capacity. At any rate, the uncertain nature of their relationship is mediated by the close proximity of all Houses to one another and their spatial demarcation from other structures by means of unbroken internal dividing walls in this part of the block (Urban 1987).

House AVI shares its western boundary wall with the eastern wall of House AIII, and uses the southern wall of House AV as its northern one. House AXII is located on its east flank, and House AVII on its southern. This House enjoys the least amount of internal restriction. Save for the chambers in its northeast (Room 4) and northwest (Room 1) corner, none of the rooms in this structure are impeded by internal walls. A Large space (Room 6) occupies the vast majority of this structure and is most likely a courtyard. Were it not for the doorway connecting Room 1 to the Block A external courtyard, and for the wall separating House AIII from its western edge, this smaller house might very well be considered an extension of House AVI. House AVII, for its part, remains largely unknown owing to its limited exploration.

The eastern half of the main mass of Block A is constructed of Houses AXII, AXI, AX, and AIX (listed south to north). These structures are comparable in size and complexity to others exhibited in Block A. House AIX, in the northeast corner of the block, is both the largest (although no precise dimensions are provided (Jansen 1984:143)), and has the greatest number of internal spaces (20).

The ambiguity with which various structures of Block A are distinguished from one another highlights the limited knowledge of this area. Jansen (1984:147) states that "attempts to distinguish the compartments making up its ground plan, especially in the eastern portion of the block [that is, Houses AIV-AXII], proved unusually difficult."

The largest section of the Moneer Area lay north of E-W-5 and east of N-S-5. This consists of Blocks E and B. Group E (Figure A.44) occupies the northwest corner of this mass, separated from Group B to its south by the street E-W-3, and N-S-6 to its east. It consists of Houses E1 - EIII, all of
which are spacious in their layouts, contrasting sharply from the crowded of the Block A Houses. The only well recovered in the northern half of the Moneer Area is located in House EII.

Figure A.44 Block E, Moneer Area (after Jansen 1984).

Group B (Fig. A.45) is the largest section of the DK-J Area, and the only one to be extensively excavated and thoroughly described in the sources. At the time of the Moneer Area's rediscovery, it was the only section of that Area that had been excavated but not yet subject to reconstruction and consolidation (Urban 1987:23). This condition allowed Block B to serve as an initial focal point for the IsMeo-Aachen Mission research goals of reconstructing Mohenjo-Daro's architectural chronology. Consequently, the phase-by-phase account of the structural development of the B Block dominates current understanding of this part of Mohenjo-Daro (Jansen 1984:144; Urban 1987).

The core of the B Block is House BI, which accounts for the southeast corner of the block and, for the majority of its frontage onto E-W-5, and all of its frontage onto N-S-5. It is notable for the thickness of its external walls (roughly 2m) and internally for the presence of several large courtyards, each flanked by smaller cells, most of which do not directly articulate with one another. A long, north-south passage running the length of the eastern wall features a row of smaller cells between it and the perimeter wall (Jansen 1984:144). Joined onto the western wall of House B are Houses BII (to the
south) and BIII (to the north). The northern limits of BI articulate ambiguously with Houses BVII, BVIII, and BIX.

![Figure A.45 Block B, Moneer Area (after Jansen 1984).](image)

Through the analysis of building joins and patterns of bonding, Jansen and colleagues were able to order the Houses of the B Block into a relative chronological construction sequence, which had its origins in House BI, itself divisible into three separate periods of expansion (Jansen 1984:145). Expansion proceeded northwards and westwards from House BI, and in both cases resulted in discrete yet attached structures that were smaller in area than House BI, and whose internal layouts were far less spacious (Jansen 1984:146). Near the western flank of the B Group, a shared open space was created between Houses BIV, BVI, and BIII. This pattern of secluded open-spaces shared by modest buildings physically attached to large houses is also noted in HR B Block 4 and 5, and VS A Block 2.

Jansenn (1984:147) notes that "the only instances of a corner structure dictating the pattern of subsequent building in a particular area are Block 18 in the DK-G N area and the 'Great Bath' in the SD area" (see section 5.5 and 7.?), both of which are examples of likely public architecture. This similar pattern of growth for House BI, along with its distinct architectural features, might imply that it could
also be a remnant of a public structure. Alternately, it this structure might simply illustrate the conventional logic of architectural expansion at Mohenjo-Daro.

**A.5 DK-G NORTH AREA**

In terms of area covered, the DK-G Area is the largest at Mohenjo-Daro, spread as it is over 28 000 m², and formally divided into a northern (DK-G North) and a larger southern section (DK-G South) (Figure 1.1). It is also the only part of Mohenjo-Daro that was excavated to any great depth, down to 7m in its southern section (Jansen 1993:54). Additionally, it is the context from which more than 12 000 artifacts were recovered during excavations in the 1930s. As such, and in a similar, but distinct manner from the Upper Town, the DK-G Area disproportionately informs our reconstruction of the various aspects of Mohenjo-Daro urban life.

The DK-G Area is bounded on the East by First Street, which runs almost the entire North-South length of the Lower Town (Mackay 1938:25). It is bisected into northern and southern sections by Central Street, a main east-west thoroughfare of Mohenjo-Daro that begins near the western limit of Lower Town, and that Mackay envisioned as running eastwards through a presumed gate of a postulated city wall, and to the banks of the Indus River, at a dock for which no evidence exists (Possehl 2002a:210). DK-G’s western limits are mainly informed by the locations of West Street, Loop Lane and Long Lane; its southern limits, by Crooked Lane. Numerous other lanes, streets, and alleys transect the DK-G Area throughout.

The smaller of the two sections of the DK-G Area, DK-G North comprises approximately 12000 m² (Possehl 2002a:208) is in the northwestern section of the Lower Town (Figure A.45). This section is bounded on the east by First Street, on the south by Central Street, and on the west by the depression that separates the Lower Town and the Upper Town. The northern edge of this section coincides with the corresponding slope of the Lower Town, which, as Mackay (1938:142) reports, was not reached during excavations. Running through the western-central part of this section is West Street, which runs north-south. If we take this street as a line of demarcation, we can easily discuss the smaller western section of DK-G Area North as consisting of Blocks 13-17 and 29, and the larger eastern section comprising Blocks 18-28 (Jansen 1993:87; Mackay 1938:142). Blocks 1-12 of the DK-G Area are located in the DK-G South section, and are discussed in the following chapter.
Figure A.46 DK-G North Area (after Mackay 1938).

Trouncing the perceived notion that the Lower Town lacked the gravitas of the Upper Town, Mackay tells us that in the northern section of the DK-G Area "were situated buildings as important as..."
any hitherto discovered at Mohenjo-daro" (Mackay 1938:142). It is also an area that suffered extensive erosion and the resulting destruction of much of the architecture of its southwestern part (Mackay 1938:143). While the doorways of buildings in the DK-G Area demonstrate good preservation relative to other areas of Mohenjo-Daro, the buildings themselves are "poorly built", which led Mackay to omit detailed descriptions of them from his work (Mackay 1938:143).

Of special note in the western section of DK-G North is the lack of alignment of Blocks 13, 14, and the southern portion of Block 15 (Figure A.47) with their neighbouring architectural blocks (the main parts of Block 15 to the northeast and Block 16 to the north) and the unnamed lane that separates the main part of Block 15 from Blocks 14 and 13 (Jansen 1993:87; Mackay 1938:142). While Block 16 and all but the southern part of Blocks 15 are aligned with West Street in a roughly North-South manner, Blocks 13 and 14, and to a lesser degree Block 29, are oriented slightly north-east to south-west, thus widening the southern part of the lane that separates Block 14 from Block 15. Block 29 follows an alignment similar to that of Blocks 13, 14 and the southern part of Block 15, but the relative isolation of this block makes this less apparent.

![Figure A.48 Block 17, DK-G North Area (after Mackay 1938).](image)

The distinction in layout is a subtle one, but nevertheless conspicuous given the overall tendency at Mohenjo-Daro for architecture and adjacent roads to adhere to one another in orientation. Differences in topography as an explanation can be ruled out, for, while Blocks 13 and 29 are
significantly lower than other blocks in this section of the DK-G Area, Blocks 14 and 15 are not (Mackay 1938:142). Mackay saw this uncharacteristic deviation from the norm as evidence of the later genesis of these structures, when civic administration and regulation at Mohenjo-Daro had begun to break down (Mackay 1938:142). Weaknesses in the chronological scheme that Marshall and Mackay employed, as well as a lack of subsequent excavation, prevents us from confirming this hypothesis, but the deviant nature of Blocks 13, 14 and the southern part of Block 15 does invite speculation.

Block 17 (Figure A.48), in the far north of the western section of the DK-G North Area, contains a structure, House II, that is the only place Mackay mentions a variation in the architectural style of this section of the city (Mackay 1938:146). As he notes, Rooms 1, 12, and 17 have walls of variable thickness (approximately 50 - 71cm) that are "built of odd sized fragments of brick alternating with courses of equal thickness of a mixture of mud and potsherds of small size," with a result that Mackay found "quite ornamental" (Mackay 1938:146). Aside from noting the uncommon decorative effect of the masonry, Mackay does not offer an interpretation or posit an explanation for this unusual building technique.

Mackay is not so restrained in his appraisal of House IV of Block 17. This structure, with its large rooms and notably polished floors led Mackay to posit that it was likely the residence or workplace of a governmental or other official (Mackay 1938:147-148). The position of this house, near the end of West Street at the eroded northern edge of the Lower Town mound, and that fact that it was equipped with a steep, shallow stairway, of which little remains, prompted Mackay to speculate that House IV served as a watchtower and gatehouse or checkpoint at the northern boundary of the city (Mackay 1938:147).

The greater mass of the northern section of the DK-G Area lies east of West Street (Figure A.49). This large area (comprising Blocks 19-28) has architecture whose quality, in Mackay's opinion, ran the gamut from stately to substandard (Mackay 1938:146-154). The most notable of the structures in the eastern section of the Northern DK-G Area are in Blocks 18 and 19. While only partly excavated (Mackay 1938:151), the designation of Blocks 18 and 19 as a single structure was predicated on the fact that both blocks were encased within a contiguous high and thick wall, as well as the fact that the internal partition wall between the blocks is relatively thin and unsubstantial, suggesting that it served as an internal divide rather than an external boundary (Mackay 1938:141). The encircling wall runs the course of the the eastern, southern, and western sides of the structure, while the northern limits of this conglomerate have been compromised owing to erosion.
At 74 m in length and between 34-35 m in width, this structure (that is, both Blocks 18 and 19) is one of the absolute largest in Mohenjo-Daro, and significantly dwarfs the better known Great Bath structure in the SD Area of the Upper Town. Perhaps for this reason Mackay (1938:148) claims this structure was the most important in the northern part of the DK-G Area.

![Diagram of Blocks 18-28, DK-G North Area](image)

Figure A.49 Blocks 18-28, DK-G North Area (after Mackay 1938).

In addition to its size and the girth of its walls, this structure is notable for several other reasons, apparent even without benefit of complete excavation. As in important complexes on the Upper Town mound, this structure was built upon a raised mud-brick platform (Mackay 1938:149). Its internal layout is not entirely understood, and is complicated by the fact that doorways penetrating the outer wall are not discernible amid the brick robbing and other damage it has suffered over the millennia (Mackay 1938:149). Nevertheless it is exceedingly complex by comparison with other Indus Civilization buildings, with dozens of interconnected rooms of varying sizes. It also sports at least one potential courtyard, and an internal well in its north-east section in a similar, through not identical position to that in the structure of the Great Bath. A series of small, cell like rooms runs the length of
the western side of the building, recalling the small chambers that characterise several large structures in both the VS, HR and Moneer Areas.

Connected by the calibre and manner of its construction to Block 18 and 19 is Block 22, which similarly consists of a single structure raised on a mud-brick platform (Figure A.50). Mackay (1938:154) speculated that this building had the same architect as constructed as the larger structure, and that the two were functionally interrelated. Block 22 had 16 rooms, three of which formed a central courtyard.

A possible additional structure to this group might well be Block 26, House I, to the east of Block 22. Not only does it share the same high-quality masonry as its western neighbours, the alignment of its northern wall is the same as that in Block 22 (Mackay 1938:157). That these were separate buildings in antiquity is attested by the batter on its external walls, but as best as can be determined without extensive excavation, the morphology of these structures is quite similar.

This grandiose nature of Blocks 18/19 and 22 stands in stark contrast to their immediate neighbour to the west and north, respectively. The three houses that make up Block 23 have masonry that is "markedly inferior both in thickness and quality" (Mackay 1938:154). Interestingly, however, House I of this block provides evidence of one of the few raised wells at Mohenjo-Daro, rising approximately 50cm above the surface of the surrounding floor. Of additional note, the coping of the well was composed of regular rectangular bricks, rather than the wedge-shaped bricks routinely used for the construction of wells in Indus Civilization settlements (Jansen 1987:15).
APPENDIX B: THE DK-G SOUTH AREA

B.1 DK-G SOUTH

While The DK-G South Area is indeed part of the Lower Town, it is important to discuss it separately. Along with its neighbour, the DK-G North Area, the DK-G South Area was the only major section of Mohenjo-Daro which was not excavated under the supervision of Marshall; rather, these areas, as well as select parts of the SD Area in the Upper Town, were excavated by one of Marshall's senior directors at Mohenjo-Daro, the prolific American scholar Ernest Mackay (1938). Although Mackay follows the general broad interpretation of Mohenjo-Daro put in place by Marshall, he afforded topics such as political structure and social organization more explicit consideration than did his former supervisor. These matters form a subtle distinction in how Mackay's exploration of the DK-G South Area.

Moreover, Mackay's description of DK-G South is complicated in a way that neither DK-G North or the remainder of the sections of Mohenjo-Daro are not. In his excavation of DK-G South, Mackay made full use of Marshall's three-phase chronology not just as a mechanism whereby buildings were allocated a relative age, but as an interpretive guide to try and understand the specific history of Mohenjo-Daro's social fabric. This was made possible by the fact that DK-G South is the only section of the ancient city in which structures were excavated with the aim of uncovering specific architectural phases. Such phases formed the core of a synthetic developmental history of the DK-G Area, a methodological feat that was not attempted during Marshall's tenure as director of Mohenjo-Daro.

Mackay organized the architectural phases of the DK-G South Area by reference to Marshall's elevation-based chronology, and ultimately his synthetic developmental history of the area suffers from the same drawbacks. However, Mackay's investigation does allow for the recognition of broadly temporally-situated architectural and civic traits at Mohenjo-Daro, a significant accomplishment which allows us to recognize and compare specific changes to architectural and civic spaces in a relative and case-by-case fashion. Mackay's approach further solidified Marshall's correlation of the perceived "fluorescence" of Indus Civilization at Mohenjo-Daro with his Intermediate Periods.

Owing to these distinctions, it is not surprising that the larger, southern part of the DK-G Area an important source of information for Mohenjo-Daro. It is noted for its many plausibly non-domestic buildings (although, as Mackay reminds us during his discussion of this area of Mohenjo-Daro, "it is
well nigh impossible to determine the use of a building with any certainty from the antiquities found in it" (Mackay 1938:41).

This area is bounded on the east by the north-south First Street, on the north by Central Street, on the west by the westernmost slope of the Lower Town mound, and on the south by an east-west depression that Mackay (1938:60) asserts was likely a "street as wide as, if not wider than, Central Street." In all, this section of the DK-G Area contains 12 Blocks (1-12), and is internally segmented by a number of criss-crossing small roads and lanes (Figs. B.1 and B.2).

Figure B.1  DK-G South Area, Lower Town, during the Intermediate II Period (after Mackay 1938).
Figure B.2  DK-G South Area, Lower Town, during the Late II and I Periods (after Mackay 1938).

B.1.1 BLOCKS 1 and 4

Figure B.3  Block 1/4 Complex, DK-G South, Intermediate III Period (after Mackay 1938).
A main and defining feature of the DK-G South area is the large wall that forms the northern limit of Blocks 1 and 4 (Figure B.3-B.6) and the southern boundary of Fore Lane (Mackay 1938:45-46). This wall (in conjunction with Fore Lane) effectively bisects the DK-G South Area into a southern and northern sub-section. As noted in the report, the alignment and batter of the wall's north face was maintained throughout the structure's existence; that is, until the abandonment of the city, it was not significantly altered. This continuity stands in contrast to most of the surviving architecture from Mohenjo-Daro. Indeed, even the presumably important structures of the city, such as the Great Bath, were subject to major alteration over their lifetimes. Such tenacity on the part of the Mohenjo-Daro inhabitants must surely speak to the importance of the structure of which this wall was a part and, indeed, Blocks 1 and 4 include several features which suggest that in antiquity, this complex was likely perceived as distinct.

Blocks 1 and 4 conjoin to form a single, interconnected architectural complex that stretched from Low Lane in the east to the abutting building composed of Houses IV-VI on the edge of the DK-G South Area in the west. On the south and north it bordered Crooked and Fore lanes, respectively. This structure spans the vast majority of the east-west expanse of the southern sub-section of DK-G South from First Street to the depression that separates the Upper Town from the Lower Town.

![Diagram of Block 1/4 Complex, DK-G South Area, Intermediate II Period](image)

**Figure B.4 Block 1/4 Complex, DK-G South Area, Intermediate II Period (after Mackay 1938).**

Not uncommonly for Mohenjo-Daro, the exact contemporaneity of the entrances of this building are difficult to determine, but it does seem that, at its most expansive, during the Intermediate
II Period (Figure B.4) this multiroomed and multi-storied complex had at least four doorways, two on the north and two on the south (Mackay 1938:48). An axially-placed southern doorway spanned almost 2.5 metres and likely served as the primary entrance (Mackay 1938:47). This building is also notable for its two large, internal court-yards, the presence of two kilns, two wells, a plausible oven, an internal cess-pit, and numerous partitioned rooms and cells that are spread across the four wings of the complex (Mackay 1938:46-50). Mackay believed that some of the smaller rooms attached to or near the entrances might have served as guard rooms. Whether or not this was true is of course debatable, but, on the basis of comparative evidence of similar arrangements from other cultural contexts (Chase and Chase 2001b), we can assert that, functionally, they would have at least been points at which access to the inner rooms of the complex was checked.

![Figure B.5 Block 1/4 Complex, DK-G South Area, during the Intermediate I Period (after Mackay 1938).](image)

Other than its size and elaborate configuration, this complex is notable for the changes that characterize its layout during the (broadly speaking) Intermediate to Late Periods. While most other large complexes in Mohenjo-Daro are typified by processes that resulted in the subdivision and partitioning of large spaces into an array of smaller ones, the processes that played out in Blocks 1 and 4 during this transition resulted in increasingly larger and less differentiated internal spaces (Figure 5.5). This gradual simplification of the complex stands in stark contrast to the effort by which the alignment and batter of the external face of the northern boundary wall was maintained through such internal changes.
The internal complexity of this structure, as well as the range of functions implied by its specific architectural features, recalls the conjoined residential, administrative, and economic role encapsulated in the "palace" designation of other early complex societies (e.g., Folan et al. 2001; Leick 1988:155-159). Indeed, Mackay himself explicitly referred this complex as a "palace," but was quick to add that he was not suggesting that it served as the residence of a "monarch, but perhaps of a ruler of a province, of which Mohenjo-Daro may have been the capital" (Mackay 1938:46). While the exact function of this complex is unclear, its size, both absolutely and relative to other complexes in Mohenjo-Daro, fits an archaeological understanding of monumental architecture (Trigger 1990), and it merits special attention in helping define the particular manifestation of such phenomena in the context of the Indus Civilization.

Figure B.6 Block 1/4 Complex, DK-G South Area, during the Late III (upper) Period and Late II-I (lower) Periods (after Mackay 1938).
B.1.2 Block 1A

Bordering the southwest portion of the Block 1 complex (Figure B.7) is "an architectural feature that is so far unique at Mohenjo-daro" (Mackay 1938:58): a double stairway at the termination of a wide passageway. This feature seems to have origins in the deep prehistory of Mohenjo-Daro, as it appears fully developed by the earliest depths to which excavation reached. While it seems to have become covered before the close of the Intermediate Period, the building to which it was attached remained, in altered form, for much longer.

This double stairway had unusually shallow steps, and the space between the staircases was the location of a drain. Mackay (1938:58-59) suggests that the lower foundation of the staircase likely held a cesspit for this drain, and that the eastern and western sides of the staircase initially featured ramps that followed the plan of the staircase. The staircase runs for roughly 6.4 m to a height of ~1.7m and seems initially to have been connected to a building that is so badly preserved as to be largely unintelligible in its overall layout, and its articulation with Block 1 to its north. Apart from the presence of a shorter, steeper staircase, unusually thick walls (between 1.1m - 1.52m) and the "excellence of the masonry" (Mackay 1938:59), little remained to excite the interpretive interest of the excavators.

![Diagram of Block 1A](image)

Figure B.7  Block 1A, DK-G South, Intermediate III Period (a), Intermediate II Period (b), and Intermediate I (c) (after Mackay 1938).

B.1.3 BLOCK 2

Bounded by Crooked Lane to its north, Block 2 is roughly southeast of the main entrance of the Block 1 complex (Figure B.8-B.9). It is separated from Block 3 to its east by a narrow alley that runs north-south along the western limits of this neighbouring block, and defined on its south by the limits
of the DK-G South Area. Its western boundaries are somewhat ambiguous, but are ultimately enclosed by the far western reaches of Crooked Lane.

Block 2 is divisible into northern and southern sections, separated mainly by open space. The southern section consists of Houses I and II, while House IV is in the northern section. House III, of which only barely traceable foundations remain, was on the far southwestern edge of the block, near Crooked Lane and Block 1A.

![Figure B.8 Block 2, DK-G South, during the Intermediate III Period (a), Intermediate II Period (b), and Intermediate I Period (c) (after Mackay 1938).](image)

House I, about which Mackay (1938:60-62) only wrote five sentences, seems to have retained its basic form and layout throughout its tenure during the Intermediate Period, but largely disappeared by the Late Period. This House, immediately west of House II and southeast of House III, is never fully described in the report. Associated plans indicate that it consisted of at least five small rooms around a central space that was perhaps a courtyard. Better preserved and reported is House II, which forms the eastern component of the southern sub-section of Block 2. This is a simple four or five-room house that had a staircase and a paved area with circular depressions, possibly to receive and hold large jars (Figure B.8). Given these features, its simple layout, its proximity to a main artery of the city (possibly to the Blocks 1/4 Complex), Mackay (1938:61) conjectured that this structure may have functioned as a tavern. Directly north of House II a paved, circular area radiates from a sunken earthen pot that Mackay argues was a washing or ablution platform during the Intermediate II Period (Mackay 1938:61).
Figure B.9 Block 2, DK-G South, Late III (a) and Late II-I (b) Periods (after Mackay 1938).

House IV, at the northeast corner of Block 2 (the junction of Crooked Lane and the dividing alley between Blocks 2 and 3), Mackay (1938:61) describes as "a mere jumble of masonry." Its exact dimensions and configurations are unknown, and the articulation of its rooms to one another is little understood. It features at least three rooms, and during the Intermediate II Period seems to have had at least three contemporaneous entrances on its southern flank which faced an open space that seems to have been the nucleus of Block 2, at the western edge of which was the bathing platform. House II retained its basic layout until near the beginning of the Late Periods, during which time the northern area of the block appears to have become the location of two pottery kilns (Mackay 1938:62-63) (Figure B.10).

B.1.4 BLOCK 3

Block 3 (Figure B.10-B.11) is located east and northeast of Block 2, and south and southeast of Block 4. It is bounded on its northern and northwestern edges by Crooked Lane, and on its east by First Street. It is separated from Block 2 to its west by a narrow alley. Although it witnessed significant alterations over time, the main and enduring features of this block were laid down in the Intermediate Period. It consists of six houses (I-VI) whose adjoining external walls form its defining perimeter. Internally, these houses are arrayed around an open space space, although Houses II and V do not appear to have had direct access to this space. It plausible that this space may have functioned as a shared courtyard or similarly secluded communal space.
During the Intermediate II Period, Houses II, III, IV and VI fronted directly onto First Street, although only House II and III evince First Street doorways during this time (Mackay 1938:64); Houses IV and VI, in contrast, were accessed through the shared space referenced above. House I was accessed at this time from the south, and did not articulate with the block's shared open space. House V was apparently entered by Crooked Lane to its north.

Houses III, IV, and VI are similar in their layout: each consists of a single large room in the east of the building (or two similarly aligned rooms in the case of House IV) partitioned from a smaller
space (or, again in the case of House IV, two such spaces) on the structure's western side. While the partitioning walls of each House are not contiguous, it is interesting that they are largely identical not just in their alignment, but their absolute position. Such similarities suggest an internal uniformity consistent with the external agreement of both the east and west walls of the structures. Of particular interest is the proportion of these structures' internal spaces when considered in relation to First Street. The habit of having large rooms in those sections of the buildings that border on First Street is similar in form to those structures in the HR-B Area (Block 5) that front onto Street 3 (Appendix A). Perhaps there is a functional reason for this pattern.

By the end of the Intermediate I Period (I) (Figure B.13), an internal redistribution of some of the discrete spaces that comprised the Houses of the block had occurred. Specifically, Rooms 7, 14, 19 and 20, which were initially part of House I, had been reallocated to House V, while a portion of Room 17, House I, was incorporated into House II (Mackay 1938:64). Mackay interpreted this as evidence that the owner of House I, having fallen on hard times, prudently partitioned part of his property amongst his neighbours. However, such pragmatic speculation is based on the imposition of modern financial structures and land tenure practices onto the Bronze Age society of Mohenjo-Daro. A more plausible explanation to explain the change of the internal composition of Block 3 would be one that took into account residential patterns attested in ancient urban centres, such as those tied to extended kin, attached households, or other urban social groups (Keith 2003; Manzanilla 1996; Smith et al 1999; Stone 2007).

Other alterations prior to the Late Period included the raising of the floor and creation of new rooms in House V, as well as the raising of Block 3's shared open space (Mackay 1938:65). Eventually, by the close of the Late Period (Figure 5.13), there were only remnants of Houses I, V, and VI in Block 3. Evidence of several partition walls in the centre of the block indicate that the shared internal space had been subdivided substantially by its last phase of occupation. Mackay asserts that this corner of the Mohenjo-Daro was no longer inhabited shortly before the close of the Late II-I Period (Mackay 1938:66).

**B.1.5 BLOCK 5**

Block 5 is located north of Block 3, and likewise runs along the western side of First Street (Fig. B.12-B.13). It is separated from Block 4 by Low Lane, and from Block 6 to its north by a short lane. It consists of comparably sized Houses I and II, and the much smaller House III.
Mackay (1938:70) notes that during its earliest known occupation (Intermediate III), the defining architectural feature of the block was the western wall of House II. This exceptionally thick wall (for which no dimensions are provided), in conjunction with two small infilled cells that flank its eastern edge, may have served to support a stairway. The prominence of the western side of the building, which faces a small alley (Low Lane), rather than its eastern side, which faces the main thoroughfare, counters a pattern seen elsewhere in the city when frontage onto streets usually has the greatest architectural investment. Perhaps the reason for this inverse pattern is because the west side of House II faces the eastern limits of the Block 1/4 complex, Mackay's "palace".

The distinctions between Houses I, II, and III really take form in the succeeding phase (II) of the Intermediate Period. House I, which in its initial occupation had doorways opening onto both First
Street and Low Lane, was now only accessed from the latter. This six-or possibly seven-room House also had a second storey, as indicated by a staircase in the northwest corner, and a well in the usual eastern side of the building (Mackay 1938:71). House II, which in this phase appears to also have a six-or seven-room layout, and which was accessed by means of First Street, was noted by Mackay, as "destroyed down to foundation level" (Mackay 1938:71). Consequently, our knowledge of the articulation of its rooms is quite limited. House III, located along the northern edge of House II, seems to have consisted of two almost equally sized rooms, the smaller one equipped with a doorway opening onto First Street. This room also had a small paved area that may have served as a bathing platform.

The transitions from this phase through the end of the Intermediate Period, and onto the close of the Late Period witnessed very little alteration in this particular block of the DK-G Area (Mackay 1938:72). Those changes which are evident on the plans of Block 5 during the Late II-I Period are primarily owing to poor preservation; in common with Block 3 to its south, much of the eastern portions of Block 5 during its terminal phase of occupation do not survive.

**B.1.6 Block 6**

Block 6 is a long complex of related buildings that run north of Block 5 between First Street on its east and Low Lane on its west (Figure B.2). It forms the northeastern boundary of the DK-G South Area. A description of this block is less straightforward than of most others in this part of the city because only its external walls have been excavated to a depth correlating with any time prior to the Late Periods (Mackay's Late III) (Mackay 1938:72). While this still allows an appreciation of how this block articulated externally with its immediate surroundings, we are quite limited in describing articulation and change within the block in any period prior to Late III. However, a description of what we know of its final stages is of value to see if it follows the general trends of subdivision and partition witnessed in other areas of the city. If this is indeed the case, the outlines of earlier forms may be discernible from the later, and presumably more crowded, patterns.

This block held three houses (Houses I, II, and III), arrayed successively from south to north between the length of Low Lane and First Street (Fig. B.14). The earliest known internal configuration (that is, the Late III phase) of the most southerly of these, House, I displays some interesting and unusual features. It was accessed from First Street on its eastern side by means of a wide doorway almost at the northeast corner of the structure. This doorway led into a small, semi-enclosed room along the north of the building which articulated with an open courtyard that dominated the eastern two-thirds of the House (at approximately 7.5m x 7.2m). In the centre of this courtyard was a well. A
north-south wall divided the western part of the building from this courtyard, beyond which were two rooms. The northern of these featured a doorway which connected it to the southwest opening of House II. Mackay (1938:73) was inclined to consider the well a public, or at least a semi-public one, a status that changed when the doorways connecting Houses I and II were created. Mackay felt that, from this point onwards, House I should be considered an annexe of House II (Mackay 1938:73).

House II had six rooms on the main floor and, while there is evidence of a staircase, no other remains attest to the second storey. The southwest corner of this building, which may have been a small, open court (Room 6), features a very wide doorway (approximately 2.4m) opening onto Low Lane, which, by the Late III period, had been bricked up. The attached room to the north of this space (Room 7), which was connected to the potential court by another unusually wide doorway, featured ephemeral, stall-like divisions. These features, together with the wide doorway originally connecting Room 6 to Low Lane, led Mackay (1938:72) to speculate that this part of the structure might have been devoted to animal housing.

![Figure B.14](image_url)

**Figure B.14** Block 6, DK-G South, Late III (a), and Late II-1 (b) Periods (after Mackay 1938).

The northern wall of House II served double duty as the southern wall of House III, which also shared the latter's eastern and western walls, which were too thin to support an upper storey (Mackay 1938:74). Both houses were framed by Low Lane and First Street. During the initial occupation of House III, its primary entrance was onto First Street by means of a possible courtyard (Mackay 1938:73). Branching off of this possible courtyard were three separate chambers which the excavator implies constituted the cores of three separate residences, on account of the separate drains in each (Mackay 1938:73). Supporting this interpretation is the fact that these rooms are the sole means of
accessibility to still other rooms. However, the precise way that some of these latter rooms connect with their neighbours is unclear on the excavation plans, and not addressed in the report. As in other complexes at Mohenjo-Daro, these suites are proportionally asymmetrical; that is, they are comprised of larger rooms and courtyards segregated from almost uniformly sized smaller rooms, which in this case are positioned on the western extremity of the building. Interestingly, the smaller rooms in this instance front onto the smaller lane (Low Lane) to the west, rather than the large street (First Street) on the east, the reverse of the pattern witnessed in the Block 5 of HR-B Area, but similar to that witnessed in Block 5 of DK-G South.

During its last phases of occupation (Late II and I), Block 6 was differed little in plan from its earliest known phase. The only significant differences Mackay notes pertain to the closing of the northern section of Low Lane adjacent to Room 22 of House III (Mackay 1938:75), and the subdivision of House III's internal and possibly shared courtyard. While this room had previously served as the sole means of internal access from First Street, now several other doorways penetrated the eastern flank of this structure (Mackay 1938:74-75).

B.1.7 Block 6A

![Diagram of Block 6A](image)

**Figure B.15  Block 6A, DK-G South, Late III Period (after Mackay 1938).**

Immediately north of Block 6 is Block 6A (Figure B.15). This block consists of a single structure on the southwest intersection of First Street, which runs along its eastern side, and Central Street, to its north (Figure B.2). It is flanked on its western side by Low Lane. As in Block 6, excavation of this structure ended before Intermediate or earlier levels were reached. Consequently, we only have relevant information for the structure's later phases.
Perhaps the most distinctive feature of this structure, which seems to have been a stable trait for the length of its use, is the substantial thickness of its walls. Mackay (1938:75) states that the thickest of these, the northern wall, measures 1.34m in width. While he provides no measurements for the other walls, he implies that they were also of a similar build. During the earliest phase of which we have evidence (Late III), this building was partitioned into three main spaces: roughly equal northern and southern sections comprise the majority of the building's internal space, while the narrow western strip of the building is composed of three rooms that run the length of the structure. Although the western room may have articulated with the northern one, neither of these shows access to the southern one. As is common at Mohenjo-Daro, the question of just how internal spaces were accessed from outside is impossible to answer with the data available. During this phase, only two clearly visible doorways are evident in this structure, both on the Low Lane (that is, western) side. Of these the more northerly only accessed one room (Mackay 1938:75).

The two large sections are similarly arrayed, in that they are generally open spaces interrupted by a set of piers. Mackay argues that these piers date as far back as the Intermediate Phases, and, like the walls of 6A, were maintained throughout the later stages of the building's occupation (Mackay 1938:75). A short north-south wall that originates in the middle of the dividing wall between the northern and southern sections of this building, and connects with one such pier, parses the northern space into separate spaces, while leaving it nevertheless as one room. The foundations of a staircase just to the west of this partial wall, along with the building's thick walls, suggest the former existence of a double storey. The western strip of 6A structure features two very small rooms at its northern and southern extremes, while a third, elongated one comprised the remainder of this internal space. The most northern of these rooms was paved and equipped with facilities to drain into Low Lane. However, rather than arguing that this space constituted a bathing room (recall that this room does not articulate with any of the others, only to the outside), Mackay (1938:76) suggests that it may have served as a guard or watch room, designed to monitor the intersection of Central and First streets. The presence of brick benches on the eastern outer wall of the structure led Mackay to postulate they were used by scribes, and to suggest that this section of the complex was likely given over to administrative pursuits (Mackay 1938:76). Whether this was indeed the primary function of Block 6A remains unknown, but the combination of unusual features evident in this structure during the Late III period does suggest a civic, rather than a solely residential, designation.
In the final stages of this building's occupation (Late II and I Periods), the floors of the 6A complex were paved, edged, and built upon a metre-thick ballast of burnt clay nodules. Modifications to some of the brick piers were made, along with the erection of an additional pier. Other than these relatively minor changes, a door was opened in the boundary wall between the northern and southern sections of the complex, connecting these formerly discrete spaces. In all other respects, the latest known stages of this complex quite closely resemble its earliest. Indeed, given its apparently Intermediate Period or earlier origins, the 6A complex may well have retained continuity in both external and internal form for the duration of its existence. This is a rare pattern at Mohenjo-Daro, especially considering the usual substantial rearrangement of plausibly civic spaces that typified the Mature to Late Harappan transition, exemplified by the changes in the Block 1/4 Complex of DK-G South, the Block 18/19 Complex of DK-G South (Section A.5), and several examples on the Upper Town Mound (Appendix C). If we do assert that that Block 6A was likely a civic structure, the fact that it was not subject to the main spatial changes that accompanied the shift from political fluorescence to the dissolution and eventual abandonment of the city, perhaps speaks to its lingering symbolic importance amongst the post-Mature Harappan community; conversely, this could also imply its complete irrelevance in the new social world of the fallen polity.

B.1.8 Block 7

For the entirety of its tenure (from Intermediate III through to Late II-I), all but the northern border of Block 7 remained the same. Its eastern limits were marked by the presence of Low Lane, its southern by Fore Lane, and the western by an arbitrary line "immediately east of Houses I and II of Block 10" (Mackay 1938:77). For all but the Late II-I Periods, the northern boundary of this block was provided by Long Lane, but during its final stage of occupation, however, a portion of Long Lane was built over with structures. Block 7 is in the immediate vicinity of Blocks 1 and 4 (to its south-west, and south, respectively). Block 5 is to its south-east, Block 6 to its east, Blocks 8 and 9 to its north, and Block 10 to its west (Figure B.1 and B.2). While it is similar to most blocks in that it is defined primarily by means of lanes and roads, Block 7, along with its neighbours Blocks 9 and 10, is one of the more embedded sections of Mohenjo-Daro, in that it is surrounded by concentric and continuous agglomerations of urban growth.

The earliest phases of this block (Figure B.16) revealed through excavation date to the beginnings of the Intermediate Period (Intermediate Period III). However, even by this early time, there appears to have been a lengthy and established history of occupation. While subsequent reuse
and absorption have left us with only a partial idea of the scope of occupation, several structures from this early phase inform us on the rough particulars of this section of the city. Mackay implies that the quality and form of the surviving Intermediate III Period buildings in this block suggest a connection with the fortunes of the Block 1 and 4 "Palace" found to its south. Prominent amongst these is House VII, a relatively small structure directly opposite the northern façade of Block 1 on Fore Lane, which Mackay (1938:78) suggested was the abode of a minor official connected to the Block 1/4 Complex.

![Figure B.16 Block 7, DK-G South, Intermediate III Period (after Mackay 1938).](image)

![Figure B.17 Block 7, DK-G South, Intermediate II Period (after Mackay 1938).](image)
The most architecturally distinct and chronologically confusing building of Block 7 is House VI, which occupies the southeast section of the block northwest of the intersection of Low Lane and Fore Lane. This structure, whose earliest remains are, Mackay admits, conflated with those of the succeeding Intermediate II Period, is very unusual at Mohenjo-Daro in that much of its external frame consists of square brick columns (Mackay 1938:78). The columns themselves do not protrude far above the level of the Intermediate II period floor, and their interstices are filled in with bricks arranged in alternating patterns, work conducted mainly in the Intermediate II Period. As Mackay (1938:78) describes it,

the spaces between them were definitely filled in during the Intermediate II Phase and the work was done when the piers were mostly underground. The general effect is very patchy and irregular, and there are even slices of brick set in here and there, which strongly suggests underpinning at a subsequent date.

In addition to this novel method of creating foundations, and the disparity in quality between the columns and poor joining masonry, this structure also housed an Intermediate or Early Period well near the eastern wall of the structure.

North of House VI is located House V, whose partial remains suggest to Mackay (1938:78) that it was once an "important house", perhaps on account of its three separate entrances: two from Low Lane to its east, and one from the south, all of which terminate in a large courtyard. The southern entrance was adjacent to a paved well-room, found roughly north of the well mentioned in relation to House VI. Directly north of House V is House IV which, while badly fragmented, does include a feature that Mackay interpreted as being tied to brewing or the processing of oil, (specifically, a thickly-slipped jar embedded into the floor, that was filled by means of a runnel that led outside (Mackay 1938:78). West of House V is located House III, of which, Mackay (1938:79) claims, "practically nothing remains."

With the exception of a preserved bathing or privy room in House IV, Mackay makes no further mention of the earliest excavated phase of occupation of Block 7. It is unclear in the maps that accompany the report whether the blank spaces for the Intermediate III Period represent unexcavated areas, or actual open spaces. If the latter, then the area west of House V and north of House VII would provide an early example of the open spaces common in the Intermediate II Period in other areas of Mohenjo-Daro.

As is usually the case, the less time separating the period of investigations from the present, the greater the clarity and resolution of the archaeological record. Such is certainly the case for most of
Block 7 during the subsequent Intermediate II Period (Figure B.17). It is in this period that we get the first real notion of the structures that comprised the western portion of this block. Houses IX and II, which form the northwestern corner of the block along with a well-room (whose eastern wall marks the western limit of the potential open space mentioned above), comprised a large, single complex. This complex contained as many as 23 rooms, and perhaps nine of them (essentially, all of House IX) were interpreted by Mackay as storerooms (Mackay 1938:79). These seem to have been of a standardized size, although no measurements are provided, and were arranged in two rows. The furthest or more northerly rooms were connected with one another by means of doorways. The more southerly rooms were each entered from the south by means of a single doorway, and connected with their northern counterpart by means of another doorway. With one exception, the rooms in this first row did not connect to one another at all (Marshall 1938:79). The main entrance to the complex was likely the wide opening that led into the paved hallway that bordered the southerly rooms, and continued to connect with House II. The small lane that ran in front (south) of his complex likely connected with both Low Lane to the south and Long Lane to the north through a set of stairs that descend from the north-south lane that separates Blocks 7 and 10.

![Diagram of Block 7, DK-G South, Intermediate I Period](image)

**Figure B.18** Block 7, DK-G South, Intermediate I Period (after Mackay 1938).

The smaller component of this complex is House II, which measures 11.9m east-west by 10.1m north-south (Mackay 1938:80). This "remarkably well-constructed building" featured external walls 1.21m thick, and consisted of seven rooms arranged around a large internal space, likely a courtyard, itself divided into three semi-discrete spaces. Owing to its later incorporation into the succeeding
Intermediate I phase structure, we are left with no way of understanding how these rooms articulated with one another.

![Figure B.19](image)

**Figure B.19** Block 7, DK-G South, during the Late III (a) and the Late II-I Periods (after Mackay 1938).

Mackay suggests that the previously separate structures which formed the northeastern and eastern sections of Block 7 (Houses III, IV, and V) during the Intermediate II Period formed one large complex (Mackay 1938:80). These do not seem interconnected in the same way as Houses II and IX; they retain their internal distinctions, but share and open onto a large communal open space. Likewise, Houses VI and VII seem to have formed a single complex, yet the reconstruction of how exactly they fit together is not as clear as in the example just mentioned. In part, this is due to with the lack of clear doorways to indicate patterns of access; the chronological mess of House VI also presents problems for interpreting architectural relations. If the space west of House V was indeed a communal open space, it seems to have retained this use during the Intermediate II Period.

At the end of the Intermediate Period (Intermediate I), both minor and major changes are evident in Block 7 (Figure B.18). The complex formed by Houses II and IX appears largely unaltered, save for some renovation to the former that followed and reinforced its original layout (Mackay 1938:81). In contrast, the complex in the northeast corner of the block seems to have continued on without House III, for it disappeared during this time. Like the Late Period alternations to the floor of Block 6A mentioned above, the well room of this complex (located in House V), was repaved with kiln waste to a depth of over one metre, itself deposited over 1.2 cm of ash. Also new to this complex during the Intermediate I Period was a small (1.52m x .6m) paved and brick-lined rectangular pit, approximately 30cm deep, located in the communal space at the centre of the complex. Mackay (1938:82) suggests that this was likely a cesspit, although one so far devoid of drains.
The main change to Block 7 during the Intermediate I period was in the southern parts of the area. Houses VI and VII, which in the previous period united into a single structure, were now more inwardly focused in relation to their neighbours owing to the incorporation previously external rooms within their perimeter walls to act as a courtyard. Additionally, the open space framed by the western and northern limits of Houses VII and VI, the southern limits of the House II/IX complex, and the southwestern limits of the House III, IV, and V complex no longer remained open, but was now the locale of House VIII. This structure was "very roughly constructed" and featured particularly thin walls (Mackay 1938:82).

In the post-Mature Harappan phase we witness the most drastic alterations to Block 7. By the Late III Period (Figure B.19) the architectural mass of Block 7 was significantly reduced; for example, Houses III and VIII were absent at this time, as were almost all of House IX and the entire western half of House V. House IV remained, but in a much dilapidated and fragmentary state. Conversely, the final Late II and I Period stages of occupation reveal the most crowded stage of Block 7's tenure (Figure B.23). In addition to several new buildings that appeared in place of previous ones, the northern confines of the block disappeared amid a flurry of structures from neighbouring Block 8, which overtook the dividing lane between the two (Figure B.2). Of particular note in this general section of Block 7 is the placement of a large circular kiln in part of the space formerly occupied by storerooms of House IX (Mackay 1938:85).

B.1.9 Block 8

Block 8 is directly opposite Block 6A on the west side of Low Lane, and opposite the northeast corner of Block 7 on the north side of Long Lane (Figure B.1 and B.2). On its western boundary it abuts with Block 9, which is contiguous with the architecture of Block 8. The dividing line between these blocks is the western edge of Room 35/38. Its northern boundary is ambiguous until its final stages of occupation, in which it was likely provided by Block 8A (see below).

During its earliest excavated phase of occupation (Intermediate II Period), this block seems to have been comprised of a single, large structure, although the manner in which its various components communicated is not entirely clear (Figure B.20) (Mackay 1938:87). The structure was almost entirely enclosed; although its western and northern flanks are only partly encased by the perimeter walls, this may be the result of poor preservation. Both its external and internal walls were quite thick, although
their actual dimensions are absent from the records. The building was centred around a large internal courtyard, which measured roughly 10.6m x 5m, and was flanked by rooms on its southern, southwestern, and northern sides. The eastern edge of this courtyard, which fronted onto Low Lane, was delineated from the lane by one of the structure's substantial walls.

![Diagram of buildings](image)

**Figure B.20**  Block 8, DK-G South, during the Intermediate II (a), Intermediate I (b), Late III (c) and Late II-I Periods (after Mackay 1938).

Block 8 was accessible into Low Lane by means of a very wide (~2.4m) doorway whose patterns of wear on the associated jambs led Mackay (1938:87) to suggest that it was regularly traversed by pack animals on their way to the central courtyard. The vestibule itself was paved, and opened onto both the large internal courtyard, and a second paved room to its west that held a well, which in turn led to a separate passages. One of these passages led to a series of rooms clustered in the southwest of the complex, another led to a possible open space associated with Block 8 House I in the northwest corner of the complex which was also accessible from the northwest corner of the central courtyard. Additionally, a doorway connected this room to the courtyard and centre of the block. Interestingly, the large space in the far western part of the complex had been filled with a cemented mass of sun-dried bricks of three separate sizes, all of them "considerably larger than the burnt bricks used in building Mohenjo-daro" (Mackay 1938:88).
During the succeeding phase of occupation, the Intermediate I Period, this complex underwent
minor alterations but retained the form and main spatial sensibilities of its former iteration (Figure
B.20). For example, most of the rooms and doorways of the previous period fit nicely with those from
the Intermediate II period, so much so that the southern and northern components of the block are
essentially identical. One significant exception to this trend is the later elimination of the paved
entrance vestibule in the southeast of the building, which was remodelled as an extension of the main
courtyard to articulate directly with Low Lane. Likewise, the open space represented in the northwest
corner of the structure was no longer connected to the central courtyard, but rather was accessible from
by means of a northern doorway in the most westerly room of the block (Mackay 1938:88).

As with most other sections of Mohenjo-Daro, the most dramatic architectural changes in Block
8 coincided with the latest periods of the city's history, although they are relatively minor compared to
other parts of the city. The predominant issue that affected Block 8 initially (during the Late III Period)
was its partition into two separate buildings, Houses I and II, roughly corresponding to the western and
eastern halves of the block (Figure B.20). This was achieved by blocking up the doorway in the
southern part of the block that had previously connected these two sections. House I seems to have
been essentially identical to its earlier composition.

House II also largely continued the form of its earlier incarnation, with the notable exception of
the unification of the rooms in the northern section (Mackay 1938:89), as well as the laying of two
courses of brick pavement over a ballast of ceramic waste in the southern well room. The external face
of the southern wall of this room featured two sloped water chutes, likely placed to drain the excess
water from the paved floor. Mackay was quite taken with the quality of these drains and their
associated masonry to the point that he stated that "the mason who was responsible for their
construction was an artist at his job", and that "the whole makes quite a decorative feature in the
monotony of an otherwise very uninteresting wall" (Mackay 1938:89). Unfortunately, no drawings or
photographs exist in his report to complement Mackay's remarks.

Interestingly, at this period (Late III) a suite of rooms appeared directly north of House II and
south of Block 8A. Mackay (1938:89) admits that he does not understand if these rooms should be
considered an extension of House II or a separate structure that appeared in a previously vacant area on
the northern fringes of Block 8.

During the last periods of its habitation (Late II and I), Block 8, in concert with its immediate
neighbours, underwent its most obvious transformation (Figure B.20). While they retained their basic
shape, both Houses I and II included more rooms than they did in the Late I and II periods. The partition walls of House I were comprised of bricks of many different sizes, a fact that led Mackay (1938:90) to suggest that the building material for House I was scavenged from other structures. Its previously external space on its northern limit was now enclosed as an internal courtyard that made up the northern section of the building.

House II witnessed an even more drastic reorganization of internal space than did House I. The western section of the internal courtyard was partitioned to form a separate room, and a potential second storey is implied by the presence of steps in a room north of the central courtyard. The bricks used in a new water chute connecting a southern room with Long Lane to the south, as well as those used in the coping for the well room, were inappropriately sized and shaped, recalling the piecemeal nature of garnering building supplies that Mackay suspected for House I during this time. During this the Late II and I Periods the northern rooms that appeared during the Late III Period articulate directly with House II (Mackay 1938:91).

The erection of House III is perhaps the most revealing piece of evidence we have for understanding the state of civic authority in the immediate aftermath of the dissolution of political coherence at Mohenjo-Daro. This structure, which has survived in a much dilapidated state, is located directly north of House I. Not only is it built directly onto the flanks of Houses I and II (on their northern and western sides, respectively), but it was constructed in such a fashion as to blur the spatial boundaries between them, as well as with Block 8A to its north. Furthermore, the internal spatial logic of the House is quite distinct from previous patterns. While most Mohenjo-Daro residences during earlier periods contained a central, or at least internal courtyard embedded within a ring of rooms, this structure seems to have possibly two courtyards or at least large rooms, arranged in a linear fashion, and flanked by single cell-like rooms on their eastern and southern edges, while their western edge features slightly larger rooms arranged two deep. While the size differences between the various sections of the building are apparent, they are not standard, and in the absence of actual measurements, the plans seem to display individual sizes for all rooms. Furthermore, as Mackay (1938:91) claims, the articulation of the rooms is unclear. It is possibly the least spatially deliberate of the buildings at Mohenjo-Daro.

B.1.10 Block 8A

Block 8A is immediately north of Block 8 and east of Block 9. It occupies the southwest corner of the intersection of Low Lane (on its east) and Central Street (to its north), the latter being the arterial
division between the northern and southern components of the DK-G Area (Figure B.2). As with
certain other sections of the city, the precise nature of the history of Block 8A is unclear. It seems that
the earliest evidence for it was in the Late III Period; however, it is unclear if this period pertains to the
lowest level excavated, or if the Block 8A was created during the Late III Period (Mackay 1938:92),

The earliest evidence for Block 8A presents a picture of an impressive, decidedly uncommon
building (Figure B.21). Like many other structures which front Central Street, Block 8A boasts
unusually well built and thick walls averaging 1.5m. With the exception of a small, partially enclosed
and paved well room just north of the entrance from Low Lane (again, the well room is on the eastern
side of the building), this structure contains no internal structural divisions. In other words, Block 8A
is one of the few buildings at Mohenjo-Daro that is effectively comprised of a single room. It is also a
rather large building, initially measuring 23m east-west and ~8m north-south. The singular nature of
the internal space of Block 8A is not devoid of architectural features, however. Buttresses were placed
at regular intervals along the walls, most notable in the southern and northern walls where they were
placed directly opposite one another (Mackay 1938:92). Mackay thought that these buttresses served
to support an open gallery with associated rooms that overhung Central Street, and he envisioned the
function of the block as a hostel (Mackay 1938:92).

![Figure B.21  Block 8A, DK-G South, Late III Period (Mackay 1938).](image)

As in other sections of the area, the spatial logic of the original Block 8A do not carry through
to the last days of the city's habitation. While the general shape of the structure remained largely
unaltered, its singular internal space was subdivided into several new compartments (Figure B.21).
The most notable impact this internal change had on the external features of the building was the
creation of an entrance vestibule that opened onto Central Street. In addition, an entrance was created
that connected the northeast corner of the block with Central Street. This entrance led from the street to a small, paved room equipped with drains that led to a cesspit in Low Lane to the east, a combination of traits and location that led Mackay (1938:93) to speculate that it served as a public latrine.

Likewise, the well room was fully partitioned from the remainder of the internal space of 8A and provided with a direct entrance onto Low Lane. Over the course of the Late Period, the inhabitants of this structure decided not to raise the steining of the well (that is, the walls of the well) to account for the rise in the floor and street, as was most often the case at Mohenjo-Daro, but rather to create a set of stairs that descended into the well room, which was maintained at its previous level. It was on these steps that an event occurred that archaeologists have since termed the "Well Room Tragedy" (Dales 1964). This refers to the discovery of four skeletons in this space (Mackay 1938:94-5).

The general retention of the distinct thick-walled exterior of Block 8A seems not to have been as thorough in the south of the structure. During its last spurts of occupation, much of the southern wall of 8A seems to have been removed, and several rooms, or perhaps even structures, were built over the former southern boundary (Mackay 1938:94). Indeed, during this period, it is difficult to distinguish between Block 8A and House III and II of Block 8 to its south, as noted above.

B.1.11 Block 9

This somewhat large and oddly-shaped block is bordered by many other blocks and features (Figure B.1 and B.2). It is located directly to the west of Block 8, and the non-linear course of Long Lane runs along its southern boundary. Thus, Block 9 is north, northwest, and west of Block 7. It is also positioned north of Block 10. Block 12 forms its western boundary, while Loop Lane, with Block 12A opposite, forms the extreme northwest limit of its domain. Its northern limits are defined by Block 9A in the west, and Central Street in the east.

While some fragments of walls dating to Marshall's Intermediate III Period attest to the relative antiquity of this part of the DK-G Area, it is the succeeding Intermediate II Period that provides the earliest partial semblance of architectural order for Block 9 (Figure B.22). There is evidence for at least five separate structures in Block 9 (Houses III - VIII) that date to this period. While most remain only partially preserved, some evidence suggests that at least some of these structures were either exceptional residences, or not residences at all. This is most apparent in the case of House VIII, whose southern walls (those that face onto Long Lane opposite House IX of Block 7) were of "exceptional thickness" (Mackay 1938:96). The massive nature of these walls is offset by the relatively thin and oddly-angled nature of the partition walls that comprised its interior, however.
House VIII is separated from House VI to its west by a short lane (marked 49 on the report map), which connects, by way of a brief flight of steps, to Long Lane to the south. Lane 49 wraps around most of House VI, which is itself an odd, out-of-square structure whose internal walls are also mostly arranged without consideration of right angles (Mackay 1938:96). Other than its unorthodox shape, this structure is of note for the well in its southeastern corner, accessible from outside by means of a wide (~2.7m) doorway. Perhaps of importance is the fact that this entrance, which formed one of two entrances on this side of House VI, was located at the junction of Long Lane and Lane 49. This placement led Mackay to posit that, while encased within a single structure, this well likely served in a public capacity as a source of water for the immediate neighbourhood (Mackay 1938:96).

Directly east of the large doorway in the southeast of House VI, across Lane 49, a single room abuts the southwestern corner of House VIII but does not articulate with it, and is accessible only from an entrance facing onto Long Lane. Mackay (1938:96), in keeping with interpretations he expressed earlier in relation to similar spaces in DK-G North, argues that this space was the purview of a watchman.

An additional unique configuration at this time in Block 9 is the presence of a possible grain bin in House V. This feature, which is essentially a square of pavement surrounded by a short wall of only half a brick in thickness, is indistinguishable from a cesspit. As Mackay makes evident, however, his preference for its function as storage rather than waste collection is based on its presence at ground level within a structure, not buried in an adjacent street (Mackay 1938:96). Interestingly, a freestanding
wall that distinguishes House V from an offshoot of Lane 49 on the western side of House V is notable for the "curious and quite ornamental pattern" of its bricks (Mackay 1938:97).

![Figure B.23 Block 9, DK-G South, during the Intermediate I (a), Late III (b), and Late II-I (c) Periods (after Mackay 1938).](image)

Of House VII, which appears to be rather large, the report only really addresses its evidence for the presence of a second storey (Mackay 1938:97).

Very little significant change occurred in the succeeding Intermediate I Period for Block 9 (Figure B.23). As Mackay (1938:97-98) notes, the main differences between this and the preceding phase amount to minor shifts in the placements of doorways, and slight expansions in overall house size, such as with House V, which now encroached onto the lane separating its eastern flank from House VI. The better state of preservation of the Intermediate I Period architecture allows us a more refined idea of the internal configuration of House VIII; however, but House VII was largely removed through later brick-robbing. Overall, Block 9 seems to have entered the final stage of full political coherence at Mohenjo-Daro largely as it did during its florescence.
The entire northern extreme of the block, which fronts onto Central Street, has only been excavated down to the Late III Period (Mackay 1938:98), and so is particularly confusing to comprehend solely from the maps (Figure B.23). Prior to this phase of the city's history, this section of the block does not even appear on the associated report plans. Of the Houses in Block 9 already discussed, virtually nothing remained by the Late III Period. House III was represented by some walls of its southeastern corner, House VIII by a solitary Late III Period staircase (of which the treads were composed of bricks laid on edge); of Houses VI and VII, only a single shared wall survived (Mackay 1938:98-99).

In a similar fashion, most of the buildings that are attested for the first time in the Late III Period are also represented by fragmentary remains. For example, Houses I, IX, and X, all located north of the "original" Block 9 structures and south of those that ran along Central Street, are only represented by fragments of walls and pavements.

The exceptions to this pattern are the buildings that front Central Street, and a large house rendered in the report as Houses II and IV opposite the southeastern corner of Block 9A. This structure's (which, despite its division into separate houses, was actually a single unit) western edge follows the alignment of the lane onto which it borders, and has a plan similar to earlier neighbour, House VI, in that it is not very rectangular. Indeed, its northern edge is narrower than its southern, which also juts out to the southwest farther than it does on its southeast corner. While the interior of the structure seems to proclaim spatial principles in concert with those expressed elsewhere at Mohenjo-Daro, such as a large internal space surrounded by smaller ones and various passages connecting the main branches of the building (Sarcina 1979), it is likewise arrayed off-kilter in relation to the external walls. Mackay (1938:98) discovered that part of the reason for this is that the southern walls of the structure were purposely built over much thicker walls of the Intermediate I Period which, if I follow Mackay's logic correctly, follow an alignment at odds with the rest of the building. This practice highlights changes in the tradition of construction at Mohenjo-Daro beginning in the Late III Period and reaching their height in the Late II and I Periods: a reliance on pre-existing buildings as both a source of raw materials and foundational supports. Although such practices were also witnessed in the Intermediate Periods, they did not approach the scale of later periods. Intermediate Period builders readily used preexisting structures, but often modified the earlier buildings to suit their own purposes; Late Period architects, however, often adapted their own structures to fit within the confines of earlier
buildings. Once again, the onset of the Late Periods at Mohenjo-Daro wrought the most dramatic changes witnessed in this particular section of the city.

House XII is situated opposite Block 8A on the west of the small lane that separates Blocks 8A and 9, thus facing onto Central Street. It was accessible at this time by two doorways in its northern face. Like Block 8A, the walls of House XII exhibit an extraordinary thickness and perhaps share with it the presence of a second storey. Although later modifications prevent an intimate knowledge of its particulars, it seems also to have shared with Block 8A the distinction of being composed of a single, unitary internal space (Mackay 1938:99).

It is unclear why the space that separates Blocks 8A and 9 was not addressed in the section of the report that dealt with the Intermediate Periods. As Mackay (1938:99) notes in his description of the Late III staircase that ran between these blocks, excavators discovered that in earlier (that is, Intermediate) Periods, this space was occupied by a laneway. This lane did not persist into the later phases of the city's occupation.

Directly west of House XII is another structure with equally thick walls. While on the report maps this structure looks like a western extension of House XII, Mackay stresses that it comprises its own building (Mackay 1938:99). Noted as "Rooms" 83-88, this non-numbered structure is internally divided into three separate spaces. The easternmost of these spaces is accessible from Central Street by a doorway and does not connect internally with the remainder of the building. Two remaining doorways from Central Street each lead in to the same interior space, which is connected via a doorway to the westernmost of the internal spaces, which do not enjoy an external entrance.

House XI, separated on its east side from the above described building by a very narrow lane, seems to share its Central Street wall with Block 9A to its west. It is unclear how exactly this structure articulates, if at all, with House IX to its south.

During its last periods of habitation, Block 9 changed dramatically (Figure B.23). Mackay (1938:99) states that "[t]he whole character of this block was changed...at the beginning of the Late II Phase." Indeed, the layout of the Late I and II Periods render this block mostly unrecognisable from its earlier incarnations. A main factor in this changed design is the eradication of Long Lane west of the Block 9/Block 8 interface.

One of the most striking changes is the union of the Late III Period buildings that front onto Central Street with the poorly understood structures to their south. This is most striking in the case of House XII, which in the latest phase does not manifest as a solitary space encased within thick walls,
but as the northern extension of a very large complex which also includes Houses X and I (Mackay 1938:100). While much of the detail regarding the layout of this complex is lost to subsequent brick-robbing, all three formerly discrete buildings connected by means of interpenetrating passages and doorways.

Although large, multi-winged complexes were not uncommon in other periods at Mohenjo-Daro, this particular one does not adhere to the basic spatial principles of such earlier models. For example, rather than sporting one generally central courtyard that acted as a node from which a host of smaller, accompanying rooms emanated (such as in Block 3, HR-A, or Block 2, HR-B Area), this complex hosts perhaps as many as four courtyards. Their relationships to the spaces around them display no discernible pattern. Likewise, the entrances to this structure seem restricted to a single opening onto the lane that lay between Blocks 9 and 8 on Central Street. Other, presumably earlier complexes often employed more than one entrance, and most complexes that fronted onto a major thoroughfare were usually accessible from them. In this Block 9 example, the previous Central Street doorways in House XII and its western neighbour were blocked up (Mackay 1938:100-101).

The remainder of Block 9 displays a similar blend of continuity in habitation and innovation of form. Houses VIII, IX, IV, and II, were all rebuilt in a distinct masonry tradition different from their earlier forms, with multiple instances of internal subdivision (Mackay 1938:101-102). While the report does not suggest that Houses IX, IV, and II formally merged to form a large complex comparable to their eastern neighbour, they certainly do form an cluster in a distinct manner than was common during earlier phases at Mohenjo-Daro.

During this time, two kilns were in use in an ambiguous open space northwest of House III and southeast of House II, the latter of which likely provided access to them (1938:102). House III appropriated parts of Long Lane and was integrated with the House I, II, and XII complex by means of a long drain that cut across the open space containing the kilns. House VII may have merged with House III of Block 10 (Mackay 1938:104), which possibly formed a section in a much larger complex including Houses II and I of Block 10.

**B.1.12 Block 9A**

Block 9A forms the northwest corner of the northern section of the southern DK-G Area which runs between Low Lane and Loop Lane (Figure B.2). Loop Lane forms its western boundary, Lane 69 its eastern, and Central Street its northern limit, by means of a wall shared with Block 9. A short east-west alley separating this block from House VII of Block 9 marked its southern limit, but this is really
only known in its later phases. The slightly east-of-north alignment of the block which stands in some contrast to the general alignment of its eastern neighbours and is attributable to the fact that Block 9A borders on the western slope of the Lower Town. Only remnants of the structures that once occupied this slope to the west of Loop Lane are visible, having long since fallen into disrepair and descended into the plain west of the Lower Town (Mackay 1938:107).

![Diagram of Block 9A, DK-G South Area, during the Late III (a) and Late II and I (b) Periods](image)

**Figure B.24** Block 9A, DK-G South Area, during the Late III (a) and Late II and I (b) Periods (after Mackay 1938).

As with most of the southern range of structures that line Central Street, the earliest phase of occupation to which Block 9A was excavated is the Late III Period (Figure B.24), and later brick robbing, architectural rearrangement, and general damage has resulted in a piecemeal understanding of its earliest known architecture (Mackay 1938:105).

The block has only two identifiable buildings: House VIII, a very large building that occupied all but the most southern fringe of the block, and House V (no reason is given to explain why these houses were numbered as such, rather than the usual I and II). House VII had originally belonged to Block 9 proper, but in the Late III Period its northern half was incorporated into Block 9A. There is little conclusive information reported on House V, save that it had stairs, but walls too thin to support a second storey. House VIII, while poorly preserved, was better described. The mass of the building consisted of a large internal space that occupied about 4/5 of the building's length (again, exact
measurements are not provided). On the evidence of bonding, Mackay was convinced that this large, internal space had originally been partitioned into several smaller chambers (Mackay 1938:105). These do not appear on the report plans, however, as only traces of where the partition walls had met the external structure walls were visible. Otherwise, the only distinct rooms in House VIII during the Late III Period are those located at its northern edge. It is unclear how or if these rooms articulated with the large courtyard to their south. What is clear is that the northern half of the most westerly of these rooms had features that Mackay understood as cooking channels, similar in form to ones used in historic Sindhi contexts (Mackay 1938:105). The number of cooking channels (six), their greater length relative to known historic domestic ones, and their association with the large courtyard led Mackay to speculate that House VIII may have served a public function, one tied to cooking for and hosting many people.

In the Late II and I Periods, all of Block 9 was remodelled. The northern wall that it shared with Block 9, which prevented the lane separating these blocks from communicating with Central Street, was removed. Likewise, an alley south of House V, which was assumed to have existed in earlier periods, is now clear in the plans.

House V consists of seven rooms, most of which are arrayed around the largest, most likely a central courtyard. House VIII occupied the same area that it did in the Late III Period, but now had about 22 varied rooms. If not for the visibility of the internal doorways which demonstrate communication between the rooms, one could easily have mistaken it as at least three separate houses. Interestingly, a very square courtyard occupies the precise centre of the building.

**B.1.13 Block 10**

Block 10 is located to the west of Block 7, and until the Late III Period, the distinction between the two is purely arbitrary (Mackay 1938:107). To its south runs Fore Lane, which separates it from complex Block 1/4, which dominates the DK-G South Area. To its north, separating Block 10 from Block 9, is Long Lane. The western limit of the block is defined by the degraded western slope of the Lower Town mound (Figure B.1 and B.2). Like other blocks in this section of Mohenjo-Daro (Blocks 10A, 11, and 12A), the western reaches of Block 10 are poorly understood.

The earliest evidence for this block results from excavations that reached as far as the Intermediate III Period (Figure B.25). The buildings have fared better in terms of their preservation than some other blocks from this period, but the architectural picture is still far from complete. Houses I, II, III, and IV are represented in the Intermediate III Period. Only the northwest corner of House I
remains for this period, containing one room and hinting at a larger, more central room. House II fared little better. The most significant and unusual architectural remnant of House II is the well room featuring a well almost as wide as the room in which it is situated, and the well room is equipped with two doors on its eastern (external) wall of the room to allow access to the northern and southern sides of the well. Only the northern part of this room seems to have been paved at this period (Mackay 1938:107).

House III is placed between Long and Fore Lanes and neighbours House VII of Block 9 to the north, and House IV of Block 1 to the south. This House was remarkably well preserved, enticing Mackay to exclaim that "[i]n it one can picture the domestic life of the times more vividly than in almost any other house of the ancient city" (Mackay 1938:108). It measured roughly 17.7m east-west and 12.6m north-south, and had doorways on all but its eastern side but was likely accessed primarily via its western entrance on the "main facade" (Mackay 1938:108).

![Figure B.25 Block 10, DK-G South Area, during the Intermediate III (a) and Intermediate II (b) Periods (after Mackay 1938).](image)

The western entrance of House III opened into a spacious courtyard, which in turn led to a small vestibule through a door in its southern end. A very wide doorway also appears on the report plans at the northern end of the room, but Mackay has interpreted this passage as the remnant of an architectural alteration, and that the doorway was bricked up coincident with the final construction of the House in this period (Mackay 1938:108). He admits, however, that the southern jamb of the abandoned doorway exhibits a finished batter (a feature usually restricted to presumed civic or public structures at Mohenjo-Daro), and the masonry that filled it was a quality inferior to that of the rest of the house. In other contexts Mackay used the presence of qualitatively distinct masonry as a means to identify later architectural renovations. Also, the width of this doorway (2.6m) is comparable to others Mackay took
to have accommodated the passage of pack animals (such as in Block 6, House II, Late III Period), although lacking the associated wear patterns of that structure.

The northern passage in the entrance court of House III, if in use during the Intermediate III Period, would have led into a possible additional, more sequestered court. A small room at the heart of the structure contained a window-like opening onto this potential inner court. With the exception of Room 1, which was equipped with its own external doorway and only accessible from Long Lane, all rooms of House III are interconnected.

Figure B.26  Block 10, DK-G South, Intermediate I Period (after Mackay 1938).

House IV, located to the west of House III, is very much degraded. Externally, the only remains of this structure are remnants of its northern and southern walls. The southern walls exhibit a collection of large niches whose use remains unclear. Internally, a central north-south wall separates what was likely a large court in the east of the building from an unknown space on the western side; owing to its proximity to the western edge of the Lower Town mound, much of the character of the western portion of Block 10 remains unknown. A remnant of a well and associated room were located near the northern limit of this dividing wall (Mackay 1938:109). The placement of this well is of particular interest, for it bucks the general trend at Mohenjo-Daro to locate wells on the eastern edges of structures. Similarly unusual is the jumble of masonry piled up around the base of the well.

In what he claims must be considered "purely conjectural" (Mackay 1938:110), Mackay posits that, in the Intermediate II Period, House I may have formed a single complex with House I of Block 7. However, the only preserved remnants of House I, Block 10, for this period pertain to the far west of the structure, furthest from Block 7. This remnant contained a possible small bathing platform in the structure's southwest corner, which may have operated in conjunction with a (presumed) upper-storey
drain to collect and direct water through a channel "of unusual workmanship" in the south face of the wall (Mackay 1938:110). Many of the remaining floor in the eastern part of the house was paved.

House II was only marginally better preserved in the Intermediate II stage than in its Intermediate III phase, but adequate to discern some internal details. During this iteration, evidence suggests that up to five rooms were in the building, although unequivocal evidence can only account for two rooms. In the southwest, in a position similar to its neighbour to the south (House I), was a small ablution space or privy. The other definite room is the unusually narrow well room, continuing in use from the Intermediate III Period. Rather than continuing to enjoy two separate entrances on the eastern side of the room, however, now only one discernible door was in the western wall, providing access only to the southern side of the well. Mackay (1938:111) does state, however, that the badly damaged state of the western wall of this room does not preclude the possibility of a second, more northerly positioned door.

House III, likewise, was little altered from its previous expression. Additional small rooms were created northwest of the main courtyard and in the possible inner courtyard. A "quantity of wood-ash" was uncovered on the surface of one of these inner rooms, prompting Mackay to suggest that it served as a kitchen (Mackay 1938:111). House IV presents virtually the same pattern as in the Intermediate III Period.

![Figure B.27](image)

**Figure B.27** Block 10, DK-G South, during the Late III (a), and Late II-I (b) Periods alongside portions of Block 12 (light grey) and Block 9 (grey) (after Mackay 1938).

By the time of the close of the Intermediate I Period, House I and House II had disappeared (Figure B.26). No internal remnant from these structures survived, save the well room in House II.
House III, continuing its commitment to preservation, is quite intact, but presents an architectural pattern that Mackay (1938:112) describes as "decidedly puzzling." Internally, this structure presents few alterations from the Intermediate II Period, all of which are tied to the western entrance court of House III. These are the addition of a room northeast of the entrance courtyard, accessibly only from outside, the creation of a medial passage between the entrance court and the inner court, the creation of a small ablution platform, and a brick-lined bin or pit. The most dramatic changes to House III during the Intermediate I Period pertain to its external façade, specifically, its perforation by a total of 15 doorways. Expectedly, many of these doorways are quite close to one another. The three doorways placed in the eastern wall of the structure are particularly confusing, as the eastern wall of House III opens onto an alley between Houses III and I that is less that 0.5m in width and which had been blocked up at its northern and southern ends since the Intermediate I Period (Mackay 1938:112). The function of all of these doorways is not apparent, as three of them opened directly onto the abutting ends of internal partition walls.

House IV is apparently no longer in use by the Intermediate I Period, as only portions of its outer walls, and the centrally-located well, bereft of even its surrounding pile of rubble, remained (Mackay 1938:112).

As has been demonstrated several times thus far, the onset of the Late Period brought with it substantial changes to the layout and architectural organization of Mohenjo-Daro, and Block 10 was no exception to this pattern (Figure B.27). In the Late III Period, only three small rooms on its eastern flank remained of the internal structure of House I. Its external walls, however, had by this time encroached upon and appropriated the space formerly occupied by Fore Lane between it and and Block 1 to the south. The only testament to the former presence of House II is its well.

House III, true to form, remains the best preserved of the lot. During the Late III Period it was largely unaltered from its previous incarnation, save the drastic measure of infilling all but two of the numerous doorways of the previous period (Mackay 1938:113). The walls that served to sequester its northeastern room from the remainder of the structure are gone, and "[t]hree very curious holes" mark the eastern wall of its northwestern room (Mackay 1938:113). Mackay postulated that these may have served to anchor a loom or some other mechanical device for which no other evidence remains. With the exception of a small patch of pavement near its well, House IV is no more visible in this period than in the preceding one.
By the onset of the Late II and I Periods (Fig. B.27), Block 10 was so dramatically rearranged as to be largely unrecognizable. The same Houses (I-IV) appeared in roughly the same positions as their previous locations, but they were internally more complex and spatially far more integrated with their neighbours.

House I appears to have been comprised of approximately 12 rooms, or at least distinct spaces. It featured two large spaces, either of which was large enough to have served as an internal courtyard. One of these large spaces displays evidence that it was roofed over in antiquity (Mackay 1938:114). At this point in their timeline, Houses I, III, and IV, had extended so far to the south that Fore Lane ceased to exist; indeed, the southern walls of these houses adjoin to the northern facade of the Block 1/4 complex. As mentioned above, Houses I and III may have served as components of a large complex at this time.

House II appears as modestly equipped as in earlier periods, and consists of just a few rooms in addition to the well room, which seems to have been slightly widened. At this time, the well room featured a wider, northern door on its eastern (external) wall, and a smaller, southern one on its western (internal) wall. House II may have been integrated with House VII of Block 9 to its west at this time, and its southern reaches rested against the northern face of House I in Block 10.

House III retained many of its consistent internal features from earlier times, but externally was much altered, mainly by its integration with House VII, Block 9 to its north, along with the absorption of Long Lane, and its likely integration with with House I to its east. Conversely, both the internal and external characteristics of House IV were radically altered in its latest stages. It was accessed from the south by means of an entrance in its southwestern corner and extended further to the east, obliterating the short lane that initially separated it from House III. It also reached further to the south, resting on the northern façade of Block 1. This rejuvenated building contained 15 separate rooms, including a large, 6.2m x 4.6m central court, and a long (13.8m) northern corridor in which the building’s well was located. This building also included the remains of a centrally-situated staircase (Mackay 1938:115-116).

B.1.14 Block 10A

Located at the far western extreme of the Lower Town, Block 10A (Figure B.28) runs along the southern edge of Long Lane opposite from Block 11 to its north (Figure B.1). It is northwest of House IV, Block 10, and is bordered on the west by the limits of the Lower Town mound.
Block 10A remains poorly understood. It is best known as the location for one of the few group burials in Mohenjo-Daro. This burial, which contained nine individuals "in strangely contorted attitudes and crowded together" (Mackay 1938:116), were not definitively assigned to a particular chronological period.

![Figure B.28 Block 10A, DK-G South Area, Intermediate III (a), Intermediate II (b), and Intermediate I (c) Periods (after Mackay 1938).](image)

Other than the burial, Block 10A is little discussed in the initial report. Its proximity to the western edge of the mound resulted in a great deal of its architecture succumbing to erosion so that, for the entirety of the Intermediate Period, only remnants of some of the perimeter walls, or those ends of others that were affixed to such walls are preserved. Mackay does mention that the unusual thickness of the Intermediate III Period walls fronting Long Lane likely indicate the special character of this block (Mackay 1938:116). He implies that it was possibly connected in some fashion to the likely public building in Block 11.

### B.1.15 Block 11

This unusual block is located at the far northwestern limit of the DK-G South Area. It is bounded by Long Lane on its south, Short Lane on its east, and Loop Lane on its northeastern border, and by the descending slope of the Lower Town mound on its west (Figure B.1 and B.2).

The interpretation of the excavators is that, for the duration of its known existence, this block was comprised of a single large complex and, while opinions have differed as to its function (Mackay 1931c: 251-252; Mackay 1938:118), all involved agree that its features are more suggestive of a public function than a private or domestic one. During its earliest known stages in the Intermediate III Period, Block 11 consisted of at least 14 rooms of quite different shapes and sizes (Figure B.29). The main
focus of the structure seemed to be the very large open court (House II - for which dimensions are not provided), which dominated the central portion of the block. On the west of this court (House I) were two long, partially visible rooms, and west of that a long, narrow hallway leading to a small well room. The eastern edge of the complex (House III) had by several large rooms and an upper storey. It was in this location that the primary entrance to the complex was located (Mackay 1938:118-119). An unusual feature of this complex is the presence of three separate wells, placed along the southern interior face of the building. The central well is located roughly midway along the southern side of the great court, while the remaining wells are spaced roughly equidistant from the centre one to the west and east, respectively.

![Figure B.29 Block 11, DK-G South, during the Intermediate III (a), Intermediate II (b), and Intermediate I (c) Periods (after Mackay 1938).](image)

The external walls and eastern end of this complex were substantially altered in the following Intermediate II Period (Figure B.29). The walls that now framed the complex, as well as several of the internal partition walls in the eastern portion, were dramatically increased in width. The southern wall of the complex, which corresponded with the central court, partially encased the central well. The eastern section of the complex, House III, was now home to several new rooms through processes of partition, while its western edge, House I, remained largely unaltered save for the addition of two small rooms. In all, the number of rooms in Block 11 increased from its Intermediate III count of 14 to the Intermediate II count of 22.

The Intermediate I Period witnessed little significant change to Block 11. The well room in House III is described as a "beautifully laid floor...its surface still polished by much use," but otherwise little distinguished the layout of Block 11 during this phase from the its Intermediate II iteration (Mackay 1938:120).

The picture for Block 11 during the Late III Period is less clear. This phase of the structure was excavated by Dikshit as part of Marshall's investigation of Mohenjo-Daro (Mackay 1931c:251). While
Mackay (1931c) reported in detail the Dikshit's observations of what was then termed DK-E, the accompanying map does not distinguish its various architectural components by chronological period as do Mackay's (1938) later excavations. Perhaps this is the reason why Mackay's later map of the Late III Period of Block 11 (Figure B.30) bears little resemblance to the original. The fact that Mackay simply avoids any discussion of the Late III Period in his later description of Block 11, and does not address the discrepancy in their respective maps, instead referring readers to his earlier report, does not assist in communicating the full history of Block 11.

Figure B. 30 Block 11, DK-G South, during the Late III (a), and Late II-I (b) Periods (after Mackay 1938).

It appears to be the case that the Intermediate III Period, Block 11 was typified by the infilling of its central court (House II), and the partial preservation or perhaps rebuilding of certain walls in House III (Mackay 1931:251-252). By Late II-I Periods, virtually nothing of Block 11 remains.

B.1.16 Block 12

Block 12 is a large, roughly square block in the west of the DK-G South Area (Figure B.1 and B.2). It is framed by streets on all but its eastern side: Loop Lane on the north, Short Lane on the west, and Long Lane on its south. It is sandwiched between Blocks 10A and 11 on its west and Block 9 on its east, as well as between Block 1 to its south and Block 12A to its north.

This compact block displays its earliest known structures in the Intermediate III Period, but only in its southern reaches (Figure B.31a). During this period, all of the block was encased in a perimeter
wall with access through two doorways near its southeast corner; three other gaps do appear along the southern wall of the structure, but these correlate with breaks in the wall (Mackay 1938:121). All other architectural features from this phase of habitation belong to a single structure, House V; however, the eastern section of this structure, a well-room, is claimed to date to the Late II Period (Mackay 1938:121). Why Mackay includes this later feature in his description of the Intermediate III Period is unknown.

![Diagram of houses](image)

**Figure B.31** Block 12, DK-G South, during the Intermediate III (a), Intermediate II (b), and Intermediate I (c) Periods (after Mackay 1938).

Otherwise, the basic outline of House V appears quite straightforward. It consisted of a courtyard flanked by a long, north-south chamber on its west, and a pair of paved rooms enclosed by a shared wall on its east. These rooms are arranged in a linear fashion, the more southerly the sole means of access to both rooms, by way of the court. Both of these rooms were equipped with apertures for the release of floor water into the central court.

In the succeeding Intermediate II phase, the architectural picture of the block is clearer, although still lacking architectural detail (Figure B.31b). The basic parameters of House V persisted with some notable additions. The long room on the western edge of the structure now continued north for the length of the block. Unusual for Mohenjo-Daro, in this passage was recovered the carbonized remains of what may have been a roof beam (Mackay 1938:121). Four niches were recessed into the western side of this passage, and a set of stairs occurred at its northern terminus. East of this passage, and comprising most of the northern and central portion of this block, was mud brick infill (Mackay 1938:122).

On the opposite side of this infill than the stairs just described was a small, thickly walled single-cell room. Given its lack of communication with the rest of the block, Mackay (Mackay
1938:122) posited that it may have served as the base for a watchtower. A unique feature of this cell was a vertical row of several small apertures in its northern wall. Mackay suggests that these pertained to water chutes from the various occupational phases of this building, which fed into increasingly raised street drains in Loop Lane.

The Intermediate I Period brought essentially no change to Block 12, the mass of which was covered by the mud brick infill described above (Figure B.31c). Some minor alterations to Room 2 and remnants of thin walls on the eastern side of the block are all that distinguish its layout from the previous period (Mackay 1938:123).

![Figure B.32 Block 12, DK-G South, during the Late III (a), and Late II-I (b) Periods (after Mackay 1938).](image)

The northern part of the block was only excavated down to the Late III Period, which is characterized by extensive mud brick infill. Very little remained to testify to the earlier presence of a structure in the southern portions of Block 12 during the Late III Period (Figure B.32). The only continuity with earlier architecture was the well room near the block's southeast corner and a vestige of the potential watchroom in the northeast corner (Mackay 1938:123). It should be noted that a southern wall, extending from the well room, seems to abut the northern face of Block 10, House IV at this time, effectively partitioning Long Lane into separate, non-communicating segments. Perhaps owing to flood-induced erosion, as Mackay suggests, much of the Late II and I Period architecture for Block 12 has not survived, and that which does bears little resemblance to its earlier versions (Mackay 1938:123). In the south of the block, the well room persists as part of a poorly understood and badly

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preserved structure that seems to have been wedged into the northwestern section of the large complex of intertwined structures that incorporated elements of Blocks 10 and 9 during this period. How it related to this complex, if at all, remains unknown.

The northern part of the block survived much more intact that its southern counterpart. Here, perhaps on top of the earlier mudbrick infill, a shared perimeter wall encased two houses, both of which opened onto Loop Lane to the north. The western third of this complex was occupied by a modest house consisting of two or three rooms, while the remaining two-thirds provided the setting for a house of six or seven rooms. The previous guard room in the northeast of the block appeared now in a modified form as a possible ablution room (Mackay 1938:123).

**B.1.17 Block 12A**

This block is directly north of Block 12, and so shares Loop Lane as a boundary (Figure B.1). Owing to the non-linear route of Loop Lane, it provides the border for the southern, eastern, and western sides of Block 12A. Although not excavated, presumably its northern border was Central Street.

![Figure B.33 Block 12A, DK-G South Area, Intermediate III, Intermediate II, and Intermediate I Periods (after Mackay 1938).](image)

Block 12A is another of the large complexes in the northern section of the DK-G Area that stand apart from many structures at Mohenjo-Daro by virtue of the scale and form of its remaining architecture. Unfortunately, it is one of the least comprehensively understood blocks in this section of the city, owing to its poor preservation and only partial excavation.

In the Intermediate III Period (Figure B.33a), only one small (~4m x 2m) room is discernible (Mackay 1938:124). The vision of Block 12 was more complete during the subsequent Intermediate II Period (Figure B.33b). Mackay has determined that the architectural remains of this phase can be attributed to two separate structures, House I in the southwest, and House II in the southeast, both only
partially uncovered. House I contained at least four quite sizeable rooms, one of which was likely a courtyard whose two piers imply that it was roofed. House II exhibited walls of quite a substantial width, seemingly comparable in their dimensions to those of its neighbour, Block 11. Unfortunately, the manner in which its rooms articulated is not clear, although it does seem that the central part of the structure served as an internal court (Mackay 1938:125).

Little change occurred in the Intermediate I Period at Block 12A (Figure B.33c). The walls of Houses I and II follow the general patterns laid down previously. External and internal doorways show that House II was accessible from both its eastern and southern sides (Mackay 1938:125). This period also presents us with the last glimpse of any meaningful architectural remains in Block 12A, as virtually nothing persisted into the succeeding Late III Period, and the Late II and I Periods only offer some foundation footings on the western edge of the block (Fig. B.34). There is some evidence, however, for the continued use of a drain at the Late II and I Periods, which connected the southwest of Block 12A with the drain that ran along Loop Lane.

![Diagram](image)

**Figure B.34** Block 12A, DK-G South, during the Late III (a), and Late II-I (b) Periods (after Mackay 1938).

**B.2 SUMMARY of the DK-G SOUTH AREA**

This careful examination of the DK-G South Area elucidates several key aspects of Mohenjo-Daro that have been under-appreciated or simply unrealized in standard narratives of the Indus Civilization. The first is that the DK-G South Area highlights in greater detail than other areas the fact that the Lower Town is not an undifferentiated and orthogonally arrayed collection of "prison-like
houses" (Wheeler 1953:36), but an urban section that displays quite marked architectural and spatial variability. Such variation is perhaps most notable in the presence of the large multi-winged Block 1/4 complex, which stands in contrast to the collection of smaller structures that surround it, such as those located in Blocks 2, 5, and 7. In many ways this pattern mirrors that witnessed in Block 2 in the HR-B area, or in Block B1 of the Moneer Area.

In addition to differences in the scale of architecture, the DK-G South Area displays quite striking examples of different decorative elements. The use of columns in the external façade of House V, Block 7 during the Intermediate III Period, and the numerous doorways of House III, Block 10 during the Intermediate I Period are quite distinct from the very thick and encompassing walls of Blocks 6A or 10A, and both are distinct from the warren of multiple thin-walled structures which comprise much of Block 9 during the Late I-I Periods.

These architectural differences just described implicitly highlight the unique potential of the DK-G South Area to inform a broad understanding of Mohenjo-Daro civic organization: the phase-based approach to the excavation of its structures. While Mackay's chronological scheme is faulty in terms of its underlying principles (Marshall 1931i:103), he did explicitly excavate the structures of the DK-G South Area according to their occupational and construction phases. By doing so, Mackay enabled the exploration of some of previous assumptions regarding the development of Mohenjo-Daro's architectural cannon in a more thorough manner than was the case under Marshall (1931). This has revealed architectural and spatial traits that seem to correlate with specific phases of the city's occupation. The impression of such traits in the DK-G South Area indicates that the earlier periods of occupation witness larger, more spacious, and generally more monumental structures than in the city's later periods, which are typified by increasing subdivision and a partial abandonment of standard construction techniques. The glaring exception to these trends is provided by the Block 1/4 Complex, which seems to have become increasingly spacious over time, albeit with a corresponding lack of new construction.

In the following appendix, I turn my attention to an examination of the Upper Town, that section of the city which has been traditionally interpreted as the seat of what served as a governing authority at Mohenjo-Daro (Wheeler 1953:23).
Appendix C: THE UPPER TOWN

C.1 DESCRIPTION OF THE UPPER TOWN MOUND

The mound itself is ascends 18m above the surrounding plain, and is roughly 200m wide and 400m in length (Jansen 1993:31), or 8ha in area (Possehl 2002a:185). Retaining walls of baked brick hem in the mass of earth and rubble that forms the bulk of the substructure or platform upon which the various sections of the mound were built (Wheeler 1953:33).

The internal layout of the mound can be conceived of as comprising two main areas: a northern section containing the majority of the excavated architectural remains (the SD Area), and a southern section, whose excavated area is roughly half that of the northern section (The L Area) (Marshall 1931a:10). Most scholastic and popular interest has focused on the SD Area, not because of the larger amount of architecture revealed through excavation, but rather because this area displays a greater concentration of enigmatic and (likely) civic architecture than any other part of this, or any, Indus Civilization city.

What follows is a brief description of these separate areas of the Upper Town, similar to those already provided for the various sections of the Lower Town.

C.2 SD AREA

This area is internally demarcated primarily by a north-south street prosaically termed "Main Street" by the site's excavators. This street bisects the SD area into roughly comparably sized eastern and western halves. While this thoroughfare does not appear to have been transversed in antiquity by a similarly portioned east-west street or avenue, smaller lanes or streets originating in the western section of the SD area do intersect with Main Street, one at the southern terminus of Main Street, and another roughly halfway along its length. Main Street is complemented by a similar north-south street to its east, termed "Divinity Street."
Figure C.1 SD Area, Upper Town (after Marshall 1931).

The SD Area (Fig. C.1) is one of the areas at Mohenjo-Daro that feature a non-sequential numbering and labelling of its component blocks. It contains Blocks numbered 1-10 (although Block 7 is simply a designated space that lacks architectural remains), plus an additional Blocks 2-8 restricted to the southeast section of the area designated as the "Southern Buildings." The Granary/Warehouse structure was labelled as Block 2 under Marshall's direction (Mackay 1931a), as was the Stupa Complex under Mackay's supervision (Mackay 1938). In order to avoid some of the confusion which accompanies the discussion of SD Area, I have opted to simply refer to the Stupa Complex and the Granary/Warehouse by their descriptive names, and have avoided the issue of "Block 2" altogether, except in reference to the Block 2 belonging to the Southern Buildings (although readers will note that this Block is no further south than the Granary/Warehouse, Great Bath, and Block 1). The Great Bath, the centrally-situated structure in the SD Area, appears not to have been designated with a Block number.

C.2.1 The Great Bath

Primary among the aforementioned quasi-familiar symbols of authority in the Upper Town is the architectural complex colloquially known as the Great Bath (Figure C.2). It is the most emblematic
and enigmatic of Mohenjo-Daro's architectural features; while it is obviously an example of specialized, likely ritual architecture, there is no clear evidence of restricted access or of unequivocal links to an elite stratum, typical hallmarks of public architecture in most historically and archaeologically attested complex societies (Mackay 1931a:136-139; Trigger 2003:565).

The bath is located in a large rectangular structure, originally at least 2 stories tall, over 60 metres in length and 30 metres in width, about 1800m² total (Jansen 1993:37). On its southern, eastern, and northern flanks, the internal structure of this building is characterized by a concentric ring of mainly isolated rooms, many equipped with bathing platforms, and one with a well. The central feature of the structure is a large, depressed, rectangular water tank or, to employ Marshall's (1931:24) initial term, a "swimming-bath", surrounded by colonnades, and equipped with descending stairs at its northern and southern edges. A partial stairway that originates in the northeast corner of its main level, as well as the thickness of its walls, suggests that the structure initially had two stories (Marshall 1931:25). Although no direct evidence exists of the second storey, Marshall notes that the structural remains of the Great Bath indicate that there likely no roof over the tank itself. During the early phases of its existence, this structure was encircled by a 5m-wide roadway that distinguished it as the only fully detached, free-standing structure known at Mohenjo-Daro (Jansen 1993:37).

![Figure C.2 The Great Bath, SD Area (after Marshall 1931).](image)

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Although we remain unsure of the precise nature of the activities that transpired at the Great Bath or what exactly the structure itself symbolized to the inhabitants of Mohenjo-Daro, we can be confident that it was certainly a functional water tank, or at the least, it was provided with all the architectural features necessary for water collection, retention, and drainage. Water was likely provided by an interior well (Jansen 1993:43). The tank itself was comprised of burnt bricks set on edge, the typical Harappan manner of hydraulic masonry (Mackay 1931a:131), internally sealed in antiquity with a layer of bitumen, the only significant use of bitumen known for the Indus Civilization (Marshall 1931d:25). Recesses set along the edges of the stairs suggest that they once sported wooden treads. The entire apparatus was encased in an additional brick wall which, together with the accumulated mass of foundational material into which it was set, would have served to reinforce the lateral integrity of the tank (Jansen 1993:44). One of the central (buried) architectural features of the Great Bath is the large, corbel-vaulted underground drain that was fed from an opening in the southwest corner of the similarly sloping tank floor (Mackay 1931a:134; Wright 2010:240). This drain connected to the network of underground and surface drains for which Harappan cities are notable amongst Bronze Age societies.

Given the exalted place of the Great Bath in modern reconstructions and representations of the Indus Civilization (Jansen 1993:47), it would be understandable to assume that it provided the focus and raison d’être for the erection of the Upper Town mound. However, the chronology of this structure does not exactly correspond with the construction and occupation history of the mound proper (Jansen 1993:37). While our understanding of Mohenjo-Daro chronology remains relative, we can say with certainty that the Great Bath was placed into the Upper Town mound after its initial construction and after at least several of the other buildings on the mound either fell into disuse, or were deemed less important than the Great Bath. The Great Bath cuts into several earlier structures in the Upper Town the most notable being the almost equally enigmatic Granary or Warehouse structure, across which and into which was placed the Great Bath's effluent drain (Jansen 1993:44).

Similar relative dating evidence indicates that the building of the Great Bath was at least partially closed off, infilled, and used as a setting for craft production (that is, its occupation and use were no longer tied to bathing or other hydraulic considerations) while the rest of the city was becoming depopulated and was devoid of political office (Jansen 1993:44-48; Possehl 2002a:191).
C.2.2 THE WAREHOUSE

![Diagram of a warehouse or hammam, SD Area (after Wheeler 1953).](image)

Figure C.3 Warehouse or hammam, SD Area (after Wheeler 1953).

Aside from the Great Bath, a commonly cited example of the special status of the Upper Town comes from the existence of the conventionally termed "Warehouse", or "Granary " (Figure C.3). Located west and south-west of the Great Bath, and stretching roughly 50m east-west and 27m north-south, this structure currently consists of "three rows of nine massive brick plinths" (Jansen 1993:50), an ambiguous material signature that has led to differing interpretations by scholars as to the building's function.

Marshall (1931:d:26) and Mackay (1931a:143) conceived of the structure as a *hammām*, a hot air bath, and suggested that it formed one aspect of a large "hydromagnetic establishment" along with the Great Bath. In Marshall's view, the quantities of charcoal recovered from between the plinths attested to the presence of a heating area for a hypocaust that warmed a series of rooms built atop the plinths. This is the conclusion that was reached for the similarly arrayed, yet much smaller House I, Block 2 of the DK-B Area in the Lower Town (see Appendix B, Section).

Despite Marshall and Mackay's claims for this repeating architectural form, Wheeler took exception to this interpretation of the large structure in the SD Area, and claimed that the spaces between the plinths served to allow for air flow in a manner analogous to that of the civic granaries of ancient Mesopotamian societies (Jansen 1993:49-50; Wheeler 1953:31). In this reconstruction, a large granary set amidst the monumental architecture of the SD Area was further proof of the centralized and redistributive nature of the Indus Civilization political economy. Although Wheeler fully excavated
this structure according to controlled stratigraphic principles that were absent during Marshall and Mackay's tenure, his report remains unpublished, leaving later scholars to conclude that his functional interpretation of the building is based mainly on impression rather than a detailed analysis of the remains that comprised the structure (Jansen 1985:165; 1993:51).

Possehl (2002a:191-192) subscribes to a similar, but functionally more inclusive interpretation than that of Wheeler. Rather than being devoted expressly to grain products for distribution, Possehl saw the structure as serving in the capacity of a general warehouse, which would have been a place of general storage (and perhaps state-controlled distribution) for goods included, but not limited to cereals, such as craft items and raw materials. Possehl's interpretation is associated with the existence of an analogous structure at the city of Lothal interpreted to be a warehouse (Rao 1979:126) but, as Possehl notes, the similarities of the structures are restricted to a general morphology, and a functional parallelism of the two buildings cannot be empirically demonstrated (Possehl 2002a:192).

C.2.3 "COLLEGE OF THE PRIESTS"

Another instance of designating functionally-specific terms to structures for which we have absolutely no corroborating evidence on the Upper Town mound is the "College of the Priests", which is set directly opposite the Great Bath on the eastern side of Main Street in the centre of the SD Area (Figure C.4). As Possehl (2002a:192) notes, this structure is "difficult to understand without the help of a technical drawing and a trowel," a sentiment foreshadowed by Mackay decades earlier (1938a:10). While its past function remains elusive, it nevertheless fits well into the type of generalized large non-domestic structures that predominate on the Upper Town mound.

The defining aspect of this roughly 70m x 24m structure is its partition into several small, cell-like rooms, several of which are accessible only through adjacent rooms (Mackay 1938b:VII), as opposed to being accessible through a centralized courtyard or unifying space such as a main hallway. That there are very inaccessible internal passageways that connect some of the rooms, and an internal courtyard surrounded by uncharacteristically larger rooms (again, not directly accessible), in a manner stylistically similar to that observed at the Great Bath led scholars to suggest parallel religious functions between it and the College of the Priests (Mackay 1938:10-11).
As such, Mackay (1938:10) termed this structure the "Collegiate Building" (later to be known as the "College of the Priests" (Possehl 2002a:192), and surmised that it served a residential or administrative and institutional structure linked to the staff or offices which were concerned with the temple he thought lay underneath the Stupa Complex. Mackay did, however acknowledge that this interpretation was largely based on proximity, and that the artifact assemblage associated with the structure did nothing to clarify its function, as they were not overwhelmingly "ecclesiastical" in nature (Mackay 1938:10). Much as the Great Bath, the Collegiate Building was partly filled in and seemingly abandoned before the ultimate abandonment of Mohenjo-Daro.

C.2.4 Stupa and Monastery

During the initial excavations of Mohenjo-Daro in the 1920s and 1930s, perhaps the only certainty in which researchers could take interpretive solace was the fact that the most prominent feature on the site could be securely understood as a Buddhist Period stupa and associated monastery (Figure C.5) (Marshall 1931j). In addition to the convenience of simply being identifiable, the
allocation of this feature to the Buddhist architectural canon of this region of South Asia conveniently came with a chronologically demarcated and well understood cultural historical tradition, which tied Mohenjo-Daro to broader and more inclusive regional historical processes (Verardi 1987:45). While it is true that excavation of the feature revealed artefacts that coincide with a period of great Buddhist religious influence in this region of South Asia (specifically Kushan coins, most dating to the reign of Vasudeva I (Banerji 1984:35; Mackay1938:15)), a secure occupational chronology and an unambiguous cultural affiliation would prove as elusive for this part of Mohenjo-Daro as it would for the rest of the city (Verardi 1987; Wright 2010:118-119).

![Figure C.5 Stupa Complex, SD Area (after Marshall 1931).](image)

The stupa complex is the most visible of the extant structures at Mohenjo-Daro, rising as it does to a height of over 21m (including the Upper Town mound itself) from the surrounding plain and other areas of Mohenjo-Daro. Its unrivalled position atop the Upper Town visibly advertises the unique class of architecture of the Upper Town in a far more direct, and suspiciously alien, manner than that of most other Harappan material culture. Its elevated and conspicuous position is enhanced by the composition of the complex itself, "a spacious quadrangle open to the sky, with a lofty stupa in its middle and rows of monastic buildings enclosing it on the four sides" (Marshall 1931j:113). This layout, according to
Marshall's reconstruction, faces and opens directly onto the steep eastern slope of the Upper Town mound, and presumably was accompanied in antiquity by a prominent stairway. Such an array of grandiose features is certainly without parallel in the architectural cannon of the Indus Civilization.

While few Indus Civilization specialists would argue against the aberrant character of this architectural signature, the initial claim that it corresponds to Buddhist Period devotional architecture has not unanimously weathered subsequent scrutiny. An impressionistic assessment of its architectural features certainly does place this complex closer in form to the Buddhist stupa tradition than it does to Indus architecture, but not comfortably so.

In part, this discomfort follows from the largely undocumented initial excavation of the stupa complex, work that was conducted by Banerji (1984) prior to the initiation of the Archaeological Survey of India (ASI) project at Mohenjo-Daro under Marshall, and which has been criticized for a lack of investigative rigour (Marshall 1931j). This is complicated also by the fact that Banerji's report on the stupa, although submitted to the ASI, was withheld from publication for over sixty years until published by Indian publishing house Prithivi Prakashan, albeit without the original photographic evidence which had been retained by the ASI and subsequently lost (Verardi and Barba 2013:269; Wright 2010:117-119). Banerji's report was withheld from publication on the orders of then ASI director, Sir John Marshall, who considered Banerji's work erroneous and his theories on the Stupa Complex "quite untenable." (Hargreaves 1930). Marshall's misgivings aside, however, it is surprising that he did not use Banerji's photographs or at least discuss in detail Banerji's work in his discussion of the Stupa complex (Marshall 1931j). Perhaps owing to its absence from the canon of Mohenjo-Daro archaeological literature, the eventual publication of Banerji's report in the 1980s largely went unnoticed by Indus Civilization scholars.

An overview of the Stupa complex's main traits reveals that it is not exactly in accord with the standard array of features usually found with Buddhist Period stupas. Verardi (1987:50-52), a specialist in the religious architecture of Central and South Asian Buddhism, claims that the placement, internal layout, composition, and relative sizes of the cells comprising the "monastery" do not follow the usually quite rigid architectural rules evident in the Buddhist tradition. Additionally, he cites the very limited space surrounding the central stupa dome would not have allowed the ritual procession so central to the known religious rites common at stupa complexes. The central dome of the stupa is not symmetrically arranged in the courtyard as it should have been and appears to have been constructed intentionally to be hollow, another feature not evinced in the Buddhist stupa tradition. Furthermore, the
dome and surrounding features are made entirely from Indus bricks (Marshall 1931j). While re-using Indus bricks has been a common practice in the Sindh until modern times, it is difficult to understand how such items could be used to create an internally-hollow, vaulted dome. Importantly, the usually rich array of decorative features associated with most known stupa complexes is entirely absent at Mohenjo-Daro, just as the Indus Civilization architecture is similarly devoid of any but the most basic and subtle of adornment.

Complementing Verardi’s assertion that the Mohenjo-Daro stupa does not conform to the architectural canon of Buddhist stupas is his revelation that Marshall (1931j:123) overlooked the stratigraphic significance of Banerji (1984)'s excavations, a shortcoming perhaps compounded by Marshall's own disregard for stratigraphy, as did Mackay (1938:16-17) when he connected the Indus component of the stupa complex with the walled open court to its north (Block 10). The hoard of Kushan coins that initially verified the dating of this structure to the Buddhist Period was placed into the presumed occupational floor of the complex, not discovered under it, meaning that while the coins certainly imply historic occupation of Mohenjo-Daro, they do not correspond with the construction of the stupa. According to Verardi's reanalysis, the central stupa dome was coincident with, not superimposed onto, the uppermost Indus Civilization habitation layer (Verardi 1987:51-52), and that the ash layer that Marshall understood to demarcate the Harappan and Buddhist levels is the same that Banerji (1926) claims covered the plinth of the stupa, and was also found on and in several small and large, pointed ceramic (presumed funerary) urns, similar to those found in several of the surrounding monastery rooms. Recently, an analysis of Banerji's description of these ceramics concluded that they can be readily identified as some of the most diagnostic and ubiquitous of Indus Civilization ceramic forms (Verardi and Barba 2013:270). In the absence of corroborating evidence we cannot verify such conclusions, nor can we ignore the possibility that such items were reused during the historic era. However, the lack of similar patterns of reuse at other Harappan sites renders Marshall's interpretation unlikely. The ceramic evidence, together with the stratigraphic unity of the Indus and historic layers and the architectural discrepancies between this and other stupa complexes led Verardi (1987:52) to conclude that, although there are clear signs of historic-era use, the Stupa complex at Mohenjo-Daro must pre-date the Buddhist Period. We are left with the highly likely but ultimately unprovable conclusion that the stupa complex at Mohenjo-Daro is not a historic period religious creation, but rather the remains of a singular and novel form of Indus Civilization monumental architecture.
Indeed, Verardi and Barba (2013:271) argue there "is little doubt that the monastery-cum-stupa is an Indus building, except the mud-brick structure [the stupa drum]", which they attribute to after of the collapse of Indus Civilization society at Mohenjo-Daro, a pattern already demonstrated for areas of the Lower Town. Based on the purposeful deposition of thousands of ceramic vessels both in the cells of the "monastery" and into and protruding from the underlying foundational layer, they claim the stupa was a cultic structure with votive associations. The authors claim that the stupa complex should therefore be understood as comparable to the Great Bath as a decidedly ritual-focused structure, and moreover that both the Great Bath and the stupa be considered components of a single politico-religious complex (Verardi and Barba 2013:272). Their reconstruction of the stupa complex, supplemented by their own on-site measurements, in some ways even resembles an inverse version of the Great Bath, with the substitution of a stepped, flat-top pyramidal platform for the water tank at its centre.

This reassessment of the stupa area has yet to find its way into the main stream of archaeological scholarship, but it does have the potential to radically affect our understanding of Mohenjo-Daro, Harappan civic architecture, and the Indus Civilization as a whole. At a minimum, Verardi and Barba's assertion that the Stupa complex and the Great Bath were components of a single politico-religious complex compels scholars to investigate the possibility of architectural pairings or agglomerations as a defining part of the pattern in the (presumably) civic architecture of the Indus Civilization. The fact that the distinguishing architectural elements of the Great Bath, Stupa Complex, College of the Priests, and the Pillared Hall (discussed below) appear in both the Upper and Lower Town (most specifically in the HR Area) lends support to this idea.

Ideally, scholars should investigate the possible symbolic implications of the elevational disparity between the sunken water tank of the Great Bath and the raised stepped platform of the Stupa Complex in Verardi and Barba's (2007) reconstruction. Such a dichotomy in the purported monumental and civic core of Mohenjo-Daro surely carries social meaning, perhaps as a reference to differences in elevation between the Upper and Lower Town or between the raised mounds of the city and its surrounding, seasonally inundated plains, which brings to mind issues of landscape mimicry and its connection with legitimizing political ideologies in other complex societies (e.g., Brady 1997*). Another avenue through which to explore the symbolic significance of this elevational disparity is as an architectural recognition of the duality and incorporation of different social segments within the political structure of Mohenjo-Daro (e.g., Netherly 1993). It should be very strongly noted that at
present, no evidence exists for the existence of oppositional social segments or for the ideological significance of differential elevation at Mohenjo-Daro (cf. Eltsov 2007); however, the segmented, yet rather modular, and redundant character of the clusters of civic architectural types advocated in this thesis, might also provide avenues though which to explore these matters further. Until such time that the original evidence which accompanied Banerji’s (1984) report is evaluated in light of further excavations on the Stupa complex, however, these avenues for investigation remain ungrounded, and the potential of the Stupa complex to inform us of Mohenjo-Daro civic structure and organization will remain unrealized (Wright 2010:119).

C.2.5 Adjacent Structures

Blocks 3-5 of the SD Area are located directly south of the Great Bath (Figure C.6). These blocks, which actually are not separate architectural constellations but rather elements of a continuous constructed mass, are poorly preserved and little understood or explained in the reports, especially as compared to their famous neighbour to the north. Regardless, Mackay (1931a:143-144) asserts that this structure was once the location of a very important building, not solely for its location, but also owing to its own features, such as the batter of its very thick (but unspecified) external northern wall. Despite the singular architectural designation for Blocks 3-5, for the sake of consistency and clarity, I have opted to describe them separately, following the pattern laid out in the original reports.

Figure C.6  Blocks 3-5, SD Area (after Marshall 1931).
C.2.5.1 Block 3

Block 3 forms the westernmost section of this section of the SD Area south of the Great Bath. It consists of three large rooms, the centre of which, Room 3, Mackay (1931a:144) interprets as a roofless court, on account of its size (approximately 8.1m north-south x 12.1m east-west).

East of this court is a room that measures approximately 8.1m north-south x 7.6 m east-west). This room is intriguing for the presence of long vertical chases (narrow, shallow channels built into the face of the walls) along its southern, eastern, and western walls. These chases average about .33 m wide and .25 m deep; no indication is provided for their length, or their possible function (Mackay 1931a:144). It is notable that the internal face of the southern wall has been partly built over, and obscures sections of the chases. Additional internal facings were also provided on the east and west walls.

C.2.5.2 Block 4

Wedged between Block 3 on its west and the north-south street on its east, Block 4 comprises the corner of the large structure that existed south of the Great Bath. Very little can be discerned about the original state of the architecture in this block. For the most part, this area is dominated by mud infill and enigmatic blocks of solid masonry. The northeast corner of Block 4 contains a paved bathing room to the south of which are the remains of a set of stairs.

Next to the bathing room and stairs, the most architecturally notable feature is in the far southwest corner of this block. At this spot, under a patch of rough paving, is a wall of "very considerable thickness", which runs east-west and parallel to the north of the complex, of which Block 4 is a part (Mackay 1931a:145). Similar to its northern counterpart, this external wall evinced a "well defined batter." Unfortunately, Mackay does not provide either the dimensions of said wall, or a description of the batter.

C.2.5.3 Block 5

Very little decipherable information can be gleaned from the figures and description of Block 5. It is southwest of Block 4 and south of Block 3, and consists primarily of the remains of unconnected walls, most of which have been heavily looted for bricks (Mackay 1931s:145). The most notable features of this block are the existence of two doorways that (almost) face one another on the north and south sides of a presumed passageway, at whose western end remains the vestiges of a staircase.
(Mackay 1931a:145). Interestingly, these doorways are quite disparate in size. The southern one is approximately 1m in width, while the northern one is twice that size (~2 m).

C.2.6 Block 6

Mackay states that Block 6 (Figure C.7) was "one of the most interesting buildings unearthed at Mohenjo-Daro and affords much room for speculation", an appropriate claim for a structure in the SD Area (Mackay 1938:20). It is located directly north of the Great Bath, separated from the latter by an east-west lane. Alleys and lanes formed its western and northern boundaries, while both a short lane (on the north) and Main Street (on the south) marked its eastern limit. It measures 56.4m in length and 25m in width.

![Figure C.7 Block 6, SD Area (after Mackay 1938).](image)

Like many other structures at Mohenjo-Daro, its current exposed state reveals a jumble of separate occupational phases which are not clearly delineated in the report. Most of its southern portion is dominated by a large burnt-brick platform attributed to the Late II-I period that Mackay believed was a foundation for a later structure that has not survived (Mackay 1938:17). Two doorways penetrate into Block 6. One doorway was placed into its southern side and led into the first of three rooms that do not articulate with the other interior spaces of the structure. Two sets of stairs were
uncovered in these rooms. The other doorway is a very wide one (2.5m) set into the Block's southeast corner off of Main Street. This provides access into a paved room that, like the southern rooms just described, does not open into the internal spaces of Block 6. The purpose of this doorway seems to have been to allow public access to a unique feature of the SD Area of Mohenjo-Daro: an oval well (Mackay 1938:18).

Water in general seems to have featured prominently in Block 6. Most of its identifiable rooms are bathing rooms, arranged in "two rows of four [bathing cells] separated by a narrow passage down whose centre ran a remarkably well built drain" (Mackay 1938:18). While Mackay (1938:20) assigns Block 6 and the Great Bath to separate occupational periods, he nevertheless claims a behavioural affinity between the activities that transpired in these structures. The proximity of the temple which he believed to exist underneath the Stupa complex compelled him to understand this entire section of the SD Area as the epicentre of the religious life of Mohenjo-Daro.

**C.2.7 Block 8**

Only the southernmost section of this block has been excavated, and that only down Late III Period levels (Figure C.8). Mackay felt that this block, along with the Stupa complex, had evidence of reoccupation during the historical Buddhist Period. Located directly north of Block 6, this single structure was likewise surrounded by alleys and evinced baked brick infill in its southern portion (Mackay 1938:21-22).

![Block 8, SD Area (after Mackay 1938).](image_url)
The exact layout of this structure is unclear, but at least three structures along the eastern wall appear separate and inaccessible from the interior of Block 8. The most arresting feature of this structure is located on a raised platform along the internal north wall. Here, five large brick "circular constructions" are placed in two rows (four in a a row along the northern wall, and one in a second row). Mackay (1938:22) claimed that these were the foundations of small stupas, and constituted further evidence for the Buddhist Period occupation of the Upper Town. Similar to the "tower" at the heart of the Stupa complex, these features, as well as the surrounding walls of this part of the structure, were built from Indus Civilization bricks.

**C.2.8 Block 9**

![Figure C.9 Block 9, SD Area (after Mackay 1938).](image)

Located west of Block 8, Block 9 presents only a small remnant of its original form (Figure C.9). For the most part, it consists of a row of rooms sandwiched between a very thick (1.5m) southern wall and a thinner northern one. These rooms average approximately 3m north-south, and x3.3m east-west, with exceptionally uniform consistency, even amid the regimented architectural traditions of Mohenjo-Daro (Mackay 1938:23).

**C.2.9 Block 10**

Block 10, in the northeast corner of the SD Area opposite the northern reaches of the College of the Priests and the Stupa Complex is only attested by the fragmentary remnants of very thick walls (2.10m) (Figure C.10). Mackay believed that this section of the SD area was "a great open court,"
presumably dating to the Intermediate Periods, on account of significant brick robbing and the erection of some "roughly built walls' which occurred during the Late II-I Periods (Mackay 1938:16).

![Diagram of Block 10, SD Area](image)

**Figure C.10, Block 10, SD Area (after Mackay 1938).**

**C.2.10 Southern Buildings (SB)**

Although the SD Area is best known for its amalgam of enigmatic and presumably elite architecture, several sections of this part of Mohenjo-Daro do not regularly figure into the general narrative of the site. These include the buildings that lie south of the Stupa complex, which the excavators appropriately termed the "Southern Buildings." In addition to being comparatively little known components of the Upper Town, these structures come closest in size and form to the majority of the architecture of the Lower Town.

These components of the Upper Town were initially labelled Blocks 1-8 of the "Southern Buildings Sections" (Mackay 1931a:145). However, later excavations of the Upper Town revealed that Block 1 was actually the southern terminus of the complex that would later be known as the :College of the Priests" (Mackay 1938:10-14). This later development in the labelling of the SD Area buildings has been taken into account for the following description of the Souther Buildings. The earlier discussion of the College of the Priests incorporates information on Block 1 of the Southern Buildings, while Blocks 2-8 of the Southern Buildings are discussed here.
C.2.11 SB Block 2

Figure C.11 Block 2, Southern Buildings, SD Area (after Marshall 1931)

This block is located directly south of the Stupa complex, and east of Divinity Street (Figure C.11). To the south of it is Block 4 and, although it is difficult to determine from the report description and associated excavation plans, Block 2's "very deep and important" southern wall appears to form the northern boundary of Block 4. However, the report claims that these blocks are separated by an east-west street that does not appear on the associated plans (Mackay 1931a:147). Mackay admits that this section of the SD Area, in particular Block 2, is poorly understood, a problem compounded by the lack of adequate excavation and significant dismantling in antiquity (Mackay 1931a:147).

Block 2 is a single architectural unit that seems to consist of a large, central open space and a concentric placement of smaller spaces. A row of cells along its southern side is separated from the inner spaces of this structure by a probable passageway, an arrangement duplicated to the north of the central space. Likewise, both the east and west edges of Block 2 appear to sport rooms similar in size, but larger than those located in the north and south of the block. Of particular note is a recessed bathing room near the southwest corner of the building, which drained thought an aperture into a curved drain and into the sewage system of Divinity Street. Mackay (1931a:147) was intrigued by the reddish deposit that overlay the bathing room floor, just as he was enamoured of the brick flooring of this bathing room, stating that the "joints of the brickwork are so fine that they will hardly admit the blade of a pocket knife."
C.2.12 SB BLOCK 3

Block 3 is located south of the "College of the Priests", from which it is separated by an east-west lane (Figure C.12). This lane meets Divinity Street at the eastern limit of Block 3, while on Block 3's western limit, it forms an intersection with the north-south street that separates the Southern Buildings from those immediately south of the Great Bath. The southern border of Block 3 is provided by an east-west lane (with Block 6 to its south), and Block 4 borders it on its eastern side.

![Diagram of Blocks 3 and 4, Southern Buildings, SD Area (after Marshall 1931).](image)

Very little information for this block appears in the report, not even a basic architectural description. The most detailed account of Block 3 (which, like Block 2 is a single structure) is Mackay's (1931a:148) statement that "robbers have made considerable depredations in the masonry in the interior of the block, leaving only isolated patches here and there of the walling and pavements of the earlier levels." From the associated plans, it can be stated that the northern section of the block contained a long, east-west oriented chamber, while a possible courtyard occupied most of the western portion of the structure. While several wall fragments that occur in the eastern and southern reaches of Block 3 have been taken as indicators of discrete internal spaces, the manner of their articulation is not at all clear.

C.2.13 SB Block 4

Block 4 is (Figure C.12) located south of Block 2, east of Block 3, and north of Block 5, from which it is separated by an east-west street. As with its previously described neighbours, this block is a single building. It likewise lacks an adequate architectural description, save that it contains "thin late walling" (Mackay 1931a:148).
From the SD Area plans, it is apparent that this structure shares certain general architectural traits with its northern neighbour, Block 2. These include the presence of rows of cells or other detached spaces arranged along the inside of the external walls of the structure. As in Block 2, smaller rooms typify the southern side, while slightly larger rooms are present on the eastern and western flanks. The northern side of Block 4 contains small cells in addition to a longer single chamber, a pattern also witnessed in Block 2. Two main differences separate the design of these two structures. One difference is the presence of a well-room rather than a bathing platform in the southwest corner of Block 4. Unusually, the well itself is built of rectangular, as opposed to the typical Indus Civilization wedge shaped bricks (Mackay 1931a:148). The second point of difference is that the central space of Block 4 is comprised of a series of in interconnected rooms rather than an open court as in Block 2. The overwhelming similarity between Blocks 2 and 4 suggests their differences might simply be due to differential preservation.

C.2.14 SB Block 5

Located south of Block 4, north of Block 7, and demarcated from Block 6 to its west by an ill-defined north-south street, the possible single structure that is Block 5 is almost entirely absent; only scattered and highly eroded remnants of walls, stairs, and some patches of pavement attest to its former state (Figure C.13). A "well-constructed bathroom" (Mackay 1931a:149) was uncovered near the southwest corner of this structure.

C.2.15 SB Block 6

This block is located directly opposite Block 3 on the south of the east-west street that divides them and that separates Blocks 4 and 5 to the west (Figure C.13). As such, Block 5 is located across a north-south street on the eastern side of Block 6. The western edge of Block 6 is bordered by the same north-south street that runs along the western side of Block 3.

Unlike most other components of this part of the SD area, Block 6 is a building that is largely intact and in a decent state of preservation. This structure is small in comparison with its neighbours, consists of numerous rooms, and contains the remains of a stairway. Mackay (1931a:149-150) believed that the missing southern section of this building once contained an open court. A collection of partial walls detailed in the report plans are not addressed in the corresponding description, and the manner of their association with Block 6 is unclear.
C.2.16 SB Block 7

Block 7 is found directly south of Block 5, southeast of Block 6, and northeast of Block 8 (Figure C.13). Mackay (1931a:150) claims that much of this section consists of Intermediate Period architectural remnants, as the Late Period constructions have been removed through denudation. While the plans portray very thick walls framing at least eight distinct spaces, their manner of articulation is unclear, and Mackay does not devote any space to them. Rather, he mentions the presence of a well of "most irregular shape", one that in its lower courses is round, but in later phases is elliptical, similar in form to that found in the Block 6 north of the Great Bath. The remnant of an intriguing curved wall exists in the southeast of this block.

C.2.17 Block 8

Block 8 is the name given to a long north-south wall of an "early date" (Mackay 1931a:150) southwest of the elliptical well in Block 7 (Figure C.13). Short eastern protrusions of northern and southern walls mark the extent of one side of what Mackay understood as an important, but entirely unknown building (Mackay 1931a:150).
C.3 L AREA

The other excavated section of the Upper Town lies to the south of the SD Area, and is referred to as L Area (Fig. C.14). Although currently separated from the structures that comprise the SD Area by roughly 28m, Mackay (1931b:151) believed that in antiquity the two areas formed a contiguous architectural and anthropogenic mass.

The report of this area that Mackay (1931b) prepared for the initial Mohenjo-Daro volumes mentions its rather convoluted nature, due to both the only partially complete excavations of the constituent elements of the L Area, and also in part by the fact that this part of the city was heavily damaged through its more recent period use as a brick quarry (Mackay 1931b:151-152). The result is that the general outline of the architectural features of the L Area is less straightforward than in other sections of Mohenjo-Daro, a situation Mackay hoped that future excavations would remedy.

As with other areas of Mohenjo-Daro, the excavated components of L Area are divided into separate sections (in this case, labelled A, B, C, and D) which are comprised of several blocks which themselves constitute several structures or complexes of structures.

C.3.1 Section A

The southernmost, and most elevated of the L Area sections is section A, which comprises Blocks 6-8 (Fig. C.15). This section is contiguous with section B to its north (although section A is
elevated above the latter section), and bounded on its south by the descending slope of the Upper Town mound. Its western boundary is likewise near the beginning of the westward slope of the mound, while the area to the east remains unexcavated.

The easternmost block of this section of the L Area is Block 6, comprised of a single elongated structure which, as Mackay (1931b:152) aptly notes, "is small." This very narrow building is defined on the west by a low wall of the Intermediate Period and three long, narrow rooms in a linear arrangement that the author places at a later date, as they are "roughly built....and ...had earthen floors" (Mackay 1931b:152). The report conveys no information on the quality or presumed chronology of the eastern boundary wall. While unattached to neighbouring structures, Block 6 must have been associated in antiquity with another structure, for as currently understood, this structure makes little functional sense.

![Diagram of L Area showing Blocks 6, 7, 8, 9, 10, and 11.](image)

**Figure C.15 Sections A and B, L Area (after Marshall 1931).**

Block 7, which forms the main component of section A and is directly west of Block 6, is larger and architecturally more complex than its eastern neighbour. Its north border is formed by an east-west wall shared with Block 9, while the majority of its southern limit is determined by an exceptionally thick east-west wall that Mackay (1931b:153) suspects was a boundary wall that may once have served to enclose the southern limits of the Upper Town. The western edge of the block is formed by the external structure wall, which also forms the eastern wall of Block 8.
This structure, like many in the ancient city, displays differential preservation and an amalgam of architectural features which relate to different occupational periods. It is divided lengthwise into two roughly equal halves, separated by a bisecting Late Period wall except at the very northern end (Mackay 1931b:152). On its western side, this wall runs by patches of Intermediate Period paving, as well as the remains of stairs that ascend to the western section of the structure, which is is roughly 2 m below the eastern side. The eastern section of the structure is highly eroded. The southeastern corner of Block 7 is the only place where the southern boundary wall is broken, and may have served as the location of the structure's entrance. However, no actual doorway has been identified at this location.

The best preserved rooms in Block 7 are found on its western side. With the exception of a plausible central courtyard, all rooms are relatively small. One of the rooms contained evidence of an Intermediate Period bathing platform, while the southernmost room in the block was the site of an bathing platform during the Late Periods. Both of these rooms contains drains that articulate with a larger drain system to the east of the Block (Mackay 1931b:152).

The northernmost room in Block 7 spans both the eastern and western components of the block. It does not seem to have articulated directly with Block 7 in antiquity, however, but as its plausible entrance was through its southwest corner, was accessible via Block 8 (Mackay 1931b:154-155).

To the immediate west of Block 7 is Block 8. The remains of a narrow street or lane occupy the space adjacent to the western wall of Block 7, although Mackay (1931b:155) suggests that by the time of its final occupation, this space was likely no longer used as such. It did seem to continue as the main path for the placement of drainage channels tied to Block 7, as related above. An additional narrow laneway, complete with an unattached set of drains terminating to the west of L Area, appears to have run along the south side of the boundary wall for Blocks 7 and 8 for a short distance.

The southern portion of Block 8 is comprised of at least six discrete spaces. The most northerly of these spaces relate to portions of the disused north-south lane just mentioned, while the remainder are rooms whose articulation and chronological designation are unclear. Two of these rooms were baths, and both had floors that sloped towards the east, the direction of the aforementioned north-south drains (Mackay 1931b:155-156). These rooms are bordered on the west by a thick (possible boundary) wall, west of which are two rooms not addressed in the report.

The southern and northern sections of Block 8 are separated by a an east-west wall. The most southerly of these rooms, similar to the bath immediately to its south, was a bath. It differs from its southern counterpart, however, as its floor sloped away to the west, and so did not use the drains used
by the southern portion of Block 8. The character and manner of articulation of the remaining rooms in the northern part of Block 8 are difficult to determine, in part owing to the mix of occupational periods present in the excavated remains, but also by the lack preservation of many of the internal doorways (Mackay 1931b:156).

C.3.2 Section B

Section B of the L Area is located directly north of Section A (Fig. C.15) and is separated from its southern neighbour by a very thick shared east-west wall on its western side, and by a thinner east-west wall on its eastern side. The eastern boundary of Section B is the same north-south road that forms the eastern edge of Block 7 in Section A. The northern boundary of Section B is provided by an east-west street that intersects with the aforementioned north-south street at the northeast corner of Section B. Overall, this section is lower in elevation than Section A and is divisible into Blocks 9, 10, and 11. As most of Area L, these blocks exhibit architecture from the Intermediate and Late Periods. Section B seems to have been a single architectural complex.

Block 9 occupies the eastern half of Section B. Its preserved architectural features include a row of four cell-like rooms tucked between the eastern wall of the complex and a parallel wall that runs approximately 3m to its west. Both of these framing walls have been attributed to the Intermediate Period, while the east-west partitions that define the cell-like rooms are attributed to the Late Period. To the north of these rooms is a larger room in the northeast corner of the block. Both this corner room, as well as the most southerly of the cell-like rooms open into a large central courtyard that is the defining feature of Block 9 (Mackay 1931b:158).

There does not appear to be a discernible break between Blocks 9, 10 and 11, the latter pair of which are located directly northwest and west of the Block 9 central courtyard, respectively. Block 10 features the badly preserved remains of Intermediate walling, which appears to have formed part of the original perimeter of the Section B complex, while Block 11 displays little in the way of preserved architectural traits at all other than patches of Intermediate paving on top of mudbrick filling, leading Mackay to speculate that this area was once endowed with buildings that have since been removed for their bricks (1931b:158-159). Overall, the entirety of Section B appears to have been the setting for a large architectural complex characterised by a large central courtyard ringed by smaller rooms.

C.3.3 Section C

The most northerly section of Area L, Section C displays a unique conflagration of architectural and spatial features that Mackay (1931b:159) claimed to represent "the most interesting part of L Area."
This section is located directly north of Section B, Block 9 (Fig. C.16). It is bordered on its west by a north-south-oriented street and on its south by the same east-west street that forms the northern limit of Section B. Its eastern edge is coincident with the descending slope of the Upper Town mound, whose erosion over the millennia has claimed some of the easternmost architectural features of Section C. Section C is divisible into Blocks 4, 5, and 11.

Block 4 accounts for the western, and largest portion of Section C. Most of the block is contained within a single perimeter wall, and while its internal components are certainly related, it is unclear whether they constituted a single building in antiquity. The southwest corner of Block 4 contains a large, open courtyard, framed on its western, northern, and southern sides by an Intermediate Period wall. One assumes that a corresponding eastern wall existed in antiquity, of which no remains survive. A large well (~2.26m in diameter) is set against the southern wall, near its eastern limit. North of this courtyard, and forming the remainder of Block 4 is one of the most enigmatic architectural arrangements at Mohenjo-Daro: the "Pillared Hall" (Possehl 2002a:194).

![Diagram of section C, L Area](image)

**Figure C.16  C Section, L Area (after Marshall 1931).**

Along with the Warehouse/Granary, Great Bath and Stupa Complex, the Pillared Hall is included amongst the most blatantly examples of specialized and monumental architecture at Mohenjo-Daro, and serves to distinguish the architecture of the Upper Town from that of the Lower Town. It is a large building (26.7m north-south and 25.9m east-west), primarily dated to the Intermediate Period, although Late period additions have been noted (Mackay 1931b: 160-161). The term 'Pillared Hall' is
a descriptive one. With the exception of a few enclosed rooms located in the south of the structure, the entirety of this complex consisted of a single room punctuated by brick piers (approximately 1.5m x 1m "in thickness"), arranged in four north-south-oriented raised rows of five piers. The footing for these rows of piers sets them above the floor of the complex by 0.35m. The piers themselves likely formed the base for brick pillars or wooden columns and are set approximately 2.9m apart within each row. Between these rows of piers and likely columns are wide aisles (4.3m - 4.57m), inlaid with brick paving of alternating header and stretcher pattern (Mackay 1931a:160-161).

During its final phases of occupation at the close of the Late Period, this complex, like so many apparently public, or simply large buildings in both the Upper Town and Lower Town, was internally partitioned into smaller chambers using bricks of a different size than those employed during its initial construction to create mortarless walls. The partitioning of the Pillared Hall featured a manner of pavement "arranged in a peculiar way not found elsewhere at Mohenjo-Daro" (Mackay 1931b:161).

Northeast of the Pillared Hall lies Block 5. This relatively compact and straightforward arrangement of rooms is defined mainly by a long north-south-orientated hallways or room on its western edge, which articulates with the Pillared Hall, an east-west row of small chambers along its north side, two (initially three) larger chambers south of the above-mentioned row, and three chambers that comprise its southern limits. The eastern boundary of this block is coincident with the eastern slope of the Upper Town mound. Mackay (1931b:166) was of the opinion that this block was historically an annex of the Pillared Hall and indeed, on its eastern edge, it does connect with the enigmatic structure.

Other than its relation with the Pillared Hall, of interest in this block is the fact that the northern row of small chambers comprised a single long room in the Intermediate Period, just as its two large, central rooms formed a unitary space during the Intermediate Period. Mackay claims that the cross-walls that demarcate the smaller rooms evince Late Period masonry traits; this is in keeping with the internal division of the Pillared Hall during the same phase (1931b:167-168). The large leather-worker stone found in one of the rooms may indicate that during the Late Period, this locale, like the Great Bath, transitioned from a public, or at least partly non-domestic space, to that of a place of production. However, as the stone itself is not found in direct association with any Late Period material, its precise chronology cannot be determined (Mackay 1931b:168). The remains of a semi-circular wall were uncovered in the west of the Block (Mackay 1931b:166).
North of Block 5 is Block 11. This is perhaps the most unusual of the blocks at Mohenjo-Daro as it consists solely of a large brick platform and wall. Mackay states that "an immensely thick N.-S. wall of the Intermediate Period was found, from either end of which subsidiary walls run eastwards" (Mackay 1931b:168). This wall, which is approximately 8.5m in width, is badly damaged from brick robbing, and Mackay was unable to ascertain whether it once supported buildings on its top or how exactly it articulated with adjacent parts of L Area.

C.3.4 Section D

Section D is to the west of Section C, separated by the north-south street previously mentioned. It is the most westerly reaching of the sections of L Area, and contains Blocks 1-3 (Fig. C.17).

Perhaps no other section of the L Area displays so complex a variety of temporal traits through its extant architecture as this section, particularly Blocks 2 and 3. The dominant component of this area is, however, attributable to the Late Periods, primarily the Late II-I Period (Mackay 1931b:175).

The eastern portion of this section is comprised of Block 1. This block, which likely was initially a single architectural unit along with Block 2, with which it shares northern and southern perimeter walls, is bounded by a north-south to its east and an east-west street to its north. Internally, the majority of this block is comprised of a large internal space, partially divided by the remnants of various partitions, and a row of three enclosed chambers that run along its northern edge. The middle such room contains an in-ground brick-lined ring, that likely served as a jar stand (Mackay 1931b:169).

The large internal space of Block 1 is divisible into several discrete, yet nevertheless interconnected rooms. Again, the absolute chronology of these spaces unclear, so providing a comprehensive account of the changing history of the relationships that characterize these spaces is not realistic. However, some general trends are discernible from an investigation of the traits evident in particular areas.

The most westerly room in this space, which runs for approximately 18.9m along the western edge of Block 1, is set apart by a Late Period wall placed roughly 3m east of the western limit of the block. It was built between what initially were free-standing piers, which may have supported columns. An ablution platform occupied the southern limits of this Room (Mackay 1931b:169-170).

The northeast corner of the large internal space of Block 1 is defined on its north by the row of three east-west rooms, and on its south by the presence of two brick piers that have correlates in the centre of this space. A third pier is in the northwest of this space, was incorporated into a short north-
south wall that partly separates this space from the long room on the west of Block 1. The use of this preexisting pier into the subdivision of the internal space of Block 1 suggests both it and the western room originally formed a unitary space. The northwest corner of Block 1’s internal space contains five sunken brick-lined depressions, apparently for the storage of large jars (Mackay 1931b:170). Interestingly, this collection of storage pits is directly south of the one previously mentioned in association with the northern row of small rooms. These pits predate the erection of both the western walls of Block 1, and the piers that foreshadowed them, as one of the pits underlies a pier. One of the pits contained what Mackay believed were clay sling bullets (Mackay 1931b:170).

![Figure C.17 D Section, L Area (after Marshall 1931).](image)

The southern and eastern component of Block 1 can be divided into roughly approximate eastern and western halves, partitioned by the remains of a collection of north-south walls. The western portion of this space contains a stretch of what Mackay believed to be its original paving, but the remaining architecture does not substantially contribute to an understanding of the layout or chronology of the structure, except to illustrate the tendency for frequent alteration (Mackay 1931b:171). The remaining eastern section of the southern part of Block 1 receive little attention in the report.
Directly south of the described section of Block 1, and comprising part of the southern boundary for Blocks 1 and 2, is a long and relatively narrow space (approximately (19.5m east-west and 2.8m north-south) that is enclosed on all but its southwest corner. It does not appear to articulate directly with Block 1 to its north or with Section B to its south. It provides the clearest example of a mostly unaltered Intermediate Period construction for Section D (Mackay 1931b:171).

Given the presence of piers (supposedly originally equipped with columns) that characterize majority of the internal space of Block 1, and the late addition of partition walls that created its separate rooms, Mackay was of the impression that Block 1, Section D, was a later, if less refined attempt to imitate the architecture of the Pillared Hall in Section C (Mackay 1931b:170). While we cannot claim with certainty the intent of its builders, at a purely stylistic level, there are striking similarities in the architectural aesthetics of the two structures. Such similarities may highlight the social or political connotations of this area of Mohenjo-Daro, and are likely connected to similar patterns evident in Blocks 7 and 10 of the DK-G South Area of the Lower Town.

C.3.4.1 Block 2

Block 2 is located west of Block 1, and is mostly encased within the same northern and southern perimeter walls. The fact that the western wall of Block 2 is of the same orientation as the eastern wall of Block 1 supports the assertion that these separate blocks were initially constructed as a single or at least interconnected architectural unit. The differential elevation of Blocks 2 and 1 may detract from this evaluation (Block 2 is slightly more elevated than its eastern neighbour ), but the exact nature of this difference remains unclear (Mackay 1931b:171).

The two most northerly rooms of Block 2 may initially have formed a single space, as did the central rooms along its western side. Evidence of a stairway, potentially leading to a second storey or the roof of the complex, is located in an alcove opposite the western entrance of the Block, and rises to the east. The most southerly of the rooms in this block likewise seem to initially have comprised a single space later subdivided into smaller rooms. The southern limit of Block 2 is marked by an opening between the block's eastern and western walls and contains a well whose "masonry is very bad" and which Mackay assigns to the Late Periods (Mackay 1931b:173).

C.3.4.2 Block 3

Architecturally, Block 3 is far less preserved and less architecturally impressive than the other areas of Section D, but displays the clearest evidence in L Area for the transformation that occurred in
socially vested understandings of place and spatiality at Mohenjo-Daro from its socio-political fluorescence in the Intermediate Period, to its retraction and eventual disintegration at the close of the Late Period.

This is perhaps best illustrated in the case of the large open courtyard, or, at least, what archaeologists have come to think of as a courtyard, as this area was quite heavily reduced through denudation and brick robbing. Mackay interpreted this large area, which is surrounded by a conflation of mainly Late Period rooms, and whose existing architectural elements are fragmented and in chronological disarray, as a refuse dump for an adjacent kiln or kilns (1931b:174). Thousands of ceramic wasters filled the space and, in fact, formed a large part of the fill upon which the ultimate surface of this court was made. Interspersed throughout this courtyard are several brick piers that seem to have foundations far deeper than the Late Period surface of the court, and that Mackay believed were Intermediate Period in their origins. At the far western edge of this court were found, in an east-west alignment, three (and a partial fourth) limestone rings. The presence of columns is, as we have already witnessed, an unusual architectural feature at Mohenjo-Daro, and associated with what comes closest in an Indus Civilization sense to conventional correlates of elite or at least monumental architecture. As discussed in relation to the rings discovered in Houses V and XII of the HR-B Area, large rings have been attested at other Indus Civilization cities, and are believed to have served as pillar or banner supports whose function was partly to signify the special status of an architectural complex (Kenoyer 2012; Vidale 2010). They are found rarely at Mohenjo-Daro, and always in association with other specific markers of social importance or distinction, such as elite goods, locations of probable craft production, or sheer size of architecture. The fact that the markers of social difference and prestige, or, at least, distinction, were located under a literal trash pile, recalls the eventual disuse and reassignment of the Great Bath as a location for production, and, in conjunction with the partitioning of the Pillared Hall, informs us that the changes wrought at Mohenjo-Daro at the close of the Late Period are not confined to the better known SD Area, but in fact affected the entirety of the Upper Town. The potential of this part of the Upper Town to reveal the full scope of such changes as well as the historical importance of this part of the Upper Town was alluded to by Mackay (1931a:175) when he stated that "it is certain that there are important buildings beneath the level to which we have already dug." As witnessed in our discussion of the rest of the city, such changes were far more encompassing in scope than is presented on the Upper Town.
APPENDIX D: PRESENTATION OF ANALYSIS

The tables that follow list the structures or areas of Mohenjo-Daro in which the architectural attributes described above were noted. The correlation of spatial and architectural traits organized by individual structure is presented separately in the appendices.

For the column listed "Location", the format is Section: Block, House (Room - if applicable). Throughout I have retained the conventional assignation of Arabic numerals to Blocks and Rooms, and Roman numerals to Houses. Consequently, the location of Room 104, House XII, in Block 2 in Section B of the HR Area would be referenced as B: 2, XII (104). For entries from DK-G South, a parenthetical indication of the period (Intermediate III, II, or I and Late III or II-I) to which the structure pertains is included. Following from this, the Intermediate II Period manifestation of Room 54 of House V, Block 7 in the DK-G South section would be entered as G-S: 7, V (54) (IN.II).

The only exception to the format just described is in regard to attributes 10A and 10B, which concern open spaces. Many open spaces occur between individual buildings, or even between whole blocks. In those cases, I have noted which structures and blocks border or frame the open spaces. For example, the location for the open space that appears in the southern part of the DK-B Area between Blocks 1 and 2 is recorded as "Block 1, House I/Block 2, House II" as these are the nearest structures to the open space. In those instances where open spaces are confined within a block or structure, I have provided the relevant House and Room information. If a sequential range of structures within a single Block define the open space, I have presented the location of the open space in reference to said structures. The open space which is contained within Block A, Moneer Area, for example, is located at "Block A, Houses AI-AV."

The reader should bear in mind that not all of the locations indicated below were assigned the full suite of Block, House, and Room designations by the Mohenjo-Daro excavators. Consequently, not all of these fields appear for every entry in the following table.

Table D.1 Identified Architectural Attributes in Group 1: Unusual Doorways

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Area</th>
<th>Location: Section, Block, House (Room)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A - Corbelled Arch Doorway</td>
<td>HR-B</td>
<td>Block 2, House V (54)</td>
</tr>
<tr>
<td>1B - Wide External</td>
<td>SD</td>
<td>Block 5</td>
</tr>
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</table>
### Table D.2 Identified Architectural Attributes of Group 2: Unusual Stairways

<table>
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<th>Attribute</th>
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</thead>
<tbody>
<tr>
<td>2A - Opposing Stairways</td>
<td>SD</td>
<td>Stupa Complex</td>
</tr>
<tr>
<td></td>
<td>HR-A</td>
<td>Block 1, House I (10)</td>
</tr>
<tr>
<td>2B - Double Stairwell</td>
<td>DK-G South</td>
<td>Block 1A (93) (IN.III-I)</td>
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### Table D.3 Identified Architectural Attributes of Group 3: Architectural Supports

<table>
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<td>3A - Square Column Bases</td>
<td>L</td>
<td>C Section, Block 4</td>
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<td></td>
<td>C Section, Block 5 (5)</td>
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<td>DK-A</td>
<td>Block 4 (1)</td>
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<td>DK-B</td>
<td>Block 2, House III (3)</td>
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<tr>
<td>DK-C</td>
<td>Block 1 (2)</td>
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<td>Block 2 (5)</td>
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<td>Block 4(2)</td>
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<td></td>
<td>Block 10 (13)</td>
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<td>DK-G South</td>
<td>Block 3, House VI (IN.II)</td>
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<td>Block 6A (LT.III-I)</td>
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<td>Block 7, House VI (LT.II-I)</td>
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<td>Block 12, House I (1) (IN.I)</td>
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<td>Block 12A, House I (16) (IN.II-I)</td>
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<td>Block 12A, House II (19) (IN.II)</td>
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<td>DK-G North</td>
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<td>Area</td>
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<td>House I (1)</td>
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<td></td>
<td>House III (1)</td>
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<td>HR-A</td>
<td>Block 1, House I (26)</td>
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<td>HR-B</td>
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**Table D.4 Identified Architectural Attributes of Group 4: Unusual Wall Types**

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**DK-G North**

**MN**

**HR-A**

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**Table D.6 Identified Architectural Attributes of Group 6: Building Fabric**

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**Table D.7 Identified Architectural Attributes of Group 7: Internal Wells**
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|           | Block 2, House II (18)  
|           | Block 4, House V (51)   |
| HR-B       | Block 5, House XXIV (16) |
| MN         | Block A, House AIV      |
| **7D - Southern Internal Well** |  
| DK-G South | Block 1, House I        
|           | Block 9, House IX (19)  
|           | Block 11, House II      |
| HR-A       | Block 3, House VIII (6)  
|           | Block 3, House IX (19)  |
| HR-B       | Block 1, House II (7)    
|           | Block 5, XXX (57)       
|           | Block 6, House XLVIII (2) |
| **7E - Central Internal Well** |  
| DK-A       | Block 2 (3)              
| DK-C       | Block 5 (3)              
|           | Block 11 (6)             |
| DK-G South | Block 1, House VI (39)   
|           | Block 6, House I        
|           | Block 8, House II (19)   |
| HR-B       | Block 2, House V (58)    
|           | Block 2, House VII       
|           | Block 2, House IX (88)   
|           | Block 3, House XIV (11)  
|           | Block 3, House XIV (12)  
|           | Block 5, House XXXVIII (84) |
|           | Block 5, House XLIII (105) |
|           | Block 6, House XLIX (1)  |
| VS-A       | Block 2, House XVII (61) |
|           | Block 3, House XIX (22)  |

**Table D.8** Identified Architectural Attributes of Group 8: Well Copings

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Area</th>
<th>Location: Section, Block, House (Room)</th>
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<tbody>
<tr>
<td>8A - Square Well</td>
<td>DK-C</td>
<td>Block 10 (14)</td>
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<tr>
<td>Attribute</td>
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<td>9A - Small Square Courtyard</td>
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<tr>
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<td>Block 9A, House VIII (54) (LT.II-I)</td>
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<td>Block 10, House III (58) (IN.III-LT.II-I)</td>
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<td>House II (8)</td>
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<td>VS-A</td>
<td>Block 2, House XV (96)</td>
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<td>Block 7, House XXXVII (22)</td>
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<td>9B - Standardized Rooms</td>
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<td>Block 9 (3-6, 9, 16)</td>
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<td>Block 4 (5-8, 10-16, 78-79) (IN.III-II)</td>
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<td>10A - Unbounded Open Spaces</td>
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REFERENCES CITED

Abbot, Carl

Abend, Gabriel

Abrams, Elliot M.

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