

**The Protohistoric Cemeteries of Northwestern  
Pakistan:  
The Deconstruction and Reinterpretations of Archaeological and  
Burial Traditions**

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by

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# **The Protohistoric Cemeteries of Northwestern Pakistan: The Deconstruction and Reinterpretation of Archaeological and Burial Traditions**

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## **Abstract**

This thesis examines the protohistoric cemeteries in northwestern Pakistan known as the Gandhara Grave Culture. These cemeteries are understood in terms of models developed by the Italian Archaeological Mission to Pakistan from the Istituto Italiano per il Medio ed Estremo Oriente (IsMEO) and the Department of Archaeology, University of Peshawar (UoP). These models explained these cemeteries in terms of migrations and particular ethnicities (e.g. Aryans) and dated them to between the mid-2<sup>nd</sup> to mid-1<sup>st</sup> millennium BC. Though developed in the 1960s by a select group of researchers, these models, with institutionalized support and tools, have grown into archaeological traditions that are still unquestioningly accepted in archaeology and taught in universities across Pakistan.

The deconstruction of these archaeological traditions exposed their inner inconsistencies and circular arguments and showed that their explanations were more relevant to the main researchers than to the cemeteries. Both were the products of the academic and political environment of the researchers themselves, and were concerned with the national prestige of Italy and Muslim identity of Pakistan. The deconstruction and contextual analysis of existing chronological frameworks rendered them obsolete and unusable for the current study. The recalibration of the radiocarbon measurements from cemeteries suggested a longer date range (from 2200 to 30 cal BC in Swat and Dir valleys). The analyses and interpretations of the grave constructions, grave goods and burial practices showed both continuity and variation that could not be explained as a culture or particular ethnicity but were rather the result of a burial tradition or traditions that transcended different geographical regions, ethnic groups and archaeological cultures. Archaeological evidence and multiple analogies suggest the existence of multiple and competing ideologies, linked with concepts of ritualized landscapes and cosmos.

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## Chapter 1: **Introduction**

The purpose of my PhD research is to deconstruct and reinterpret the existing models of an archaeological phenomenon in northwestern Pakistan, widely known as the Gandhara Grave Culture. My research focuses on investigating the contexts of the existing archaeological models and their main advocates, and following this, on the re-analyses and re-interpretations of the excavation data from these protohistoric cemeteries in northwestern Pakistan.

Protohistoric cemeteries in northern and northwestern South Asia were first reported in the early part of the 20<sup>th</sup> century (Dani 1978:43; Francke 1914:65-71). However, the first archaeological identification in northwestern Pakistan was carried out in the 1960s in the current geographical limits of Khyber Pakhtunkhwa Province (formerly the Northwest Frontier Province (NWFP)) by Professors Giuseppe Tucci (1963) and Giorgio Stacul (1966) in Swat State, and Professor Ahmad Hassan Dani (1968b) in Dir State. It was claimed that these protohistoric cemeteries were part of a singular archaeological culture, and hitherto mainly studied as the Gandhara Grave Culture in Pakistan archaeology. Dir and Swat valleys were considered to be the core areas of this culture, with further sites discovered to the south and east in the Vale of Peshawar and Taxila Valley. Alleged Gandhara Grave Culture style sites have also been discovered along the Pakistan and Afghanistan border in Chitral District, and in Bajaur and Mohmand Tribal Agencies (Ali et al. 2002; Ali et al. 2005; Ali and Zahir 2005; Ali and Rahman 2005). Similar types of grave structures and materials have been reported from Ladakh (Dani 1978:43; Francke 1914; Shahli 2001:110), Himachalpradesh (V. Nautiyal pers. comm.), Jammu and Kashmir and Uttarakhand in India (Agrawal et al. 1995;

Khandhuri et al. 1997; Shahli 2001:110), Gilgit-Baltistan province or formerly the Northern Areas of Pakistan (Dani 2001), the Gomal Plain in Khyber Pakhtunkhwa, and parts of Punjab province, Pakistan (Dani 1978).

### **1.1 Previous Understandings**

The protohistoric cemeteries of northwestern Pakistan were mainly understood in terms of the archaeological models developed by the Italian Archaeological Mission to Pakistan from the Istituto Italiano per il Medio ed Estremo Oriente ((IsMEO) renamed the Istituto Italiano per l'Africa e l'Oriente (IsIAO) in 1995 and the Department of Archaeology, renamed as Institute of Archaeology and Anthropology in 2009, University of Peshawar (UoP) teams. The IsMEO and UoP archaeological models were based upon research in Swat and Dir valleys respectively.

Within the IsMEO and UoP models, these protohistoric cemeteries were understood to be part of a 'homogenous culture', corresponding to Indo-European language-speaking Aryans (Dani 1968b:49-55; Salvatori 1975:334; Tucci 1977:36; Stacul 1969:87). Particular types of artefacts, graves and burial practices were associated with this 'culture' and its people (Dani 1968b; Stacul 1969). Analyses of these protohistoric cemeteries were mainly approached through culture-historical frameworks (Johnson 2010:15-21), considering people, languages, graves and other material culture as essentially interchangeable and identical. The technological innovations within this culture were therefore considered to be the result of migrations and diffusions from the west (Central Asia and Iran) (Dani 1968b:49-55). These protohistoric graves were dated from the 16<sup>th</sup> to the 5<sup>th</sup> century BC (Dani 1968b:48; Stacul 1969:82-85, 1978:149), which enabled the advocates of the archaeological models to shed light on

the then largely unexplored and unknown period between the end of the first period of urbanism in the Harappan Civilization, and the rise of the second period of urbanism in the early historic period. The relative and absolute dates for these protohistoric cemeteries were seen to fall within a perceived void between the well-documented archaeological and historical phenomena (first and second urbanizations), and ‘commonsense’ prevailed to assign these protohistoric cemeteries to those people who had supposedly invaded the subcontinent within this time period (e.g. Dani 1968b:49-55).

In addition to the archaeological data, IsMEO and UoP interpretations of the protohistoric graves drew heavily upon references to particular groups of people and regions within the Vedic and historical literature. The Vedic literature, especially the *Rigveda*, provided information about the regions of northwestern Pakistan and corresponded well to the time period in question; it was taken for granted that these protohistoric graves represented the protagonists of *Rigveda*, who were identified as Aryans (Dani 1968:37-48). Historical accounts, particularly by historians connected to Alexander the Great, talked about different tribes who fought against Alexander in the area; therefore these protohistoric cemeteries were interpreted as the physical manifestation of these tribes (Tucci 1963:27-28). Northwestern Pakistan, the region of the first discovery of the protohistoric cemeteries, is inhabited by groups of people who speak some of the most ancient Indo-European dialects and languages in South Asia grouped under the rubric of Dardic languages (e.g. Biddulph 1971 [1880]:155-164); therefore, these protohistoric graves are thought to have belonged to people from these linguistic groups in the past (Kuz'mina 2007:307-320).

Within IsMEO and UoP models, the protohistoric cemeteries were lodged within particular geographical regions. The protohistoric cemeteries within northwestern Pakistan were defined through the geographical limits of ancient geographical entity, Gandhara. This resulted in the understanding that findings of protohistoric cemeteries in, for example, the Gandhara region were of the Gandhara Grave Culture, while if found outside Gandhara, for example in the Gomal valley, Dera Ismail Khan, they were part of a different grave culture (i.e. Gomal Grave Culture). This association with the geographical, and historical, entity of Gandhara shows that the archaeological phenomenon of protohistoric cemeteries was based upon wrong assumptions from the very start.

Both the IsMEO and UoP models of the protohistoric cemeteries were mainly developed during the 1960s and were thus the products of the particular political, academic and ideological contexts of their leading scholars. Through this research I aim to deconstruct these archaeological models and highlight the roles of individuals in their formation. The undisputed acceptance of the ideas of the main researchers of the IsMEO and UoP models, and the continued, unchallenged use of both the models in the archaeology of Pakistan has transformed them into archaeological traditions. The deconstruction of the main ideas within the IsMEO and UoP models and their transformations through time is one of the main themes of my research. Following on from this, through the analysis of selected categories of data from the protohistoric cemeteries of Swat and Dir (utilized for the construction of the IsMEO and UoP models), in combination with material from new explorations and excavations, I will develop new explanations and interpretations of the protohistoric cemeteries within current political and academic contexts.

## 1.2 Geographical Context

The geographical foundation of the protohistoric cemeteries within northwestern Pakistan was central to both the IsMEO and UoP interpretative regimes. The UoP model was based upon the association of the protohistoric cemeteries with the ancient geographical region of Gandhara (e.g. Dani and Durrani 1964; Dani 1968a-b). This association of protohistoric cemeteries with Gandhara was initially resisted and criticized by IsMEO scholars (Stacul 1975b:329); however, it was later accommodated within the IsMEO model (Stacul 2000).

The name Gandhara and its association with geographical region is a historical construct (Swati 1997:77-83; Young 2009:57-61). The first reference to the region of Gandhara and its people is found in the *Rigveda* (RV 1.120.1 and 1.126.7) (Swati 1997:77; Young 2009:58). It was a distinct geographical region and one of the provinces of the Achaemenid Empire of Persia prior to 539 BC (Brosius 2006:11, 49). Herodotus (*Histories* 3:91) recorded it as part of the 7<sup>th</sup> province of the Achaemenid Empire and not as a separate satrapy in itself. The Behistun inscription (column 1 line 16) of the Achaemenid king Darius, dated to c. 518 BC, also mentioned the name of Gandhara as part of the twenty-three provinces (Swati 1997:77; Wheeler 1962:3).

The geographical limits of Gandhara have remained fluid within different time periods (Law 1943:10 cf. Swati 1997:77); however, it has commonly been identified with the Vale of Peshawar (Beal 1968:97-9, 119-121; Behrendt 2003:24; Cunningham 2007 [1871]:40-41, 68-69; Dani 1968b:2; Foucher 1915:5; Hargreaves 1930:1; Zwalf 1979:2). The Dir and Swat valleys, along with Bajaur and Mohmand Tribal Agencies,

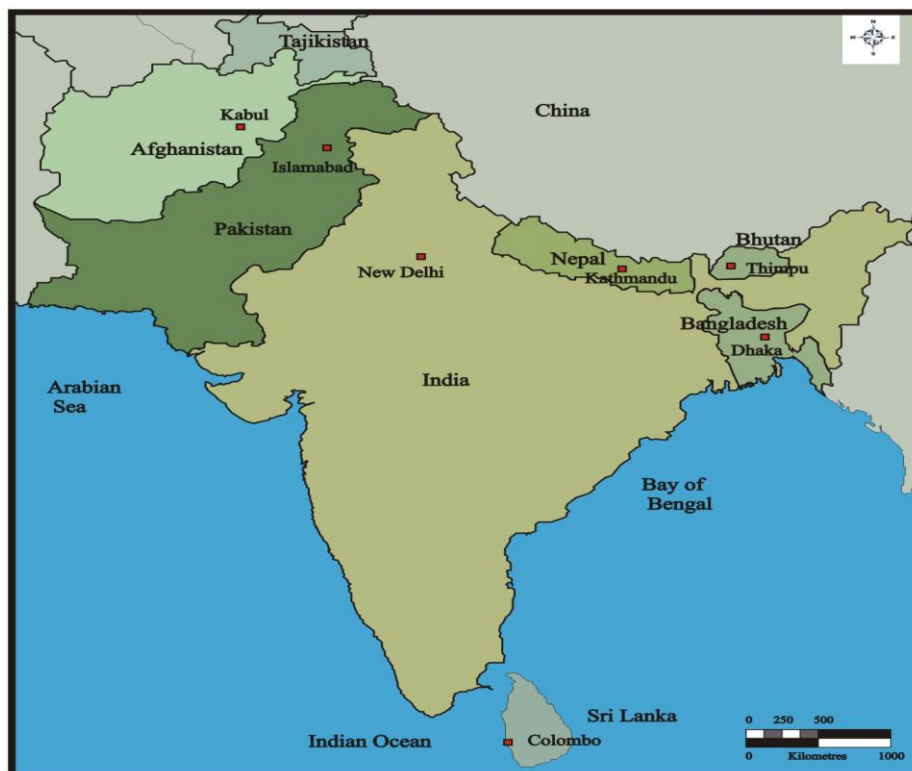
were not considered a part of Gandhara but rather part of the ancient region of Udyana (Swat) (Cunningham 2007 [1871]:68; Tucci 1977:11). Thus, within the IsMEO and UoP models, the association of protohistoric cemeteries in Swat and Dir valleys (which had never been part of the Gandhara) is a misrepresentation from the onset.

The Vale of Peshawar, with an area of 6763 square kilometres, is enclosed on all sides by barren mountains, except on the eastern side, where it opens up to the Indus River, and thus the corresponding Vale takes the form of a 'saucer' (Dichter 1967:91). These mountains have many low-lying mountain passes, e.g. the Khyber Pass, which connect it with not only with northern and northwestern India, but also with Afghanistan, Central Asia and beyond (Ali 2003: 15-21; Young and Ali 2007:11). Thus, the Vale of Peshawar was the central point between the trade routes connecting Swat, Dir and Chitral on one hand, and Afghanistan and Central Asia on the other (Imperial Gazetteer of India-NWFP (IGI-NWFP) 2002:153). The Vale supports rich alluvial deposits, and with the introduction of canals and other irrigation systems, has become one of the most important agricultural regions in Pakistan (Dichter 1967:91; IGI-NWFP 2002:143). The perennial waters from the Rivers Kabul, Swat, Bara, Kalpani and Indus, are its main water-sources for agriculture (Ali 2003:15-17). It consists of the current administrative districts of Peshawar, Charsadda, Mardan, Nowshera and Swabi. A total of 19 protohistoric cemeteries have been reported from the Vale, of which Zarif Karuna and Adina cemeteries have been excavated (see Appendix 1).

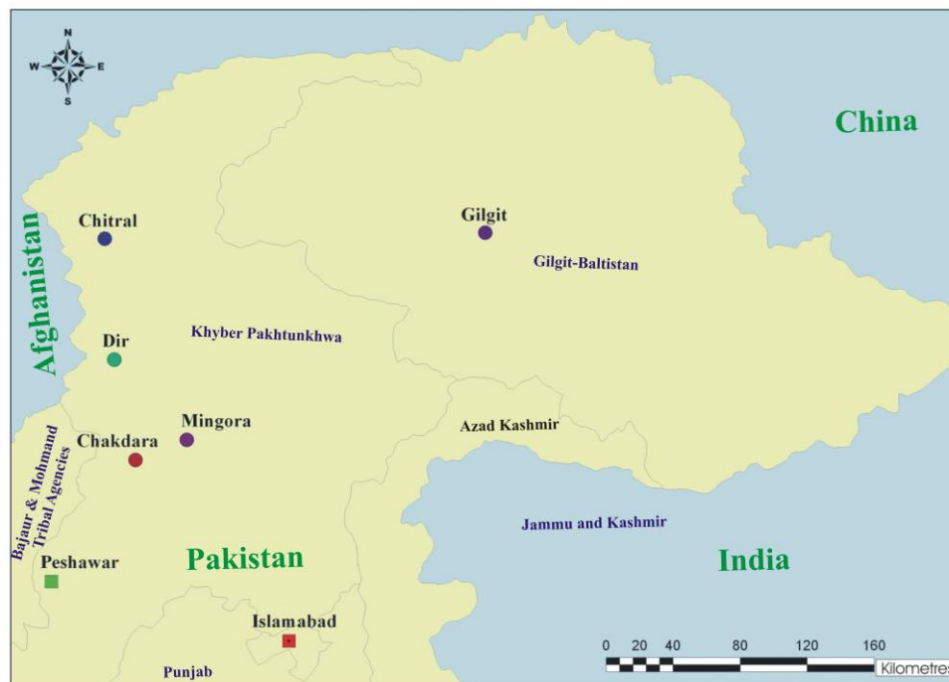
The valley of Dir with an approximate area of 5180 square kilometres is drained by the Panjkora River and its tributaries (Dichter 1967:30; McMahon and Ramsay 1901:5). It is located to the south and southwest of Chitral valley. With a total length of 113

kilometres, the region progressively widens with the run of the Panjkora River, from a few kilometres width at its head in the Shandur or Hindu Raj range in the north, to about 65 kilometres at its meeting point with Swat River in the south (Dichter 1967:62; McMahon and Ramsay 1901:7). The extent of the alluvial soils in the Panjkora River valley is less than that of the Swat River valley. These soils are extremely fertile and hence most of the agricultural and settlement activities are focused around the main river channel and its tributaries (McMahon and Ramsay 1901:7). Dir still has some dry temperate coniferous forests, although these are now threatened by modern agricultural expansion and other deforestation activities (Roberts 1997:10).

The valley of Swat, located to the south of Chitral and east of Dir, is formed through the erosion of the Swat River and its tributaries and is about 6150 square kilometres in area, of which more than half (3207 square kilometres) consists of mountains (U. Ali 2008:53-54). These mountains surround the river valley on all sides, except for a corridor in the south through which the Swat River flows out of the region (U. Ali 2008:53-54), while the Indus River acts as its eastern border. The width of the Swat valley increases along the flow of the Swat River, from 3.5 to 6.5 kilometres in the north to about 22.5 kilometres in the south (U. Ali 2008:54). Swat River and its tributaries are the main source of the deposition of the fertile alluvial soils in this area. Agriculture is mostly practiced on terraced fields and provides the livelihood for 80% of the population (U. Ali 2008:54-62). Although, Swat valley is surrounded by mountains on all sides, these mountains have many treacherous passes that were the main source of contact between Swat and the outside world (Tucci 1966:43).

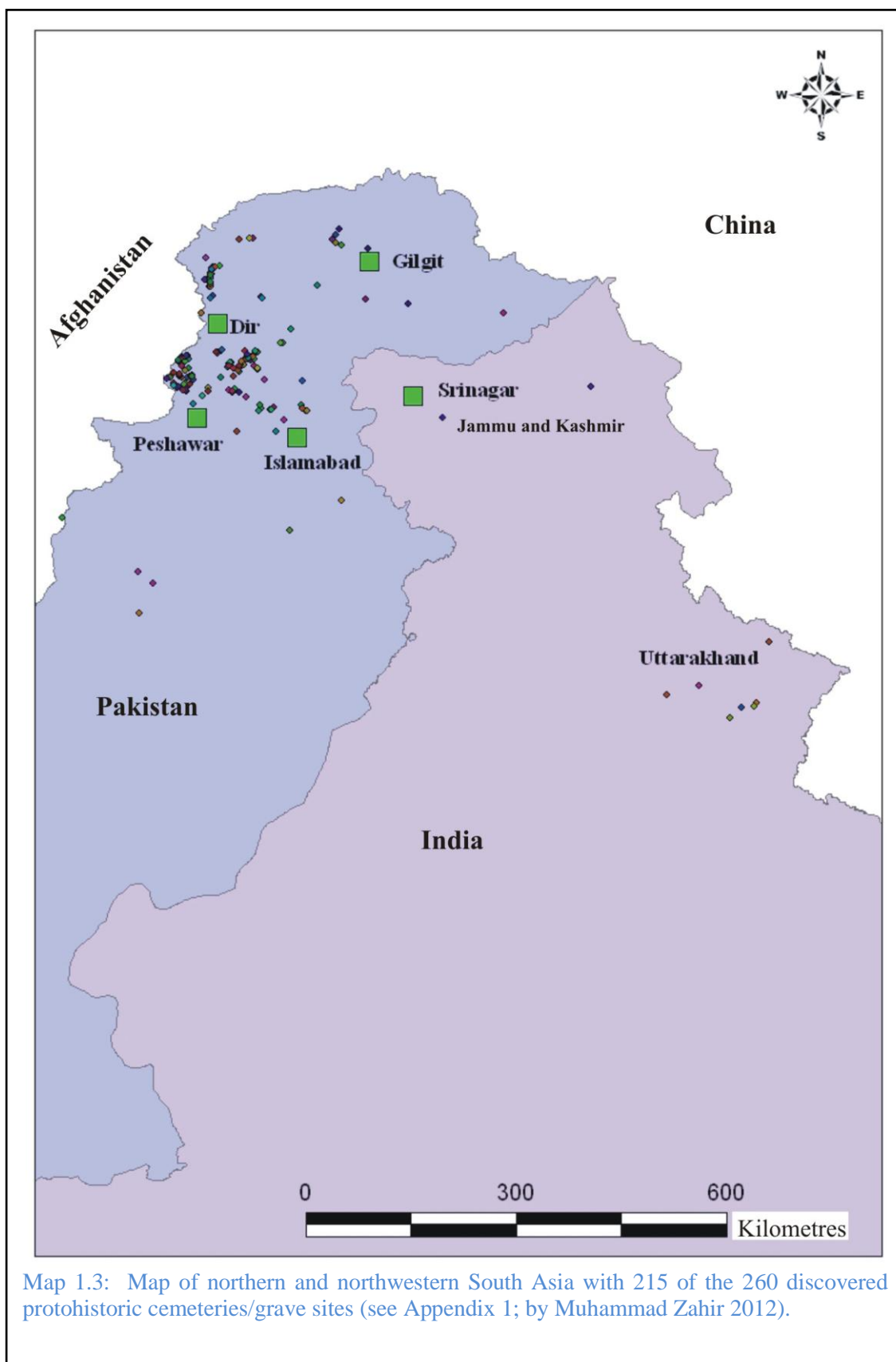


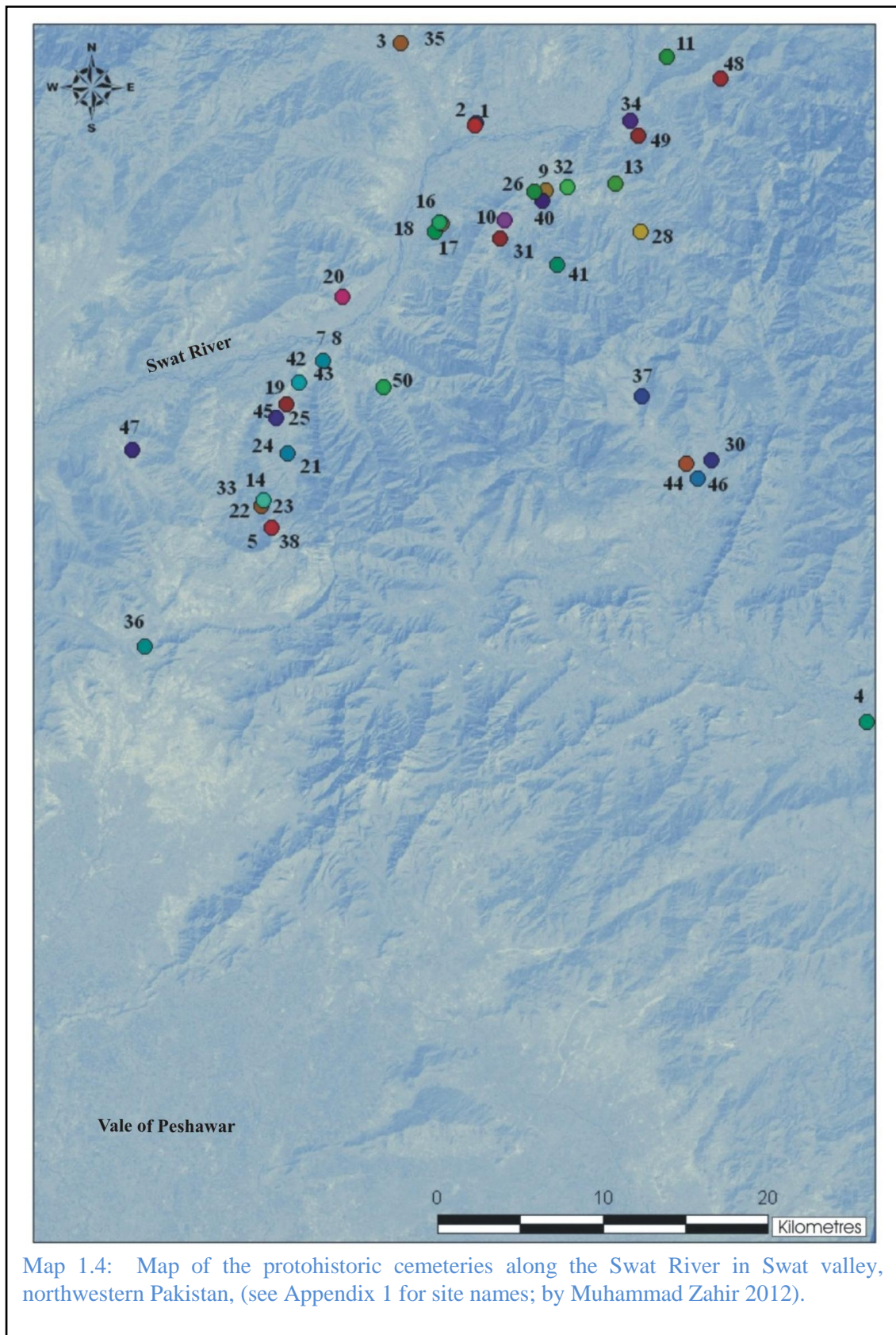
Map 1.1: Map of South Asia (by Muhammad Zahir 2012).



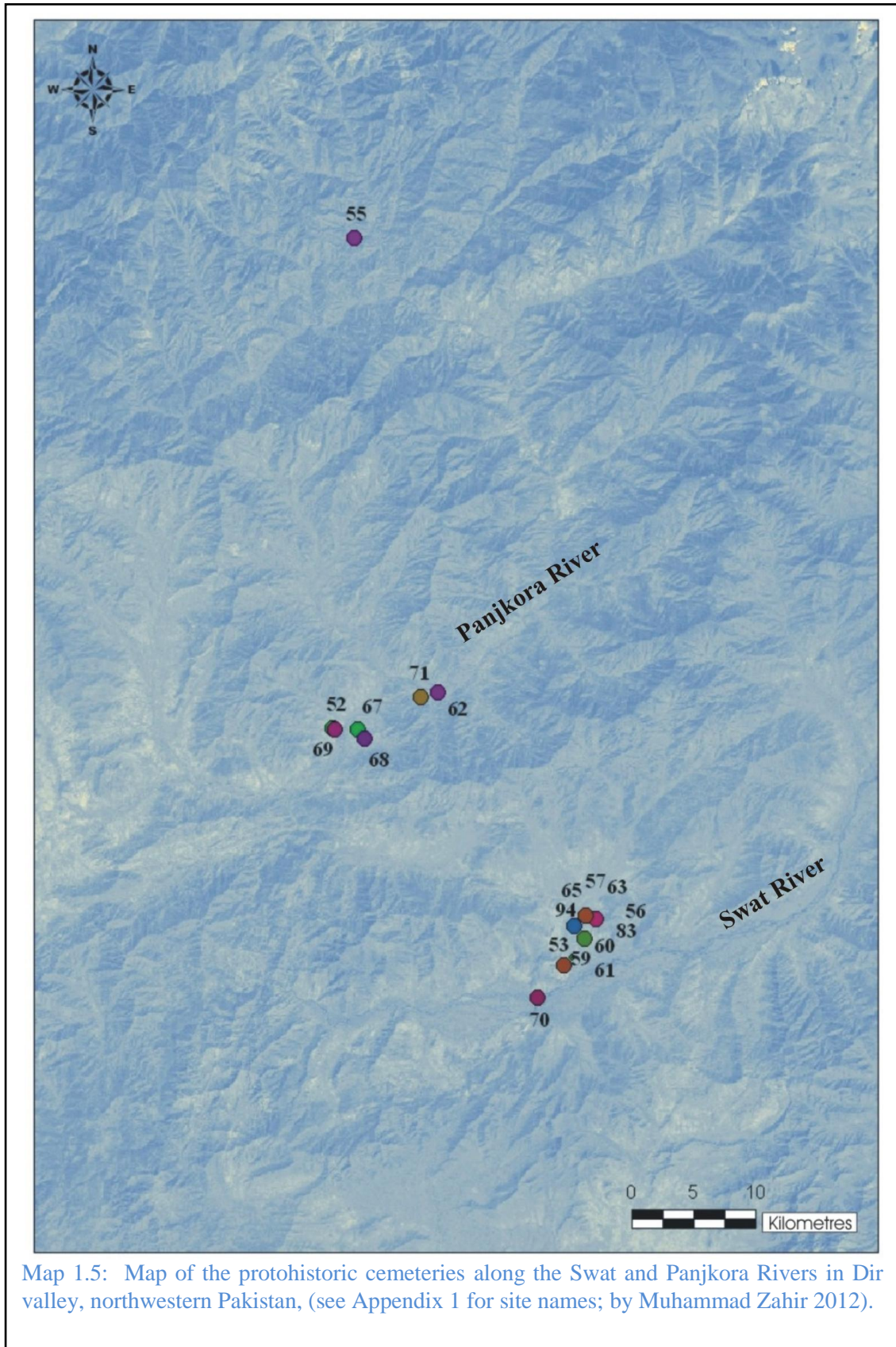
Map 1.2: Map of northwestern Pakistan (by Muhammad Zahir 2012).





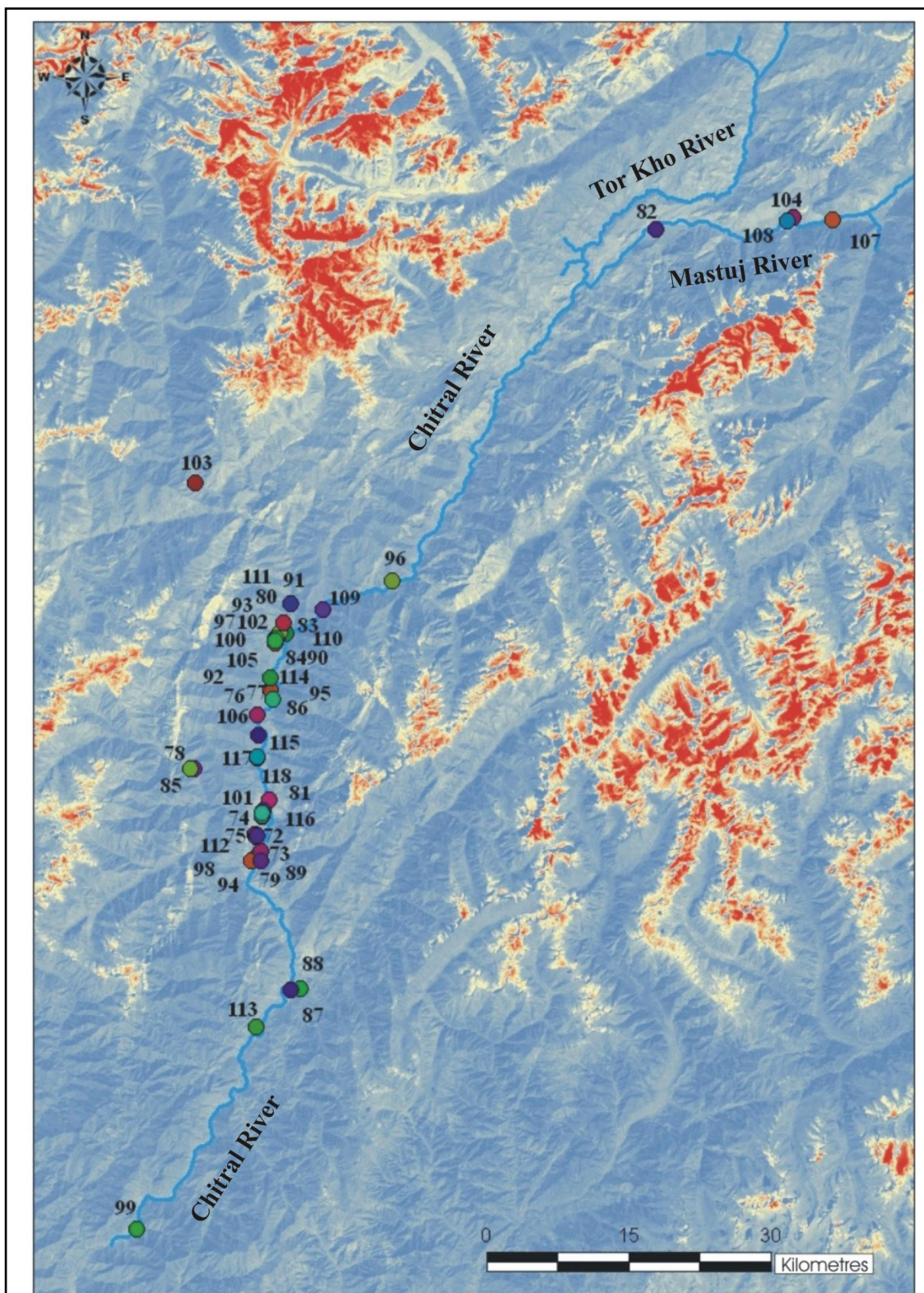






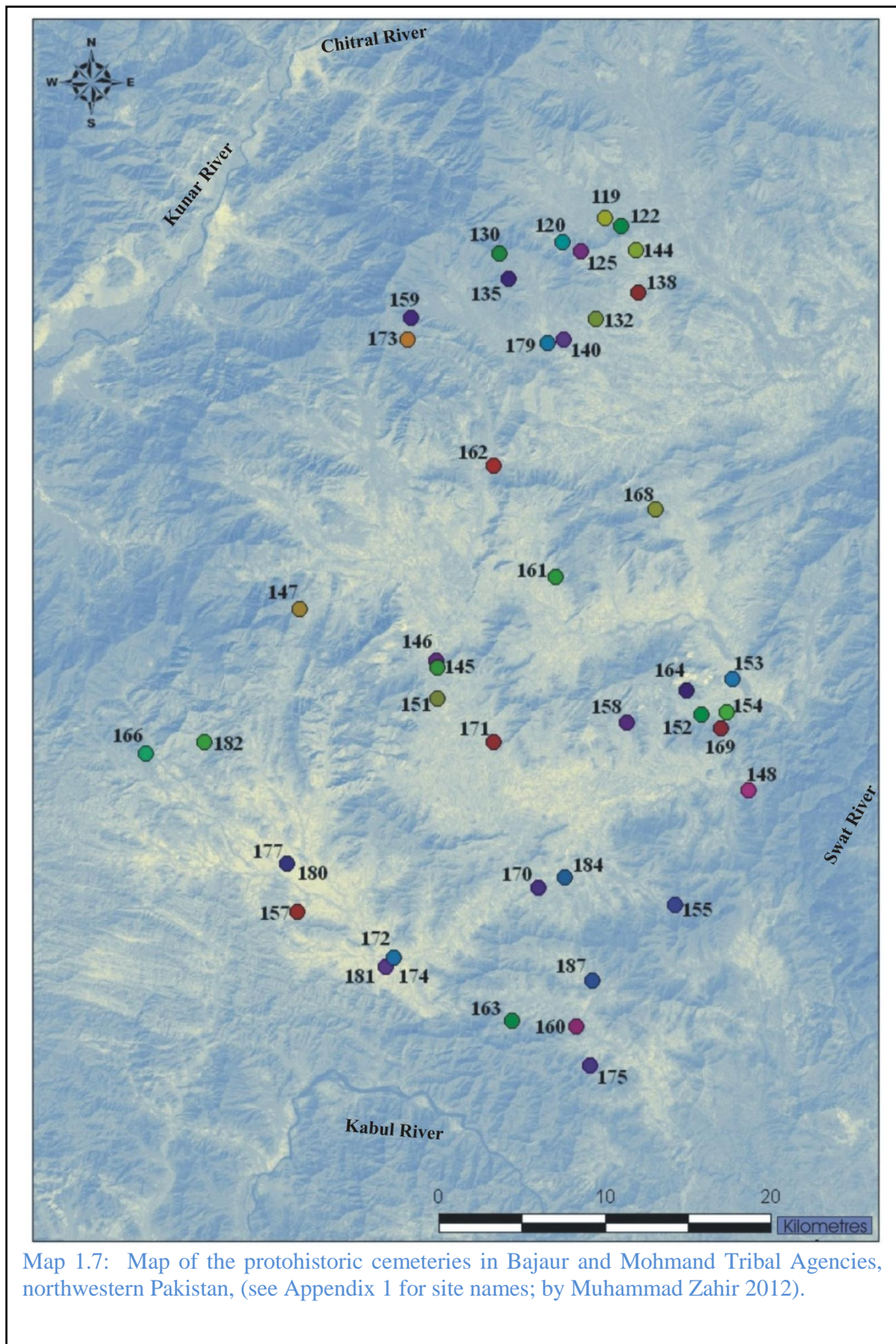
Map 1.5: Map of the protohistoric cemeteries along the Swat and Panjkora Rivers in Dir valley, northwestern Pakistan, (see Appendix 1 for site names; by Muhammad Zahir 2012).

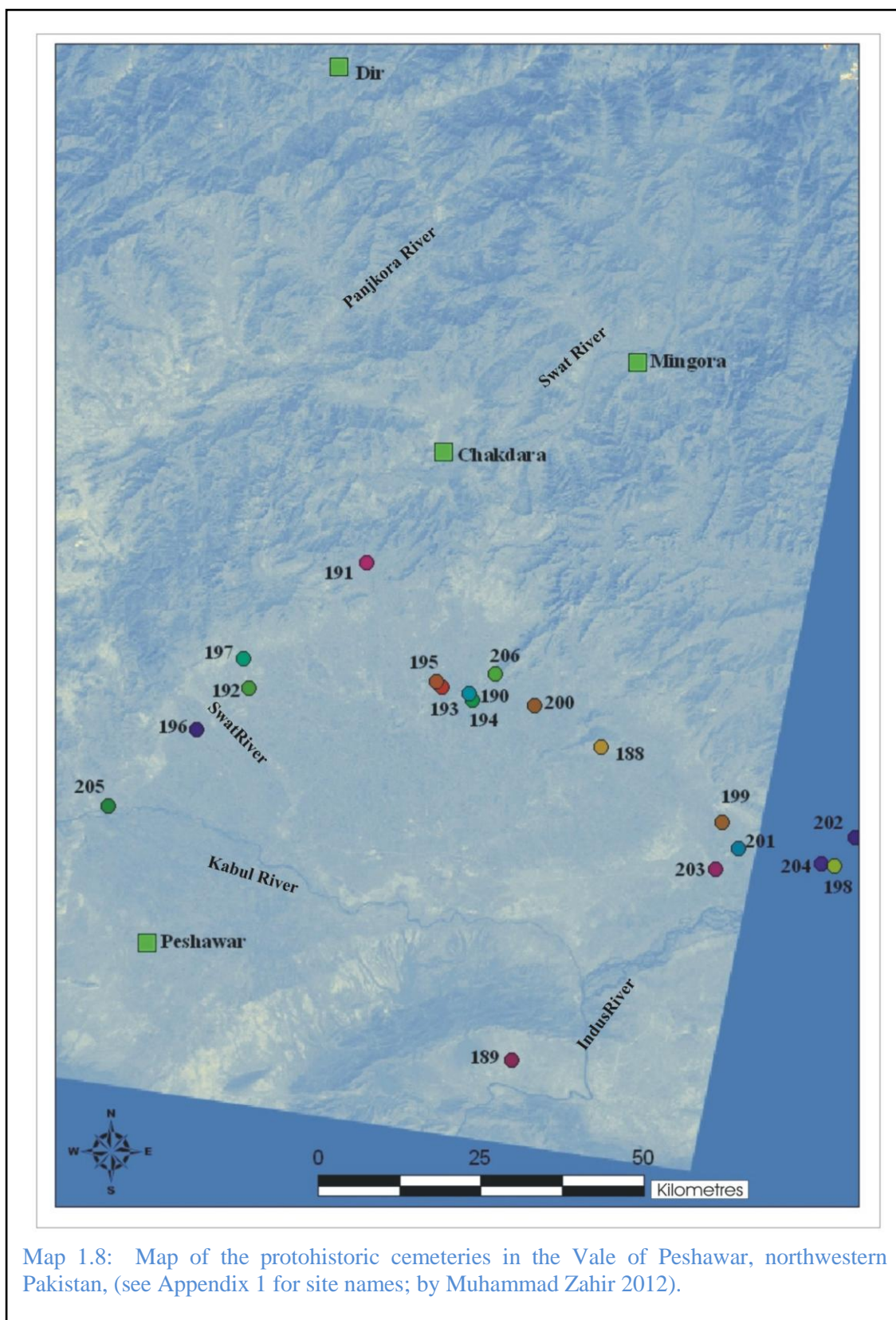




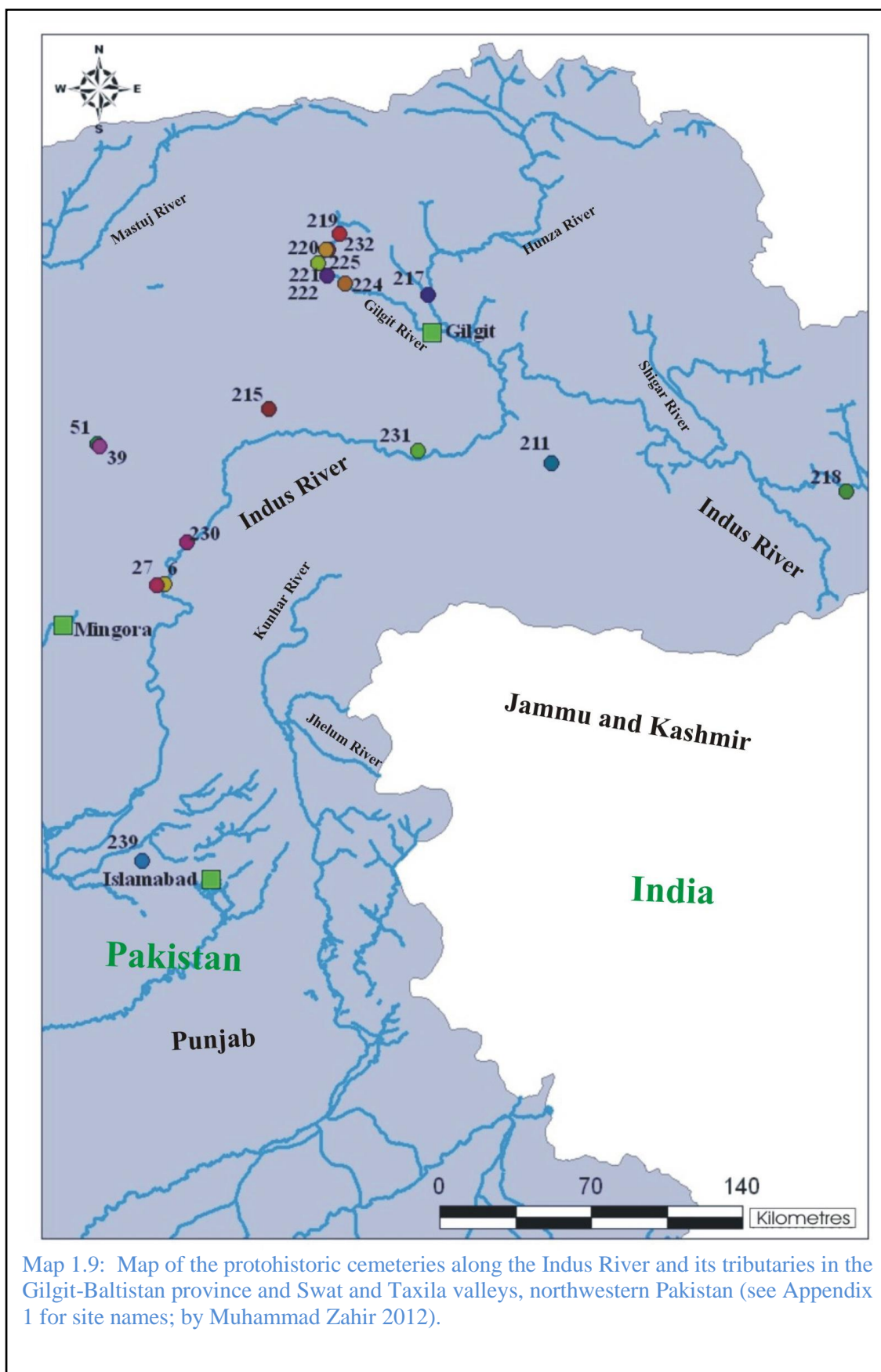
Map 1.6: Map of the protohistoric cemeteries along the Chitral River in District Chitral, northwestern Pakistan. The highest mountain (Tirich Mir) in Chitral is 6550 meters above sea level, while Chitral Town is located at 1100 meters height. (see Appendix 1 for site names; by Muhammad Zahir 2012).



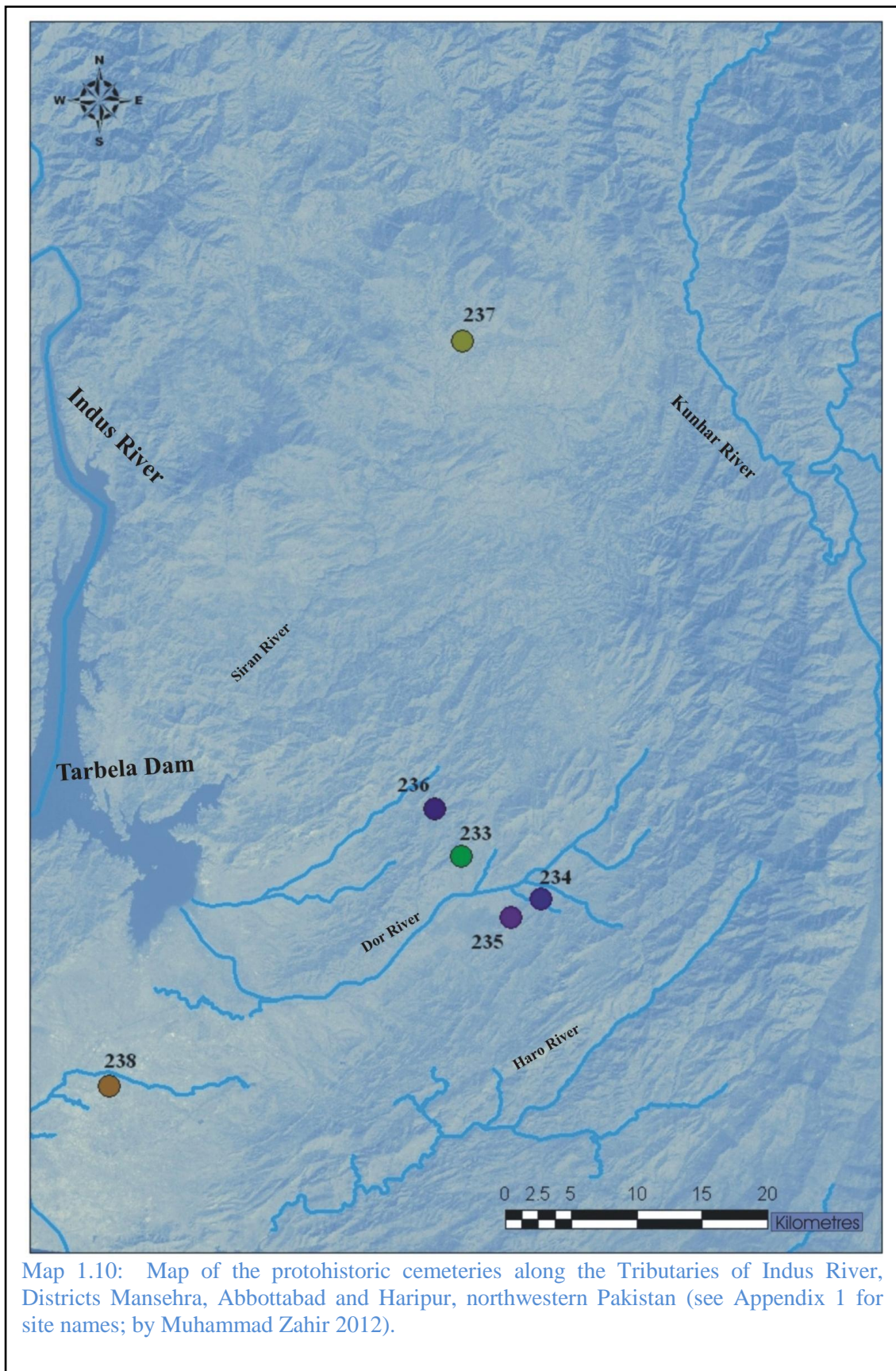




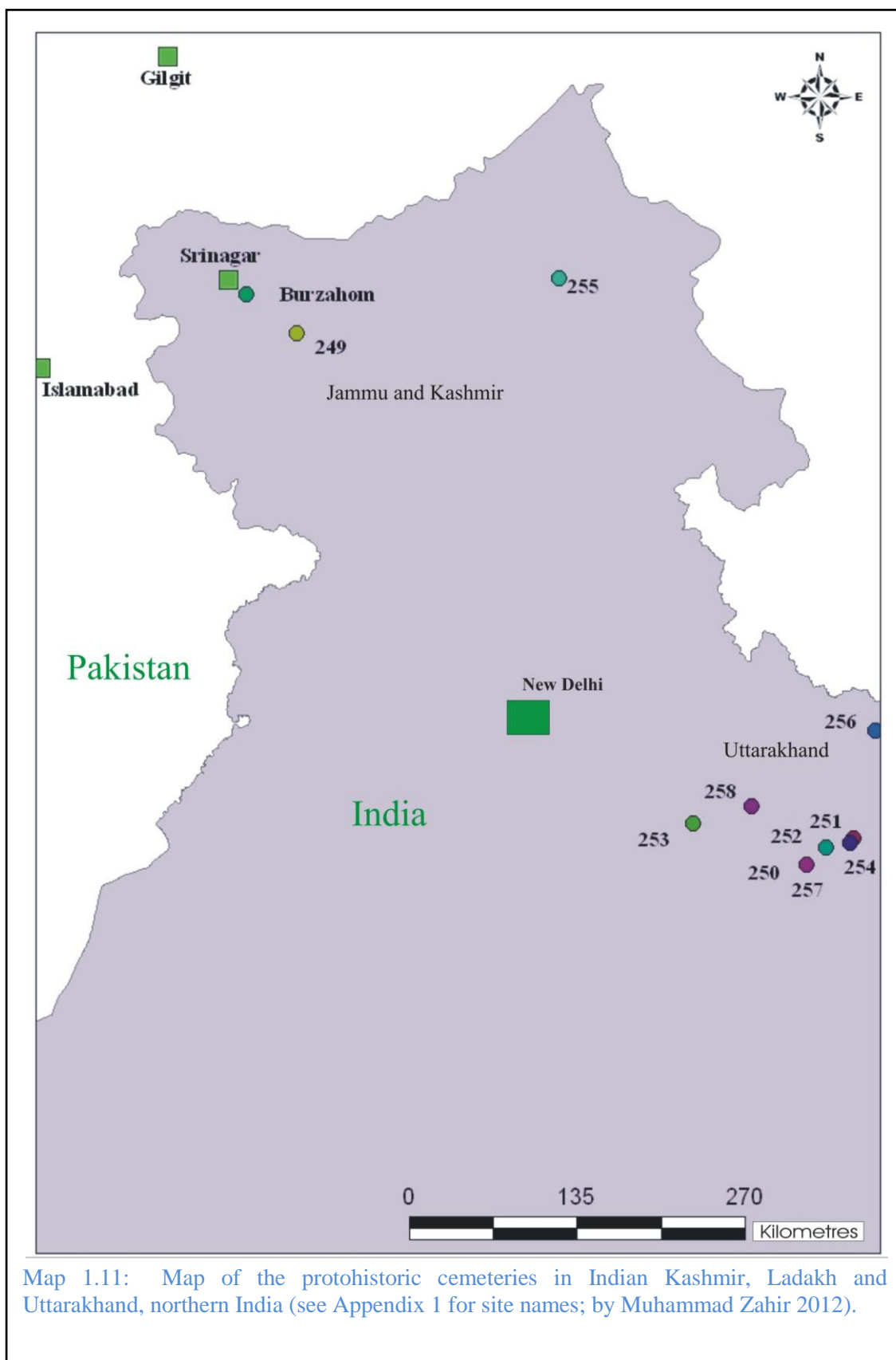




Map 1.9: Map of the protohistoric cemeteries along the Indus River and its tributaries in the Gilgit-Baltistan province and Swat and Taxila valleys, northwestern Pakistan (see Appendix 1 for site names; by Muhammad Zahir 2012).







The Swat and Dir valleys were at the centre of the formation of the IsMEO and UoP models. So far a total of 72 protohistoric cemeteries (with 52 and 20 sites in Swat and

Dir valleys respectively – see Maps 1.4 and 1.5), have been recorded within these two regions. Chitral (47 protohistoric cemeteries – see Map 1.6), and Mohmand and Bajaur Tribal Agencies (69 protohistoric cemeteries – see Map 1.7) have recently emerged as the focus of further cemetery research in northwestern Pakistan. Protohistoric cemeteries have also been reported from Vale of Peshawar (19 sites – see Map 1.8), Gilgit-Baltistan province (22 sites – see Map 1.9), Hazara, Taxila and Rawalpindi region (11 sites – see Map 1.10), Salt Range (5 sites), Dera Ismail Khan Region (3 sites), North-Waziristan (1 site) and Jammu and Kashmir, Ladakh, Himachal Pradesh and Uttarakhand region (11 sites – see Map 1.11). So far, a total of 260 cemeteries with some similarities in the burial practices, grave constructions and material culture have been discovered in northern and northwestern South Asia (for details see Appendix 1, Maps 1.1 to 1.3). Thus, it may be suggested that although Dir and Swat valleys were the centres of archaeological research, these protohistoric cemeteries were not confined to the geographical limits of either Swat and Dir valleys or the Vale of Peshawar or ancient Gandhara.

### **1.3 Explanation of Key Theoretical Concepts**

My deconstruction and reinterpretation of the IsMEO and UoP archaeological models requires utilization of some key archaeological, literary and sociological concepts. These concepts are explained below.

#### **1.3.1 Culture**

The Italian and Spanish were probably the first languages to employ the term ‘culture’ in 15<sup>th</sup> century AD (Díaz-Andreu 1996:51), which then meant the “cultivation of the human mind” (Trigger 1992:162; 2009:232). By 17<sup>th</sup> century AD, the meaning of

culture evolved into a “distinctive way of life” of people and into a concept of people with “their own culture” by the late 18<sup>th</sup> century (Trigger 1992:162; 2009:232). Taylor (2006 [1903]:1) defined culture as “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society”. Gostaf Kossinna was the first to use individual artefacts’ types to define archaeological cultures (Kossinna 1911 cf. Härke 1991:188). V. Gordon Childe was the first archaeologist to explicitly define culture in the archaeological literature (Díaz-Andreu 1996:48-9). Childe defined culture as the constant recurring of pots, implements, ornaments, burial rites and house forms in association with each other, and was of the view that these traits could be associated with specific groups of people (or races) (Childe 1929:v-vi).

The concepts of culture within the Pakistani archaeology, especially concerned with the interpretation of the protohistoric graves within northwestern Pakistan, were tied in with the ideas of Childe and his concepts of an archaeological culture (and the theoretical concepts of culture-history) were the basis of the IsMEO and UoP models. Perhaps, one of the earliest examples of utilizing a group of artefacts as an archaeological “culture” by Pakistani archaeologists came from the excavation of a small settlement site at Kot Diji in Sindh province of Pakistan by Dr. F. A. Khan. The site yielded a pre-Indus Valley Civilization pottery tradition with simple or “featureless rims” (Khan 1965:78; Possehl 2002:43). These pots with characteristic designs became the hallmark of the Kot Diji culture and its people, and their presence at archaeological sites are usually implied as attesting the presence of the Kot Dijians (e.g. Ali and Jan 2003:14-15; Agrawal 1982:130; Dani 1972:39; Halim 1972:27).

### 1.3.2 Tradition

The term tradition is seldom explained within the anthropological and archaeological literature and usually embodies a lot of assumptions (Shanklin 1981:71; e.g. Glock 1985; Renfrew 1980). It is usually seen within the dichotomous relationship of modernity or rationality versus tradition or western versus indigenous and as a passive force against innovation and creativity (Rhum 1996:326; Shanklin 1981:72-73; Tarlow 2000: 718).

Tradition is concerned with the active transmission of everything that has been created through the actions, thinking and imagination of humans in the past to the present from one generation to the next generation (Shills 1981:12). Tradition is primarily involved with the creation of the future from the past through practices brought from the past into the present (Glassie 1995:395; Pauketat 2001:2; Trevor-Roper 2000 [1983]:15). Both the processes of transmission and learning of the traditions are social practices that are influenced by cultural ways of doing things (Mithen 1996:208; Steele and Shennan 1996:19). This transmission creates a link with the past that differentiates individuals and groups from others and it is this expression of distinctiveness of the tradition that creates the social identities of the groups, such as ethnicity (Shills 1981:13, 21; Strobel 2009:120-121).

Ideological beliefs are considered to be the most important component of the tradition (Chattopadhyay 1992:2593); however, traditions can be a part of the legitimization of the ideology in itself, e.g. the Islamic tradition of Hadith (the sayings, actions or non-actions of the Prophet Muhammad (Peace Be Upon Him)). Hadiths are not part of the Quranic revelation but are transmitted by Muslims through repetition, memory and

writing (Glassie 1995:406). Hadiths are dynamically interpreted to explain and codify new issues and complications within the Muslim faith that may arise with the passage of time that were nonexistent at the time of the Prophet Muhammad (PBUH). Similarly, the Brahmans in India draw their power from the traditions of the *Vedic* literature and some of the Brahmans have been actively involved in the interpretations of the *Vedic* traditions to suit their own aspirations and carve out their own futures from the use of tradition (Ingalls 1958:209-215).

Within archaeology, the study of tradition has taken at least four directions over the years. The concept of tradition has been used to understand continuities and changes within the different styles, types and similarities within the material culture, such as Willey (1945, 1954) study of the pottery traditions within the pottery assemblages in Peru and Yellen (1998) study of the barbed bone points within the Saharan and sub-Saharan Africa. Stacul (2009), without elaborating what he meant by tradition, undertook a similar study of the stone “harvesters” from northern South Asia. Renfrew (1980) used the concept of tradition, without elaborating the concept itself, to criticise the different practices within the main archaeological schools (the Classical and New Archaeology). Pinsky and Wylie (1989:viii) have used the study of the traditions within archaeology as a tool of “disciplinary self-consciousness” to know how archaeologists as part of the discipline interpret archaeological evidence and deal with different issues and interpretations within philosophical, historical and socio-political contexts. The new emerging ideas of tradition within archaeology have credited the survival of tradition as essential to the survival of the ethnic community or identity of the people in the past (e.g. Strobel 2009).

I invoke all these four understandings of the tradition within archaeology to deconstruct and reinterpret the protohistoric cemeteries in northwestern Pakistan. I suggest that there are sufficient chronological and regional similarities and continuities within the protohistoric cemeteries that these were part of a tradition or traditions that were probably sanctioned by undocumented protohistoric ideologies within northwestern Pakistan and that these were the archaeological emblems of those ideologies. I also argue that their survival was a result of the maintenance of the tradition or traditions by the follower of these ideologies and these were linked with their subsistence and social strategies. I also argue that the interpretation of the protohistoric cemeteries within the IsMEO and UoP archaeological models have remained unchanged since the first report and have acquired a status of institutionalized traditions that are actively maintained and transmitted to the younger generations of archaeologists through a variety of tools, including but not limited to curriculum control and republication of the seminal research works. Thus, I have mounted multiple challenges to the existing archaeological models of the protohistoric cemeteries through the deconstruction of the main theoretical frameworks, the personalities of the main researchers and their own backgrounds, the academic and wider politics, the use of data and the reinterpretation of the excavation datasets within the new theoretical understandings.

### **1.3.3 Deconstruction**

Jacques Derrida, the French philosopher, is credited with the introduction of the concept of deconstruction in philosophy. Derrida explained his concept of deconstruction in an interview at Oxford (Oxford Amnesty Lecture on 13 February 1992):

“Deconstruction is an ugly and difficult word ... deconstruction does not mean the dissolution of the subject... which means, when you

deconstruct anything, you simply do not destroy or dissolve or cancel the legitimacy of what you are deconstructing... [Deconstruction] means to analyse historically, in a genealogical way, the formation and the different layers which have built ... to the concept ... every concept has its own history” (Derrida 1992).

Deconstruction is a difficult process because deconstruction allows us to go beyond the façade of beautifully structured ideas under consideration and it soon turns into an ugly exercise as it exposes the inner inconsistencies within those ideas when the structures are removed. However, deconstruction is neither a tool of destruction nor it is equal to the destruction of the ideas and it does not promote the destruction of the ideas. Deconstruction does not need to lead to the reconstruction of ideas as that is a separate process that does not involve deconstruction (Derrida 1992). Deconstruction is a way of thinking and there could be no singular way or method in which the deconstruction can be conducted and it is this very idea that the deconstruction strives to oppose (Derrida 1991:273). In fact, the purpose of deconstruction is to open up the secured concepts through challenging and investigating their acceptance without intellectual rigour (Caputo 1997:32).

For the deconstruction of the existing IsMEO and UoP archaeological models, I have investigated and challenged their unhindered acceptance within Pakistani archaeology in general and these models in particular by investigating the concepts employed within these models; the dataset utilized within the formation of these models; the roles and personalities of the researchers themselves; the role of the institutions, sub-regional, national and international politics in the formation of these models. The purpose of this deconstruction is to open up these models and their datasets to allow for the reinterpretation of the protohistoric cemeteries in northwestern Pakistan.

Thus, I suggest that both the existing models are based upon early 20<sup>th</sup> century theoretical paradigms that are not in line with the current theoretical understandings. I also propose that the datasets from the protohistoric cemeteries were not accurately interpreted within both the existing models, and were never rigorously applied within the existing models, particularly within the UoP model, and there is evidence of tweaking and setting aside of the actual data to conform to the preconceived ideas of the researchers. I also argue that the main researchers and their ideas have a history and that history can be traced to show their roles in the formation of the existing archaeological models, which are heavily based upon their own theoretical and political orientations. I suggest that both the existing models were not shaped in isolation and that both were heavily politicised endeavours that involved the formation of the regional, national and ethnic identities in the present and past. In fact, I contend that the UoP model was specifically moulded to cater for the creation of new identities for the newly established nation of Pakistan. I also suggest that both these models have been actively promoted by their respective organizations and countries to promote and preserve their own institutional and national characteristics of their respective national archaeologies.

#### **1.3.4 Identity and Agency**

The term identity, from the Latin root word *idem* (Rowlands 2007:61), has been mainly associated with ethnic, gender and nationalistic studies and infrequently with the studies of ideology, age and class/status in archaeology, although its definitions are still ambiguous and heterogeneous (Díaz-Andreu and Lucy 2005:1; Meskell and Preucel 2004:122).



Identity is a socially fluid knowledge of individuality of members of a social group and/or individuals identification with broader groups which works on the creation and recognition of social differences from other groups and the perception of the sense of belonging to the group (Díaz-Andreu and Lucy 2005:1-2; Wells 2002:22). Identities are created through contacts between people and these are acquired and maintained through human choice and agency (Díaz-Andreu and Lucy 2005:2).

Agency is the relationship between an individual human being and everyone and everything else in the surroundings (Gardner 2007 [2003]:1). Thus, through agency humans and human actions are introduced into the study of the past and as humans differ from each other, their actions in the past as individuals or as a member of a social group might have not been the same, which can be engaged within the field of archaeology at their individuality and contradictions (Joyce 2000: 71; Wobst 2000:41). Thus, the concept of agency within archaeology is about peopling the past and accepting humans as individuals or as members of social groups to have the capacity to act in their own spheres with their own dynamic thinking and perceived results.

My discussions of ‘identity’ in relation to the people, who created the protohistoric graves excavated within northwestern Pakistan, are mainly concerned with issues of gender and age. Gender and sex does not mean the same, as sex is the biological identification of the human groups into males and females, while gender is the culturally specific identification of these biological groups, by the individual themselves or by others, with different roles within that specific culture (Díaz-Andreu 2005:14; Sørensen 2000:7; Voss 2006:107). The concept of age is a basic but culturally variable

aspect of the past and present societies and that age categories (such as children, adults or old persons) are not natural and universal but are rather social constructions, partially based upon biological progress and decline, and primarily representing the views and expectations of a particular society (Lucy 2005:43). The archaeology of children is not just about children, but it is about their relationships with their peers, adults and other social groups within that society (Baxter 2005:16).

Within both the existing IsMEO and UoP models and even within the archaeology of Pakistan more generally, not a single study on gender and age has been carried out, meaning that the past is generally conceived as devoid of any living beings. This understanding and presentation of genderless, human-less and the social-less past by Pakistani archaeologists is pretty much consistent with their other colleagues from South Asia (Ray 2004:467). Both models mainly considered protohistoric burial practices and their associated material cultures as ‘wholes’ in the form of a homogenous culture of a particular group of people or ethnic group, race or tribes. These types of interpretations are the product of culture-historical frameworks and are no longer relevant within current archaeological understandings (Jones 2007:45-51; Lucy 2005:86; Sørensen 2000:4).

The identification of the people within both the models became, at least in part, a legitimization exercise of the present using the past. For UoP team it was linked to defining the identity of the newly born state of Pakistan, and for the IsMEO team it was introduced in relation to the revival of the prestige of Italy after their World War II defeat. Both the models were concerned with the ethnic identification of people within the protohistoric cemeteries with groups from the mythical past (Aryans), historical

accounts (e.g. Assakenoi), linguistic groups (e.g. Dards) and current people (e.g. Pathans) living within northwestern Pakistan and thus ethnic identification of the people was understood as a fact that had also occurred in the past.

I suggest that evidence from the material culture from the graves, historical literature and the geographical extent of these protohistoric cemeteries (that has been used for the formulation of these models) does not support any of the ethnic identification within both the models. Instead, I argue that the location of the cemeteries, graves and the manipulation of the human remains and material culture within their respective landscapes and their geographical distribution and chronological extent are related to the ideologies and ritualistic identities of the living and deceased within the graves. I also suggest that the presence of the protohistoric graves within certain landscape settings (i.e. in relation to the rivers, mountains and valleys) are related with living and buried individuals' concepts of the cosmos and are indicative of the presence of undocumented ideologies within the archaeology of the region, the traces of which have been recorded by the 19<sup>th</sup> and 20<sup>th</sup> century western ethnographers within the non-Muslim and Muslim populations living in northwestern Pakistan and bordering regions. I also argue that the protohistoric cemeteries are related to the subsistence strategies of the transhumant groups within the regions, where the women and men enjoyed similar statuses within their burials.

### 1.3.5 Analogy

The concept of analogy, as a form of inference (Hodder 1982b:16) and means of interpretation (Binford 1967:1), has been employed in the interpretation of archaeological phenomena through ethnographic knowledge since the 16<sup>th</sup> century AD (e.g. the comparison of ‘primitives’ with the prehistoric cultures) (Wylie 1985:65-67). Analogy is the transportation of information from one object to another on the basis of some relation of comparability between them (Wylie 1980 cf. Hodder 1982b:16; Uemov 1970:266-7). This means that through analogies the ethnographic knowledge of the people in the present is used to understand the past societies within the similar situation (e.g. the explanation of the burial practices in the past from the knowledge of the burial practices in the present).

The main purpose of the analogy with ethnographic parallels is to broaden the perspective of the interpreter of the archaeological phenomenon and that failure to cite ethnographic parallels results in the archaeological datasets being interpreted as unitary and homologous (Ucko 1969:262). Perhaps, it is the absence of ethnographic parallels within the IsMEO (except Stacul’s (1971)) and UoP models that has resulted in the interpretations of the protohistoric cemeteries as part of unitary and homogenous cultural entities, with no scope for difference, individuality and change.

There are two types of analogies: formal and relational analogies (Hodder 1982b:16). Within archaeology, formal analogy is undertaken when the present and past situations are deemed similar in different aspects with a premise that the number of similarities within the present and the past would lead to the archaeologist to the expected unknown situations in the past without considering the context of the similarities (Hodder

1982b:16-18). Relational analogy, in contrast, is focused on demonstrating that the similarities and differences within the present and the past situations are linked with the unknown situations in the past that are being interpreted (Hodder 1982b:19). Multiple analogies from several sources within the relevant context allows for contextual conclusions from the analogies (Shelley 1999:603, 2003:86), meaning that multiple analogies for the same archaeological phenomenon within the same context may result in better understandings of the past.

The first use of the term “analogy” within the context of the protohistoric cemeteries was employed by Stacul (1971:15). While interpreting the cremation graves and urns (particularly the face and box urns) from northwestern Pakistan, he noticed that these were similar to those from the Middle Danubian Basin in Central Europe (Stacul 1971:15). From this analogy, he claimed that there were migrations in the past coming in “repeated movements of expansion that radiated from Central Europe” and these might have reached the northwestern regions of Pakistan (Stacul 1971:19).

Young (2003) through her study of the modern transhumant groups and environmental data from protohistoric archaeological sites in northwestern Pakistan suggested to the existence of multiple transhumance subsistence strategies within the region. Coningham and Sutherland (1998), through analogy with British Iron Age storage pits interpreted the “dwelling pits” in Swat valley and Kashmir as grain stores and linked them with transhumant groups.

To explain and interpret the protohistoric cemeteries in northwestern Pakistan, I use three different relational analogies from northwestern Pakistan: the Muslim burial

traditions (10<sup>th</sup> to 21<sup>st</sup> century AD); Buddhist (1<sup>st</sup>- 5<sup>th</sup> century AD); and the non-Muslim Kafiristani and Kalasha (19<sup>th</sup> – 21<sup>st</sup> century AD) burial practices. The detailed study of these three burial practices is not part of my PhD research; however, I briefly outline some of the relevant issues that are relevant to the context and help in the explanation and interpretation of the protohistoric cemeteries in northwestern Pakistan (see chapter 7 sections 7.5 to 7.7).

#### **1.4 Thesis Outline**

In this opening chapter I have introduced my main research question: the deconstruction and the reinterpretation of the protohistoric cemeteries known as the Gandharan Grave Culture in northwestern Pakistan. I have given an outline of the ways in which these graves have been previously explained and understood, through two different archaeological models, the IsMEO and UoP models. This was followed by a discussion of the geography of the Vale of Peshawar (ancient Gandhara), Dir and Swat valleys and the relevance of this to the formulation of both archaeological models. Key concepts of culture, tradition, deconstruction, identity, agency and analogy, which are central to my deconstruction and reinterpretation of the protohistoric graves, have been briefly defined.

Chapter 2 sets out the context of my PhD research by explaining the IsMEO and UoP archaeological models and summarising the exploration and excavations of the protohistoric cemeteries within Swat and Dir valleys. In this chapter, I bring together the different interpretations of the protohistoric cemeteries and their identification with different groups of people within both the models. Key elements of these models are their chronological frameworks, the main interpretations, and identity ascribed to the

people who created these protohistoric cemeteries and were ultimately buried there. A critical element of my work is the emphasis I place on understanding that both the models were the product of the political and academic conditions of the time and their main researchers, which have continued unchallenged since 1960s. These, through repetitive reproduction and curriculum control have become archaeological traditions that are institutionally adhered to and promoted within the archaeology of Pakistan.

Chapters 3 and 4 are primarily concerned with the deconstructions of the IsMEO and UoP archaeological models of the protohistoric cemeteries. The thrust of this deconstruction is focused on the application of theoretical understandings by the key researchers and their own academic personalities. I suggest that within both the existing models understandings of the protohistoric cemeteries are essentially the same and are built around culture-historical paradigms. Furthermore, I argue that the understandings of the protohistoric cemeteries are linked more closely to the academic histories and associations of the key researchers, such as Tucci and Dani, than with the actual datasets. I also suggest that both the models are political in nature and are constructed within the then (1950s and 1960s) political landscapes of Italy and Pakistan.

Through the deconstruction of the chronological frameworks within both the models, I suggest that these are not applicable to the protohistoric cemeteries in their current form and that these are primarily based upon the culture evolution typologies of the pottery assemblages established at single sites. I also contend that for the UoP model there is no relationship between the published and unpublished datasets or even between the different published datasets in their current form. I also argue that although both the models were formed in competition with each other, and that both enjoyed support from

their respective organizations, the UoP model borrowed or was based upon the initial understandings of IsMEO model, particularly the work of Chiara Silvi Antonini (1963).

Chapter 5 sets out my approaches to the analysis and interpretation of the IsMEO and UoP models in order to develop new interpretations of the protohistoric cemeteries in northwestern Pakistan. The datasets for my analyses come from information on graves, grave goods and human remains. For these analyses, I selected nine cemeteries with information on graves and grave goods and eight cemeteries with information on burial practices within the thirty-five cemeteries excavated by the IsMEO and UoP teams in northwestern Pakistan. However, for chronological analysis, I could only utilize seven cremation burials from Loebanr-I and Katelai-I cemeteries excavated by the IsMEO team due to the presence of individual grave-based radiocarbon measurements. For anthropological analysis of the age and sex, I mostly utilized the UoP model, owing to the presence of relatively detailed information on the anthropological studies of the Timargarha 1 and 2 cemeteries. I used frequency, cross-tabulation and Pearson Coefficient for my analyses of the graves, grave goods and burial practices and their relationships with each other and with age and sex based groups. For the management and analyses of the information for these datasets, I used different software packages, including File Maker Pro and Statistical Package for Social Science (SPSS). One of the main themes of my analysis is the recalibration of the radiocarbon measurements from protohistoric settlements and cemeteries in northwestern Pakistan, for which I used the online software OxCal version 4.1.

In chapter 6, I present my analyses of the three sets of data. I analyse the different construction methods of the graves, their shapes and orientations for their frequency and



cross-tabulation analysis. Pearson's coefficient analysis of the measurements of the graves' upper and lower grave-chambers allowed me to challenge Fritsch's (1997) assertions of the grave measurements being manipulated by a known form and to develop alternative understandings of the construction strategies. The frequency and cross-tabulation analysis of grave goods within different cemeteries suggest that there were some patterns within the positioning of goods within graves. The analysis of the burial practices allowed me to demonstrate the presence of many variations and choices undertaken by the living for the burial of their deceased. Through the frequency and cross-tabulation analysis of the different burial practices, I can suggest that there were no particular strategies employed by the people in dealing with the different age or sex groups.

Chapter 7 present my discussion of both archaeological models in light of my analyses in chapter 6. Through my recalibration of the radiocarbon measurements, I propose a longer chronological range for the existence of protohistoric cemeteries in northwestern Pakistan than was formulated within both the IsMEO and UoP models. I also show that the existing chronological frameworks within both the models are not relevant in their current forms. I also discuss the different new and exciting aspects of the graves, grave goods and burial practices within the northwestern Pakistan that had come to light through my analyses of these cemeteries. Through the use of analogies with the Muslim, Buddhist and non-Muslim burial practices within northwestern Pakistan, I explain these cemeteries as part of burial traditions and not as a culture. These burials were part of the manipulation of the social and ideological identities of the deceased and the living alike. I also suggest that these cemeteries, graves and bodies, were placed within a heavily ritualized landscape and their placement reflects ideas of the cosmos

and the worldviews of the people who were buried in these cemeteries. Through the association of different material objects and animal remains, I argue for the presence of yarn and cloth manufacturing subsistence strategy that was probably linked to transhumant groups. I also suggest that both the existing models were reflections of the working relations of archaeologists with the elite and ruling classes of their respective research areas.

Chapter 8 presents the conclusions of my PhD research and my future plans. I argue that the protohistoric cemeteries are part of a long lasting burial tradition(s) that existed from end of 3<sup>rd</sup> millennium BC to 1<sup>st</sup> century AD in Swat valley and to the end of 1<sup>st</sup> millennium AD in Chitral, northwestern Pakistan. I suggest that this long time frame, coupled with the existence of large number of protohistoric cemeteries in northern and northwestern South Asia, attest to the presence of multiple and competing ideologies that promoted the ritualistic utilization of the landscape for the burial of the deceased. I argue that these protohistoric traditions could not be linked to one particular ethnicity or culture or region.

### **1.5 Summary**

The aim of my PhD research is to deconstruct and reinterpret the existing archaeological models, the IsMEO and UoP models, of the protohistoric cemeteries in northwestern Pakistan. The IsMEO and UoP models are based upon the research conducted by the Italian Archaeological Mission to Pakistan and Department of Archaeology, University of Peshawar in the Swat and Dir valleys respectively. Both of these were modelled primarily within the political and academic environment of the 1960s. The protohistoric cemeteries were mainly interpreted in terms of the culture-historical frameworks, and

were mainly associated with literary, or rather imaginary, protohistoric ethnic groups in the region. The specific association of the protohistoric cemeteries with a particular geographical region, such as Gandhara, was central to the UoP model and was later on incorporated within the IsMEO model. However, both the models were based upon excavations in the Swat and Dir valleys, which were probably never part of the geographical limits of the historical region of Gandhara. Furthermore, the discovery of similar protohistoric cemeteries in much wider regions of northern and northwestern South Asia renders the ideas of the geographical association of the protohistoric cemeteries with smaller geographical entities as almost irrelevant.

## **Chapter 2: Research Context of the IsMEO and UoP Archaeological Models and Traditions**

The purpose of this chapter is to understand the existing archaeological models of the protohistoric cemeteries in northwestern Pakistan produced by the Istituto Italiano per il Medio ed Estremo Oriente (IsMEO) and the Department of Archaeology, University of Peshawar (UoP). This is undertaken by analysing the previous research and literature concerning the archaeological investigations of protohistoric cemeteries in Swat and Dir valleys and their interpretations within the IsMEO and UoP models. Furthermore, relatively recent archaeological investigation of protohistoric cemeteries in northern and northwestern Pakistan, which were not part of the formation process of the IsMEO and UoP models, are also included to show the continuity of these two archaeological models within the archaeology of Pakistan. Both the models were primarily concerned with the description of the grave structures, burial practices and the identification of discrete ethnic groups of people in the past linked to the graves. Furthermore, the overall chronology of the protohistoric cemeteries and the material culture, particularly the ceramic traditions, were central concerns within these two models.

The aim of this chapter is to show that both the IsMEO and UoP archaeological models of the protohistoric cemeteries in Swat and Dir valleys have effectively become archaeological traditions, through the transmission and repetitions of ideas from one generation of archaeologists to another. The continuity of these two almost competing traditions has been ensured through institutionalized patronage within concerned Italian and Pakistani institutions in the form of general acceptance accorded to their respective archaeological models.

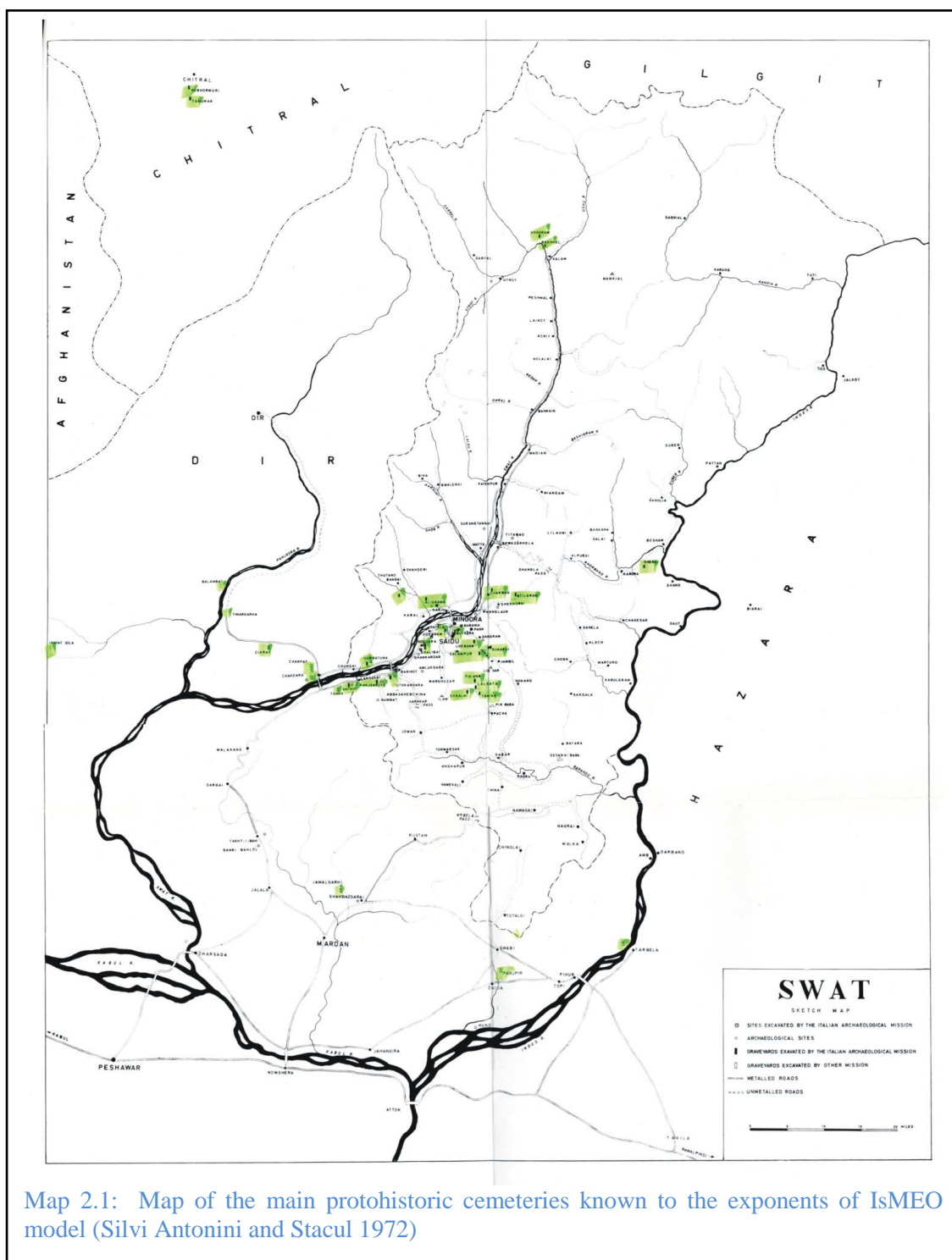
## **2.1 IsMEO Model**

The IsMEO model is based upon the work of the Italian Archaeological Mission to Pakistan, which started their archaeological explorations in the then Swat State in 1956. This model was primarily shaped by the excavations of Katelai-I, Loebanr-I, Butkara-II and Kherai protohistoric cemeteries during the 1960s (see Table 2.1). The construction of the protohistoric graves was understood to consist of two chambers dug into the soil, where the lower chamber contained human skeletal remains and grave goods and was separated from the larger upper chamber by stone slabs (Silvi Antonini and Stacul 1972:11). Some of the lower grave-chambers had dry-stone masonry walls (Silvi Antonini and Stacul 1972:11). However, at the site of Kherai, graves were constructed from four vertically placed schist slabs in the lower cavity, forming a cist-grave, which had not been reported from other cemeteries in Swat (Stacul 1975b:324).

Two burial practices were noted within the excavation of Swat protohistoric cemeteries; flexed inhumations and cremation burials (Silvi Antonini and Stacul 1972:11). A combination of inhumation and cremation burials was also recorded within individual graves (Silvi Antonini and Stacul 1972:11). In case of flexed inhumation, it was observed that the bodies were primarily placed in a crouching position, indiscriminately resting on either the left or the right side, with the head towards the mountain and the feet towards the valley floor (Silvi Antonini and Stacul 1972:12).

S. No	Site Name	Region	Excavator	Excavation Dates	Excavated Graves
1	Butkara-II	Swat	Tadei	1961	48
2	Butkara-IIb	Swat	Tadei	1963	3
3	Loebanr-I	Swat	Silvi Antonini and Stacul	1962, 1964	183
4	Katelai-I	Swat	Silvi Antonini, Castaldi and Stacul	1962-3, 1965	243
5	Gogdara	Swat	Stacul	1963	1
6	Aligrama	Swat	Tucci	1963	4
7	Gogdara III settlement	Swat	Silvi Antonini/Stacul	1963, 1966	1
8	Nazahei	Swat	Stacul	1964	1
9	Kherai	Swat	Stacul	1966	12
10	Tarike	Swat	Stacul	1967	5
11	Lalbatai	Swat	Stacul	1967	4
12	Sogalai	Swat	Stacul	1967	1
13	Pulanr	Swat	Stacul	1967	1
14	Noghormuri	Chitral	Stacul	1968	1
15	Ushoram	Swat	Stacul	1968	1
16	Rashnel	Swat	Stacul	1968	1
17	Aligrama Settlement	Swat	Stacul and Tusa	1975	5
18	Saidu Sharif 1	Swat	Noci and Macchiarelli	1979-80, 1982	18
19	Arkot-kili	Swat	Tucci	1956?/ IsMEO archives	1
20	Barikot- I (Bir-Kot-Ghwandai)	Swat	Tucci	1956?/IsMEO archives	2
21	Kuz Batkot	Swat	Stacul	Unknown/IsMEO archives	1
22	Gogdara – IV	Swat	Vidale and Olivieri	2011	2
23	Udegram-G	Swat	Vidale and Olivieri	2012	2
<b>Total Graves</b>					<b>541</b>

Table 2.1: IsMEO excavated protohistoric cemeteries and settlement sites with graves, northwestern Pakistan.



Cremation burials usually consisted of cremated remains put inside a pottery vessel or an urn and then buried inside the graves, primarily within the lower grave-chamber (Silvi Antonini and Stacul 1972:12). Bones, ashes and charcoal were sometimes also found in the upper grave chambers (Silvi Antonini and Stacul 1972: 12). The

excavators argued that the presence of multiple graves and anatomically dislocated human remains indicated the re-utilization of the graves (Silvi Antonini and Stacul 1972: 12; Stacul 1975b: 324). Some of the cremation urns were provided with complex decorative patterns (e.g. plastic, incised, ridges and rectangular/spherical perforations). Some of these decorative patterns, particularly the plastic and rectangular/spherical perforations, were reserved for the urns and were not found on other pots. An urn pot (Silvi Antonini and Stacul 1972:55 vessel type VTf 68 variety D72-74), with an applied (stylized) nose, perforations for mouth and eyes and applied eye brows, called a face or anthropomorphic urn, has become an iconic image of the protohistoric cemeteries in north-western Pakistan (e.g. see Coningham 2005: 539; Coningham and Manual 2007: 740; Dani 1968: front page; Parpola 2005: 106, 2009: 156). Parpola (2005: 78) claimed, without citing any data, that one third of the protohistoric graves within north-western Pakistan contained these face-urns. Box-urns with perforations, sometime provided with a lid and raised edges, were also used for depositing cremated remains within graves (e.g. graves 130, 151 and 230 at Katelai-I cemetery).

The most common grave goods were grey and red ware pottery vessels, ranging from a single pot to several dozen in a given grave (Silvi Antonini 1963:49). Animal and human figurines were also found (Silvi Antonini 1963:56). Grave goods were considered to be the personal possessions of the buried individuals and thus a direct reflection of their social status when alive (Faccenna 1964:59; Olivieri 2003:18).

Within the IsMEO model, the graves were identified as the protohistoric or pre-Buddhist graveyards of Swat. The definition of the graves within the UoP model (discussed below) as the Gandhara Grave Culture was considered unsuited to the



protohistoric graves in the region (Stacul 1975:329) or rather ‘ill-defined’ (Tusa 1979:676, 1981:99); however, owing to its popularity, it was later on adopted by the IsMEO team (e.g. Stacul 2000).

Based upon the excavation of the Ghalegai rock shelter, and other cemetery and settlement sites, the resulting pottery typologies, and 35 radiocarbon dates (a combination of both un-calibrated and MASCA-calibrated dates), Stacul discerned seven protohistoric periods in Swat during the mid-3<sup>rd</sup> to the mid-1<sup>st</sup> millennium BC (Stacul 1969, 1987; Vinogradova 2001:11). Period I of the Ghalegai sequence was Neolithic (2970 and 2920 BC), followed by a period of Harappan ceramics (2180 BC), then by the ‘barbaric’ red-washed wares and coarse handmade Neolithic ceramics (1950-1920 BC) respectively (Morigi and Bianchetti 2005:223; Stacul 1969:82-83, 1970b:92, 1974:239-240, 1985a:364, 1987:33, 39, 45).

The change from Period III to IV was gradual (1800/1700 BC to 1400 BC) and during period IV Swat valley was in contact with multiple regions through trade, including Central Asia, northern Iran and northern China, as well as with the Indus Valley (Stacul 1980b:74, 1985a:358, 1989:249-250). Flexed inhumations within cist-graves from the site of Kherai were dated to period IV (Stacul 1979:662, 1987:71). Tusa (1979:681) considered period IV as the formative stage of the grave culture, however, Kherai was not really incorporated within chronological narrative of their protohistoric cemeteries. Some of the pottery from period IV at settlement sites, such as Ghalegai was also linked to pottery from Harappan cemeteries (Stacul 1978:150, 1980a:62, 1993:89, 1997a:375).

Period V of the Ghalegai sequence (considered as the earliest or period I of the protohistoric cemeteries within IsMEO model), was characterised by black-grey burnished ware which gradually evolved from earlier ceramic traditions and bore similarities with Iranian cultures (Stacul 1969:84). Cremation burials were more frequent than fractional or complete inhumation during Period V, while in Period VI complete inhumation and fractional burials were more common than cremation burials (Stacul 1975b:330). The dominant artefact recovered in Period VI was plain grey-ware (Stacul 1975b:330). Period VII witnessed increased complete inhumation burials along with isolated instances of cremation and fractional burials (Stacul 1975b:330). Period VII is known from incised geometrically decorated grey and red-ware, with complete inhumation as the main burial practice. In this period, burials started to include greater frequency of weapons and iron implements (Stacul 1974:243). These changes in pottery types and burials within period VII were argued to be representative of a time of great migration and population changes (Stacul 1974:242). This period is considered to have witnessed the coming of a new group of people and some incorporation and continuation of the local population (Stacul 1974:243). Furthermore, changes within the pottery assemblage were thought to be related to functional changes in line with new eating habits derived from northern Iran, which were brought by Central Asian nomads (Stacul 1997b:347). Thus, each of the chronological periods was considered to be a result of migration and “ethnic changes” from outside (Silvi Antonini 1969:113; Stacul 1970b:98-102, 1971:15; 1974:242-3; 1977b:252; Tusa 1979:690).

Salvatori (1975) was the first to attempt to redefine Stacul’s Ghalegai sequence to make it relevant to the protohistoric graves. Salvatori’s framework was primarily based upon statistical analyses of the ceramic types and decorative patterns, and burial practices and

he proposed the subdivision of periods I and II of the protohistoric graves (corresponding to period V and VI of the Ghalegai sequence) into two separate periods each, (i.e. periods IA, IB, IIA and IIB). Salvatori also proposed an intermediate period between period II and III of the protohistoric graves, corresponding to period VII of the Ghalegai sequence (Salvatori 1975:340)

Fritsch (1997:59) carried out statistical analysis of the ceramic types, their decorative styles and the burial practices at Butkara-II cemetery, and then proposed the division of period V and VI of the Ghalegai sequence into three periods (i.e. periods IA, IB and II) for Butkara-II itself. She also merged Salvatori's (1975:340) periods I and II into IA and considered the intermediate period and period III as periods IB and II respectively at Butkara-II cemetery (Fritsch 1997:57).

With a relatively broader scope, Vinogradova (2001) undertook a study similar to those of Salvatori (1975) and Fritsch (1997) of the protohistoric cemeteries in Swat and analysed the material culture (including pottery assemblages, metal artefacts and terracotta figurines), graves and burial practices. She authenticated Salvatori's (1975:340) division of the grave periods I and II (periods V and VI of the Ghalegai sequence) into parts A and B (Vinogradova 2001:13). However, she did not consider that there was an intermediate period between period II and III of the protohistoric graves, as proposed by Salvatori (Vinogradova 2001:13). Vinogradova (2001:34) considered that the protohistoric cemetery of Kherai was the earliest of the protohistoric cemeteries of Swat and placed it within period IV of the Ghalegai sequence.

The understandings of the protohistoric cemeteries within the IsMEO model were mainly formulated through an emphasis on their similarities as part of a close, singular group, and by ignoring the differences within cemeteries. Faccenna (1964:66) argued that there was clear evidence to suggest that the protohistoric cemeteries of Swat belonged to the “same cultural horizon” and that the people buried within the graves were “morphologically the same”. Stacul (1974:241-2) considered that during the mid-2<sup>nd</sup> millennium BC the protohistoric graves and settlements from most of the northwestern South Asia, including the regions of Swat, Dir, Vale of Peshawar and northern Baluchistan, were “under the sway of a relatively unitary culture”. Similarly, Salvatori (1975:334) suggested that the “absolute uniformity” of the material culture from the protohistoric cemeteries of Swat dictated that these cemeteries should be treated “in a unitary manner” without considering the differences within the chronological patterns (or material culture) in each of the protohistoric cemeteries. Tucci argued the position of ignoring the “evident differences” in the geographical and chronological settings of cemeteries and in the typological differences within their pottery assemblages in order to consider the protohistoric cemeteries as a “series of homologous cultures”, which were not affected even by the “many migrations” into Swat (Tucci 1977:36). While discarding the “local variations” and emphasizing the relative homogeneity of the protohistoric cemeteries, Stacul and Tusa proposed a “cultural province”, encompassing the regions of Swat, Dir, the Vale of Peshawar and the Bajaur and Mohmand tribal areas (Stacul and Tusa 1977:175-176).

Within the IsMEO model, the groupings of different ceramic choices in the Swat cemeteries were considered as a sign of different waves of migration of various tribal groups, related to “actual migration” of people from west (Iran or Central Asia) to east

(India) (Stacul 1969:87, 1970b:99, 1985a:365). Furthermore, variations within different, but successive, material 'cultures' of the Swat valley were seen as evidence of the overlaying of different cultures, as a consequence of successive invasions and penetration of the Aryans into the northern subcontinent (Stacul 1987:13, 24). The different practices for the disposal of human remains were believed to denote the presence of different ethnic groups within the community, which were there as a result of migrations. Thus, flexed inhumation burials of Kherai cemetery (period IV of the Ghalegai sequence) were thought to correspond to those of the southern Bactrian people, and with the migrations of the Indo-Aryans (Stacul 1987:24). Stacul, in his later studies (1992:120, 1997c:438), considered the people of the northern and southern valleys of the Himalaya, Karakorum and Hindukush ranges as mountain peoples, representing the Inner Asian Complex of Neolithic cultures in the northwest of the subcontinent, who were affected by the nomadic movements across the mountains. Stacul (1997c:438) moved away from his earlier position and later argued that the post-Neolithic cultures of Swat evolved from local as well as foreign traditions through integration. Young (2003) has also suggested the continuity and development of local traditions rather than any direct replacement or importations from outside.

Within the Swat valley, protohistoric cemeteries were discovered near the settlement sites such as Bir-kot-ghwandai, associated with Alexander the Great and his army during their campaign in Swat in c. 327 BC. Thus, the IsMEO team members tried to associate these cemeteries with people living in this area before Alexander's invasion. The inhabitants of these settlements were said to have offered fierce resistance to Alexander's army, who were recorded by Greek historians as Assakenoi, or Asvakayana in Sanskrit (Tucci 1963:28). Thus the major protohistoric cemeteries of Katelai-I,

Loebanr-I and Butkara-II were thought to belong to the people known as Assakenoi (Tucci 1963:27-28). Stacul (1970b:101) placed the Assakenoi people within period VI of the Ghalegai sequence. However, Tucci (1977:14) later modified his earlier view about the Assakenoi and proposed that the protohistoric graves might have belonged to different tribes who might have not been related to the Assakenoi.

Faccenna (1964:67) believed that the Swat cemeteries belonged to people of Iranian origin who came to this part of the world through migration and, once they were settled in the area, continued their own cultures. Silvi Antonini (1969:100) went on to find the origin and homeland of the people of the protohistoric cemeteries of Swat. She compared pottery typologies from Swat with Central Asian and Iranian examples, to show that the people of these regions were closely interlinked (Silvi Antonini 1969:114). While comparing the pottery, Silvi Antonini did not take into account the chronologies of these archaeological cultures in two different regions, which in turn undermines her analysis. The Central Asian and Iranian examples were of much older dates than those from the Swat (Kuz'mina 2007:312-313). In her later study on the subject, Silvi Antonini noted that the association of the Swat graves with graves in Central Asia and Iran was largely superficial and that there was an absence of correspondences in the data employed for her previous study (Silvi Antonini 1973:235). However, Silvi Antonini thought that graves in the Swat valley might have been related to an eastward movement by agriculturalists from Turkmenia (Silvi Antonini 1973:244; Thapar 1993:259).

Genna (1965:164, 166) analysed the skeletal remains from the Butkara-II graves and claimed that they belonged to a mixture of Mediterranean and Mongolian races. Stacul

associated the presence of “dominant cremation” in the first phase of the Swat and Dir cemeteries (period V of the Ghalegai sequence) with the settling of different tribal groups through “actual waves of migration” or “ethnic migrations” into these areas (Stacul 1970b:98-99, 1971:9, 1979:672). However, Stacul (1971:9) could not find similar practices within India, Iran, or Central Asia, and looked for parallels in the Neolithic to Bronze Age cultures from southern Anatolia to the Middle Danubian Basin as a result of direct influence of V. G. Childe’s (1929) landmark work in that region. In order to understand the cremation burials of northwestern Pakistan, Stacul (1971:9) tried to establish a relationship through a formal analogy between the cremation burials and face-urns in these two regions. Explanations for this relationship included the diffusion of culture through the medium of trade, and the dominance of new groups over indigenous groups. Based upon pottery resemblances, urn shapes and burial practices, the relationships were thought to have been a result of the continuous movements of people from Central Europe to India (Stacul 1971:9-19). Kuz’mina suggested that the sites within these two regions are not contemporary and that the similarities within the material culture are isolated and accidental (Kuz’mina 2007:312). Furthermore, she suggested that the “meaning of the historical contacts” within the two regions has not been established (Kuz’mina 2007:312).

Tucci (1977:11-52) used literary sources to establish the presence of Dards in Swat, Dir, Chitral, Gilgit-Baltistan province of Pakistan, and Ladakh in India, and associated the protohistoric cemeteries in these regions with Dardic language speaking ethnic groups, who might have migrated from Central Asia. Dards is a historic and linguistic name that is used to primarily represent the different ancient language speakers residing in northwestern Pakistan and adjoining regions (called the imaginary name of a non-

existent, non-historical political entity of *Dardistan* – the land or country of the Dards), inhabited by the Aryan tribes (Biddulph 1971 [1880]:155-6). Although the Dards were well known to the historians, the different population groups living in northwestern Pakistan were not aware of the name and it was thought that this name was applied by people residing outside the region (e.g. in Kashmir) (Biddulph 1971 [1880]:156-7).

Tucci (1977:36-37) suggested that Dards arrived in series of migrations, the first being datable to mid-third millennium BC. Stacul (1975b:327-328) explored an analogy of fractional burials among indigenous ethnic groups, *Kafirs* and Dardic tribes, presently living in northern Pakistan. He recorded that these people leave their dead in wooden coffins to decompose in the open, after which they wash the bones and offer a final burial (Biddulph 1971 [1880]:112; Stacul 1975b:327-328; Robertson 1985 [1896]:504). This lead Stacul to suggest that the graves without skeletal remains or with some skeletal remains were probably placed, awaiting successive or final burials (Stacul 1975b:328).

Kuz'mina (2007:307-320) suggested that the protohistoric cemeteries within northern and northwestern South Asia actually belonged to the Dards. Jettmar (1959:85) considered the *Kafirs* (i.e. Dards) as the descendents of the early *Vedic* Aryans. He thought that the social and religious life of the Iranian and Indian Aryans was similar to those of the present day Kalasha and Dards, and that both the societies were created through class differentiations and feastings (Jettmar 1959:85).

The discovery of cemeteries in the proximity of, and immediately underneath, Buddhist monuments in Swat led the IsMEO archaeologists to declare that these belonged to the



pre-Buddhist people of Swat. The location of the Buddhist sacred sites near the burial grounds of the ancient people in the area was interpreted as the occupation of the old religious centres by the new religion (Tucci 1963:27). For example, the Buddhist Stupa site of Butkara-II overlies the Butkara-II cemetery (Faccenna 1964:66). M. Taddei also noted the presence of protohistoric graves at the site of Butkara-IIb (different Butkara-II cemetery), datable to the 1<sup>st</sup> century AD (Tucci 1977:23-24). The graves at the Saidu Sharif Stupa were located under the Buddhist remains and contained extended inhumations without any grave goods (Noci et al. 1997). The radiocarbon dates from the Saidu Sharif Stupa cemetery (grave 11) suggest a date of mid-1<sup>st</sup> century AD (Noci et al. 1997:35).

Tucci (1977:10) noted a regular pattern between the location of Buddhist religious sites containing stupas and protohistoric cemeteries of the Swat valley, and the excavation of some stupas showed that they were actually built upon these cemeteries (Faccenna 1964:66). Tucci was of the view that the association of two religious funerary monuments signalled the victory of the new religion over the old religion which would have been followed in the remote parts of the Swat valley at that time (Tucci 1977:10).

Within the IsMEO model, the presence of the dislocated inhumations and cremation burials within these graves was of special interest to the archaeologists and anthropologists. In 1968, Castaldi explained these protohistoric graves and different burial practices in terms of the “semi-nomadic transhumant people” (cf. Stacul 1975b:323). Based upon his ethnographic studies of the prehistoric and protohistoric burials at Gallura in Sardinia, Castaldi (1968:591-2, 608) considered that the presence of secondary burials (i.e. exposed/fractional and cremation burials to him) manifested

the deliberate intentions of semi-nomadic people and that they undertook this in order to transport the remains of the deceased who died during their seasonal migration to their original home.

Castaldi explained the presence of disarticulated human remains within graves was the result of flesh removal for easy transportation at the end of the seasonal migrations. This allowed Castaldi to explain the homogenous culture of the settled (articulate inhumations) and the varied culture of the semi-nomadic (disarticulate inhumations) in terms of the burial practices within the same sites. However, he did not specifically use the term transhumant himself and Stacul (1969b:323) was the first to use the term transhumant while explaining the Castaldi understandings of the burial practices.

## **2.2 UoP model**

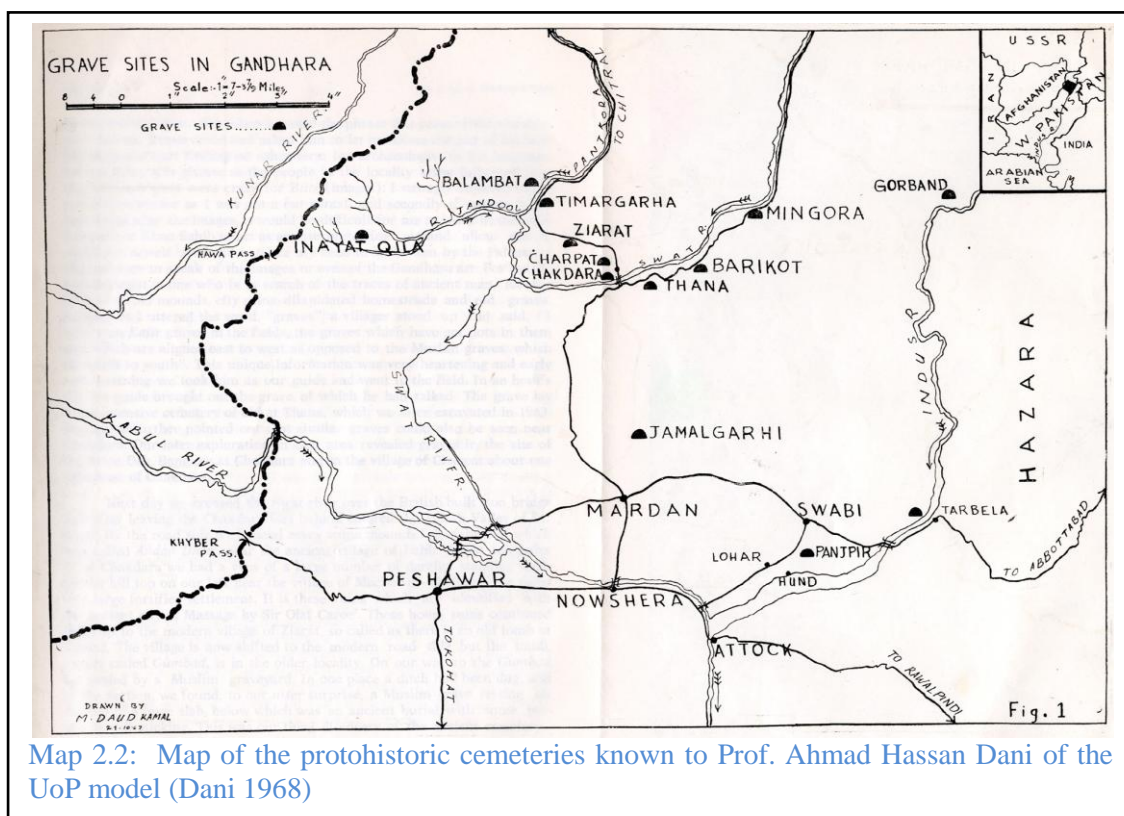
The UoP model of the protohistoric cemeteries is based upon the excavation of three protohistoric cemeteries being Timargarha 1, 2, 3 and the Balambat settlement site in Dir, and the protohistoric cemetery of Thana in Swat valley by the Department of Archaeology, University of Peshawar between 1963 and 1965. Professor Ahmad Hasan Dani, a prolific writer and brilliant scholar, was the main theorist for the UoP model; however, he was not the main field archaeologist within these excavations. Dani also reported the presence of protohistoric cemeteries in the Bajaur Tribal region, the Vale of Peshawar, Taxila, Dera Ismail Khan (D I Khan), and in the Gilgit-Baltistan and Punjab provinces of Pakistan (Dani and Durrani 1964:164; Dani 1966e, 1968:11-17, 1968a:99, 1978b:42-44, 1980:121-122, 1998:155).

Dani and Durrani coined the term “Gandhara Grave Complex” in relation to the different protohistoric cemeteries in northwestern Pakistan (Dani and Durrani

1964:164). In 1968, Dani started using the term “Gandhara Grave Culture” to describe the protohistoric cemeteries as an archaeological phenomenon or a “grave culture” associated with the historical and geographical region of Gandhara as he considered that the first alleged discovery of this culture was made in Gandhara in 1955 (Dani 1968: 24; 1978b:42, 1980:121). However, Dani later on considered these protohistoric cemeteries as being one aspect of a culture (without elaborating the other aspects) rather than culture in itself (Dani 1999a:39). Dani also noted the possibility of finding these protohistoric graves in other parts of northern Pakistan (Dani 1966a-e, 1968:30, 1968a:99).

S. No.	Name	Region	Excavators	Excavation Dates	Excavated Graves
1	Thana	Swat	Dani and Durrani	1963	14
2	Timargarha 1	Dir	Dani, Durrani and Rahman	1964-1965	111
3	Timargarha 2	Dir	Dani and Sharif	1965	32
4	Timargarha 3	Dir	Dani, Mirza and Sadar	1965	20
5	Balambat settlement	Dir	Dani and Durrani	1965	4
6	Shamlai	Dir	Dani	1965	6
7	Sarai Khola	Taxila	Halim	1968-73	122
8	Gumla	D I Khan	Dani	1970-71	15
9	Hathala	D I Khan	Dani	1970-72	6
10	Zarif Karuna	Peshawar	Halim and Khan	1971	45
11	Nangryal	Swat	S.N.Khan	1982	3
12	Adina	Peshawar	F. Khan, S.N. Khan and Jawad	1993	185
<b>Total Graves</b>					<b>563</b>

Table 2.2: Excavations of protohistoric cemeteries and settlement sites with graves (following the UoP model), northwestern Pakistan



Within the overarching term of Gandhara Grave Culture, Dani tried to define the grave structures, burial styles and material culture of the protohistoric cemeteries. He dated the protohistoric cemeteries from mid-2<sup>nd</sup> millennium to mid-1<sup>st</sup> millennium BC, presumably filling the gap between the end of the first period of urbanization and the rise of historic cities in Pakistan (Dani 1968:8, 1988:70, 1992:395, 1999a:35). He arrived at this time-period through combining information from the “formation period” of the *Rigveda*, comparison with the chronologies of northern Iranian sites (e.g. Tepe Hisar), and two (un-calibrated) radiocarbon dates from Timargarha 1 (Dani 1968:37-48).

Dani (1968:48) dated Period-I of Timargarha 1 from the 16<sup>th</sup> to 13<sup>th</sup> century BC, but very few burials belonged to this period. Period II and III were dated from the 12<sup>th</sup> to 10<sup>th</sup> century BC and the 9<sup>th</sup> to 6<sup>th</sup> century BC respectively and the graves of these two periods are abundant. Bronze was found in periods I and II, while iron was only found

in period III. Dani considered that the Balambat settlement site sequence showed that the protohistoric graves at Timargarha predated the arrival of the Achaemenids in Gandhara in the 6<sup>th</sup> century BC (Dani 1968:48; Vinogradova 2001:12).

Dani (1968:5-7) considered that the traditional narratives of protohistory within northwestern Pakistan did not provide adequate information about the events and developments in the region of Gandhara between the end of the Indus Valley Civilization and the rise of historic cities. The discovery of graves within Gandhara was a good omen for increasing knowledge about this 'dark' age in the history of Pakistan; a dark age that was partially understood through the mythologies and traditions in the *Rigvedic* literature (Dani 1968:8-9; Halim 1972:24; Mughal 1990:268; Stacul 1967a:186).

Dani (1968:62) argued that the graves were constructed in a uniform way; however, he did not clarify whether these graves were constructed in this uniform method through all the chronological periods. When analysing data from Timargarha 1, Dani (1968:62-63) sub-divided the grave structure into six constituent parts. These six parts are: the upper stone structure; the upper grave-chamber; the covering or sealing stones; the lower grave-chamber; the walls; and the floors of the lower grave-chamber (Dani 1968:62). The graves of children were considered exceptions to this general construction method as they were constructed of four slabs (cist-grave) without any upper grave-chamber or stone circle (Dani 1968:62-63). He also claimed that some of the adult graves were provided with a headstone (Dani 1968:62).

Dani recorded the presence of three burial practices being flexed or crouched inhumations, cremation burials, and fractional burials, which he ascribed to the three different chronological periods respectively (Dani 1968:34). Dani (1968:42-43) considered that simple but characteristic grey and red ware constituted the pottery assemblage of the three periods, which had stylistic links with the archaeological cultures of northern Iran and Central Asia.

Dani noted that, though the material from the graves provided evidence for the diffusion of material culture, it did not give the proper names of the people who had constructed and were interred within the graves (Dani 1968:24-25, 1992:397). He saw literary evidence as providing names for the archaeological cultures, and he understood archaeology as providing “the base for correct historical reconstruction” (Dani 1978b:53; 1980:132).

Dani supported the theory of Aryan invasion and the destruction of the Indus Valley civilization by Aryans, as proposed by Sir Mortimer Wheeler (his mentor) and Sir John Marshall (Dani 1961:330; Marshall 1975 [1951]:12; Wheeler 1992 [1950]:32-34). Dani considered the Indus Valley Civilization primarily as an urban civilisation that gave way to a backward rural life when it was destroyed. This destruction allowed a barbarian way of life to conquer the civilised way of life and was seen very much as the result of a new force coming to the Indus valley from Central Asia. Furthermore, the Iranian and Central Asian connections with South Asia (particularly in the pottery assemblages), meant to Dani (1968:49-55) that the pottery came from Iran and Central Asia and were brought by different waves of people, who could be no other than the Aryans mentioned in the *Rigveda*. In 1967, Dani for the first time equated the coming

of Aryans with historical migrations and invasions into the South Asia through the mountain passes of northern Pakistan. He also equated the social structure of the present day Pathans, living in the mountainous regions of northwestern Pakistan, with those of the “by gone Aryans” (Dani 1967:1, 3).

Dani used physical anthropology evidence to suggest links between the people interred in the cemeteries of Timargarha with different groups of peoples in the past, including those from Central Asia and Iran (Bernhard 1968:380-381; Dani 1968:49). Dani drew upon the literary evidence, especially the *Rigveda*, which spoke of the people who called themselves *Arya* (in Sanskrit language) or Aryans in the 2<sup>nd</sup> and 1<sup>st</sup> millennium BC. Based on this evidence, Dani established that different waves of Aryans invasions from Central Asia and Iran into South Asia had occurred (Dani 1968:49-55), and called these Aryans the “grey-ware people” (Dani 1968:54). It is this association between the protohistoric cemeteries and the Aryans that had captivated the imagination of many researchers linked with Pakistan archaeology (e.g. Agrawal 1982:250; Ali and Qazi 2008:3; Allchin 1970:4, 1980:84-85; Halim 1972:33-34; Khan 2004:2; Lal 1978:37; Leshnik 1972:154; Mughal 1989:56, 1990:268; Parpola 1988:245; Stacul 1975a:88; Thapar 1979:113; Thapar and Rahman 1996:278).

Dani interpreted the protohistoric cemeteries as the archaeological representation of the large-scale population movements of an ethnic group of people called Aryans, from Central Asia into South Asia. The source of strength for these people was that their social structure, based upon a nomadic life-style (Dani 1978a:20). Dani argued that imposing this nomadic life-style on a land of settled agriculturalists led to a new type of class structure, where the incoming nomads were supreme (Dani 1978a:20). He did not

elaborate this class structure but he believed that the fighting strength of the Aryans lay in the riding of horses and their use for pulling carts and chariots (Dani 1978a:20).

Dani (1992:395) argued that the tribes living within the boundaries of Pakistan in the 2<sup>nd</sup> millennium BC had cultural links with Central Asian tribes, but, unlike them, they had left a pastoral lifestyle and opted instead for agriculture and sedentarism (*contra* Dani 1978a, 1980, 1998). However, he also claimed that the physical anthropological evidence from Timargarha graves showed that the people there did not belong to a homogenous group (Dani 1992:407). Furthermore, Dani suggested that variation within grave construction methods in different regions was due to local conditions in the past, present differential preservation of the graves, variation in recording techniques of the excavation teams, and perhaps due to different people following different burial rites (Dani 1992:410). In addition, in the form of a circular argument and contrary to his previous stands, Dani (1992:419) later argued for understanding the literary records from the evidence of the graves (*contra* Dani 1968, 1978b, 1980, 1999a).

Based on the discovery of cist-graves in the mountain foothills of Gilgit-Baltistan province, Dani suggested that they belonged to a “group of hill people” that spread from Chitral to the Indus River, and he thought that the absence of graves in the plains might be the result of their destruction during farming activities (Dani 1978:43-44, 1980:122). He also pondered upon the possibility of ascribing these graves to the Kalasha tribe of Chitral, but he rejected this on the basis that their present burial rites are very different from that of the prevalent protohistoric burials (Dani 1978b:43, 1980:122). In 1998, Dani reconsidered his views after he had interpreted the material culture from the newly discovered graves in Gilgit-Baltistan province. He then decided that the material



coming from these newly discovered graves (e.g. at Duran Sor) was entirely different from that of the protohistoric graves of Swat and Dir valleys, and instead was related to the Kalasha (Dani 1998:157). He claimed that the question of the origin of the Dardic people in Gilgit-Baltistan province and even those of Chitral was solved finally by these new discoveries in the graves of Gilgit-Baltistan (Dani 1998:157). Furthermore, Dani believed that the geographical distribution of these graves corresponded to the distribution of modern Dardic-language speakers in that area, so these graves and the people buried within these graves represented a new group of the Aryans, who were definitely the ancestors of modern Dardic people living in that area (Dani 1998:155).

Dani also excavated protohistoric graves at the sites of Gumla and Hathala in the Gomal Valley (D I Khan District) of Khyber Pakhtunkhwa province. However, Dani differentiated these from his main Gandhara Grave Culture and named them the Gomal Grave Culture (Dani 1972:40; 1992:399). Dani (1972:169) associated the first burial period at Gumla and Hathala with the post-Harappan period and called the people, as part of “another cremated grave complex”. He considered the material culture within the graves as poor, and suggested that these people used horses and offered animal sacrifices (Dani 1972:169). Dani did not name these people explicitly but all his arguments suggested that the people within the graves were Aryans, who were responsible for the destruction of the Harappans (Dani 1972:169). The destruction of the Harappan civilization and the introduction of the horse and iron were key components of the Aryan invasion theory (Allchin and Allchin 1968:144-156; 1993 [1982]:302-305, 313; Allchin 1980:72, 84-85; Dani 1961:329-330).

One key distinction, for Dani, was that the mouths of the skeletons in these graves were wide open, which was not the case in the Gandhara Grave Culture (Dani 1972:40, 1992:402). However, Dani also recorded similarities in the burial practices (flexed inhumations and urn burials), use of grey-ware and iron artefacts within graves, which make them more akin to the protohistoric graves in Swat and Dir valleys. Thus, it may be suggested that the protohistoric graves within the Gomal valley were part of the same archaeological phenomena rather than a different phenomena. Both Gumla and Hathala sites were later used for Muslim burials.

Dani (1972:40) considered the Sarai Khola cemetery (with extended inhumations) in the Taxila valley to be part of his Gomal Grave Culture (Halim 1972:23). The excavator, Mr. M. A. Halim (1972:34) explicitly associated the graves with the coming of Aryans to northern and northwestern Pakistan regions. The graves are dated through calibrated radiocarbon measurements to 450 – 90 BC (Bernhard 1981:183). The association of the Sarai Khola graves with the Aryans might also have been a result of Dani's influence, as the excavation and analyses corresponded to the timing of his movement from University of Peshawar to Quaid-i-Azam University Islamabad in 1971. The excavation of Sarai Khola was conducted by archaeologists based at Taxila Museum, which has traditionally remained under the influence of Quaid-i-Azam University archaeologists.

The Zarif Karuna cemetery in the Vale of Peshawar was not excavated by archaeologists from the University of Peshawar; however, the description and interpretation of the excavation results were firmly based upon the UoP model. Mughal (1972:125) identified four distinct burials types, stratigraphically superimposed upon

each other. The lowest was represented by a single flexed inhumation, followed by multiple burials within the same grave, then by cremation burials and finally by fractional burials (Mughal 1972:125). However, the relatively detailed excavation report identified only three burial practices, and used these three burial practices for the chronological periodization of the site, which was claimed to have been confirmed by the stratigraphy (Khan 1979:66). This approach of linking each chronological period with differences in burial practices is the hallmark of Dani's excavations in Dir and Swat valleys, and formed the cornerstone of the UoP model (Dani 1968:31-48; Khan 1979:67). At Zarif Karuna, the first period was represented by inhumation burials, the second by cremation and urn burials, and single and multiple fractional burials constituted the final period at the site (Khan 1979:67). Dani (1988:70) considered the site of Zarif Karuna to be part of his Gandhara Grave Culture.

Although the Adina cemetery in the low-lying hills of District Swabi (Vale of Peshawar) was conducted primarily by the University of Peshawar archaeologists, there has been no attempt to link it to the Gandhara Grave Culture, or the UoP model. There are divergent views on the chronology of the site, oscillating between the Late Bronze Age of the second millennium BC and the Buddhist period of the third century AD (Jawad 2006:15, 27; Khan 1993:5). The excavators recorded types of grave structures similar to those of the protohistoric cemeteries of Swat and Dir and did suggest the existence of a strong link to the protohistoric cemeteries of Swat and Dir (Jawad 2006; Khan 1993).

The excavation of a small protohistoric cemetery, with three cist-graves and extended inhumations, at Nangryal in the Swat Valley by the University of Peshawar

archaeologists (Khan 1996:1-4), was not interpreted within the UoP model of protohistoric graves and was not explicitly associated with the Aryans. It may be worth mentioning that both the Adina and Nangryal cemeteries were excavated after the departure of Dani from the University of Peshawar to Quaid-i-Azam University Islamabad and this may represent his diminishing influence over the UoP archaeologists.

The recent excavations of protohistoric cemeteries in district Chitral of Khyber Pakhtunkhwa province were primarily conducted by graduates and archaeologists of the UoP and Hazara University with colleagues from UK. Although the researchers may be officially related to the University of Peshawar, their research does not adhere to the canons of the UoP model of protohistoric cemeteries. In fact, Chitral has become the main focus of cemetery studies in northern Pakistan (Ali and Zahir 2005; Ali et al. 2002; Ali et al. 2005 a-b; Ali et al. 2008; Ali et al. 2010; Israruddin 1979; Mohammadzai 2007; Stacul 1969a) and the datasets from these new research projects are progressively challenging the UoP model. Seven radiocarbon dates from protohistoric cemeteries in Chitral range from around 800 BC to 1000 AD (Ali et al. 2008).

The present Muslim population in northwestern Pakistan associate these early protohistoric cemeteries with *Kafirs* or non-believers or Kalash (Dani and Durrani 1964:164; Jawad 2006:16). The large number of graves in these cemeteries, and the continuous use of the same sites for burials until the present day, was a source of astonishment to Dani and Durrani (1964:164). However, the Muslim burials within these cemeteries were either slightly apart from these *Kafir* graves or were built above

them (Dani and Durrani 1964:164). Protohistoric graves in the Mohmand Tribal Agency of Pakistan were described as pre-Islamic cemeteries (Mohammadzai 2006:39, 2007:26). This association of the protohistoric cemeteries with or within the Muslim cemeteries in northwestern Pakistan is probably very significant, especially given the link between these cemeteries and Buddhist monuments in this and other areas (as mentioned earlier). There seems to be some continuity from the protohistoric burial traditions, especially the construction of the graves, and the traditions of continuing with the same locations.

### **2.3 IsMEO and UoP models as archaeological traditions**

As the majority of the large scale excavations of protohistoric cemeteries were conducted in the 1960s, so the canons of both the IsMEO and UoP interpretative models were established during the 1960s. Since then, these models have remained unchallenged for more than half a century within the archaeology of Pakistan. This feat was achieved through the continuous propagation and reinvention of the ideas of the key researchers within both the models. Professors Giuseppe Tucci (e.g. Tucci 1963 a-b, 1977), Chiara Silvi Antonini (e.g. Silvi Antonini 1963; Silvi Antonini and Stacul 1972) and Giorgio Stacul (e.g. Stacul 1966, 2000) were the main promoters of the IsMEO model and their understandings of the protohistoric graves have remained largely unchanged since the first discovery and excavations of the protohistoric graves in Swat valley. Professor Dani was responsible for the interpretive regime of the UoP model of the protohistoric graves in Dir and Swat and his concepts of the graves and the people have not changed at all (e.g. Dani 1966 d-e, 2007). The IsMEO model has more detailed recordings and publications of the excavated protohistoric cemeteries than the UoP. New researchers have come up with some new ideas, but have mostly lent

support and insured continuity of the IsMEO model and the ideas of its main researchers, for example Salvatori's (1975) chronological framework.

The IsMEO and UoP models were based on the analysis of no more than 36 cemeteries (Müller-Karpe 1983:12; Vinogradova 2001:10). The discovery of a further 224 protohistoric cemeteries (see Appendix 1), mostly during the last two decades, has had little impact on either interpretative regime and hence both the models are treated as a form of received wisdom within the archaeology of Pakistan (e.g. Ali and Qazi 2008:1; Ali et al. 2010:215, 217). The undergraduate and postgraduate curriculum of the eleven public sector universities (and colleges under the provincial higher education departments) teaching archaeology in Pakistan include the subjects of Aryans and Gandhara Grave Culture as if these are real world entities (Higher Education Commission 2003:10, 12, 32). In fact, this current curriculum, commissioned by the Ministry of Education and approved by the Higher Education Commission of Pakistan, is heavily biased towards the UoP model of protohistoric cemeteries and pays little attention to the IsMEO model. Thus, students of archaeology in Pakistan are introduced to the simplified idea of the protohistoric cemeteries in northwestern Pakistan equated with the coming of Aryans, from their very first interaction with archaeology and these ideas are repeated as they move through their courses for higher degrees. This in turn ensures the continuity and acceptance of the UoP model by almost every student these institutes teach. The Department of Archaeology, Hazara University, Pakistan (the only archaeology department in Pakistan with a detailed online introduction) equates the protohistoric graves in Chitral with the Indo-Aryans ([www.hu.edu.pk/clht.php](http://www.hu.edu.pk/clht.php)), thereby granting institutional acceptance to the definitions of protohistoric graves as suggested within the UoP model.

Furthermore, the display of the material culture and skeletal remains, coming from the protohistoric graves within the museums of Pakistan (e.g. Sir Sahibzada Abdul Qayyum (SSAQ) Khan Museum University of Peshawar, Chitral Museum, Hazara University Museum, Swat Museum, Taxila Museum) is displayed in a particular way to conform to the grand narrative of the Indus Valley Civilization followed by the Gandhara Grave Culture, and then by the rise of historic cities and the age of Gandharan Buddhism. Labels in these museums directly state that the artefacts and human remains are those of the Aryans (e.g. SSAQ Museum, Chitral Museum, Hazara University Museum). This consistency within the different museums reinforces the dissemination and eventual acceptance of a rather rigid time period for these cemeteries and burial practices, and their ethnic identification within the community of archaeologists and public.

Students are trained within traditional archaeologies, mostly embedded within culture-historical paradigms, considering people, languages and pots as interchangeable (e.g. Dani 1968). These traditional understandings and trainings do not allow for radical (or even relatively minor) changes, or permit the challenging of authorities, thus coercing new professionals to conform to these extant beliefs and narratives. Thus, it may be suggested that the continuity and unchallenged existence of both the IsMEO and UoP models has been due to theoretical stagnation within the archaeology of Pakistan, which has remained faithfully enshrined within the culture-historical archaeology.

Within both the IsMEO and UoP models, the main theorists (e.g. Tucci and Dani, who as classical archaeologists had similar training in the ancient languages of the region) were able to utilize datasets from other fields, particularly religious and secular

literature to explain the archaeological material cultures from the graves. They were also able to publish relatively detailed reports of their research and they went on to continuously reproduce their research for almost half a century (e.g. Dani 1968, 2007 and Stacul 1966; 2000, 2005). The sheer volume of their publications and their reputations as archaeologists made it impossible for any senior or young professionals without their linguistic skills working within the archaeological establishments of Pakistan to question their datasets and interpretations.

Potential challenges to either the IsMEO or UoP models probably also suffered from the inability of new researchers with new datasets to publish well researched and detailed publications from their short and small-scale projects. The resultant research papers mainly talk about the number of the protohistoric grave sites discovered and do not contain any new theoretical discussions or new discussions of past interpretations. The majority of these reports are poorly published and are limited in scope. Most of newly discovered protohistoric cemeteries are reported as part of large-scale survey reports with little individual discussion of the graves (e.g. Ali et al. 2005; Ali and Rahman 2005). Thus, these new discoveries of the protohistoric graves are usually employed to validate the two models.

This ensures the passing of both the models from one generation of archaeologists to others as valid explanations for the protohistoric cemeteries in northwestern Pakistan, transforming both of these archaeological models into archaeological traditions. However, the continuity of these archaeological traditions, especially the UoP model, was also dependent upon the personality of Prof. Dani and his actual presence at the University of Peshawar. His departure to Quaid-i-Azam University had an impact on the



understandings of the new cemetery excavations, such as Adina and Nangryal; however, it did not have any impact upon the continuation of the national institutional acceptance and propagation of the UoP model. .

## **2.4 Summary**

The protohistoric cemeteries in the northern and northwestern Pakistan are widely understood within either the IsMEO or the UoP archaeological models, both shaped during the 1960s. The IsMEO model is a product of research by the Italian Archaeological Mission in the Swat valley, and the UoP model is the result of excavations in Swat and Dir by the Department of Archaeology, University of Peshawar. Both the models were created through the work of a very few individuals, in fact there are four researchers (Professors Tucci, Silvi Antonini and Stacul (for IsMEO), and Dani (for UoP)) who can be credited with almost all of the ideas within these two models.

The IsMEO model was largely based upon datasets from the excavation of Butkara-II, Katelai-I and Loebanr-I cemeteries. Within the IsMEO model, the protohistoric cemeteries were studied as part of the larger chronological sequence of Ghalegai rock shelter and were dated from 14<sup>th</sup> to 4<sup>th</sup> century BC (period V to VII). Two primary burial practices were noted within the protohistoric cemeteries of Swat; inhumation and cremation burials. A third burial practice consisted of the combined interment of inhumation and cremated remains in a single grave. The material culture (especially the pottery assemblage) and the people responsible for the material culture were linked to Iran and Central Asia. The people within the graves were identified with ethnic groups as suggested within the ancient literature (e.g. Aryans) or with the historical/modern

inhabitants of the Swat and surrounding regions (e.g. Dards). The ideas of the IsMEO model have remained largely unchanged since its beginning in the 1960s.

The excavations of the protohistoric cemeteries of Timargarha 1 and 2 in Dir and Thana in Swat valley were central to the formation of the UoP model. The UoP model was based upon the assumption that the burial practices were linked to the chronological patterns of the protohistoric cemeteries. Thus, the three burial practices (inhumation, cremation and fractional burials) were considered to correspond to three chronological periods, dateable from the mid-2<sup>nd</sup> to mid-1<sup>st</sup> millennium BC. The material culture was analysed and described as related to that of the protohistoric cultures of Central Asia and Iran, and the people within the graves were the different groups of Aryans who migrated into northern and northwestern Pakistan in different time periods.

The stability of the core group of researchers and the institutional acceptance of the IsMEO and UoP models of the protohistoric cemeteries within the archaeology of Pakistan has transformed these models into archaeological traditions, handed down through generations of archaeologists since 1960s. Thus, these archaeological models as archaeological traditions have become factoids and have managed to remain current despite overwhelming new data that should have challenged most of the concepts employed within both the models.

### Chapter 3: The Deconstruction of the IsMEO Archaeological Model

The purpose of this chapter is to deconstruct the IsMEO archaeological model of the protohistoric cemeteries in northwestern Pakistan. The Italian Archaeological Mission to Pakistan is the longest serving foreign archaeological mission in Pakistan. Over the years, the mission has contributed new resources and knowledge to the archaeology of northern Pakistan in general, and Swat in particular. Their research within the Swat Valley also afforded them an opportunity to venture out, somewhat infrequently, into the surrounding regions of Chitral and Gilgit-Baltistan. Their activities in Swat included dozens of excavations at sites ranging from the Neolithic to the Islamic period, including the three main protohistoric cemeteries at Katelai-I, Loebanr-I and Butkara-II (Bagnera et al. 2011; Olivieri 2006; Stacul 1972). True to the Italian archaeological practice of meticulous recording, the mission maintained and published tremendous amounts of information on their research.

The IsMEO model adhered to the general theoretical approaches of Italian archaeology of the early 20<sup>th</sup> century, particularly the theoretical approaches employed by Tucci, Silvi Antonini and Stacul in their works on the protohistoric cemeteries in Swat valley. The personalities of these scholars and their ideas about people in the past have had a tremendous bearing upon the general understandings of the protohistoric cemeteries to date within the archaeology of Pakistan. The IsMEO model is a product of culture-historical understandings of archaeological cultures and is mainly concerned with elaborate evolutionary typological associations of the material culture with outside regions, and the identification of the protohistoric people with peoples from the *Rigvedic* and Classical annals. In the IsMEO model, the chronological understandings

of the protohistoric cemeteries are largely understood in terms of their agreements with the cultural profile of the region established through the excavations of the settlements sites, especially the Ghalegai rock shelter.

### **3.1 Theoretical settings of the IsMEO model**

For most of the 20<sup>th</sup> century, the story of Italian archaeology is the story of culture-historical, art-historical and Marxist paradigms, albeit with strong local inputs. Italy was one of several European countries where archaeologists were not terribly interested in the wider theoretical debates of the 1960s and 1970s, and were content with their own historical theories and methods (Hodder 1991:12). A classical school of thought was promoted within Italian archaeology by the theorists G. Boni, P. Orsi and L. Bernabo Brea since 1940. Their interpretations of the prehistory were mainly inspired and expanded upon what was known from the classical literature (d'Agostino 1991:59; Trigger 2009:62-63). In fact, Bernabo Brea, a strong follower of V.G. Childe, was interested in the creation of 'historical prehistory' through the comparison between archaeological datasets and the records of the people from the Greek and Roman writers and through the application of diffusion and typological studies of material culture (d'Agostino 1991:60; Loney 2002:208).

S. M. Puglisi, an Italian theorist and Marxist archaeologist, and a strong follower of Childe and his culture-historical understandings, saw cultures as an essential economic behaviour (d'Agostino 1991:60-1). He was an inspirational figure within the field of protohistoric cemeteries studies in Italy and his methods were mainly based upon typology and the seriation of artefacts (d'Agostino 1991:60-1). This resulted in the use of quantitative principles and mathematical formulas to analyse materials as the "direct

mirroring of the actual societies” (d’Agostino 1991:62). This in turn promoted the detailed documentation of the burial places, the shapes of the graves, the details of artefacts within graves and the nature of human, faunal and floral remains within the Italian funerary archaeology (d’Agostino 1991:52-3). Perhaps he was also instrumental in the promotion of grave goods as a direct property and reflection of the deceased social status in the society, as practiced within the IsMEO model. In fact, it is claimed that most (99%) of the archaeologists involved with the IsMEO team working in northwestern Pakistan, from the 1960s to 1980s, were “active Marxists” (L. M. Olivieri pers. comm.).

The Italian archaeologist Giuseppe Fiorelli (1823-1896) pioneered the techniques of the detailed recording of stratigraphies of archaeological sites within the Italian archaeology (Trigger 2009:62-3). Within the traditional Italian archaeology in general these archaeological methods were only utilized by epigraphers and art historians as a source of corroborating their literary data (Trigger 2009:62- 3). The longevity of traditional approaches to archaeology within 20<sup>th</sup> century Italian archaeological establishments (and perhaps much of the European archaeologies, particularly German and French archaeologies) were maintained through a rigorous initiation process for new professionals; a process that tied young archaeologists to powerful directors who controlled research grants, determined the goals of research, and evaluated the performances of the young; thereby controlling their professional futures and research directions (Trigger 2009:64-5).

It can be argued that these practices were responsible for the continuation, or rather repetition, of the ideas of the powerful personalities within the IsMEO researchers

working in Pakistan; for example Stacul's interpretations of the chronological and typological classifications, rendering the IsMEO model an archaeological tradition in itself. As a result, the IsMEO model of the protohistoric cemeteries in Swat valley remained predominantly culture-historical from the very beginning and these approaches still remain valid. This situation is partly because of the absence of any new input from outside the traditional Italian archaeological understandings since the late 1950s, and partly because of the continuity of the powerful personalities and their interpretational regimes. Under the influence of traditional Italian archaeology, there is a strong sense of continuity from teacher to student within the IsMEO model (e.g. Gnoli 1997; Silvi Antonini and Stacul 1972: acknowledgments); in fact, dissent and critique of the teacher by a student were seriously dealt with (e.g. Gnoli 1986:265).

The concept of "cultural province" coined by Stacul and Tusa (1977:175-176) to explain the protohistoric settlements and cemeteries in northwestern Pakistan has its genesis in the ideas of Gustaf Kossinna. Kossinna, the late 19<sup>th</sup> and early 20<sup>th</sup> century German linguist turned archaeologist, was a nationalist fanatic and a sympathiser of the Nazi party; the Nazis used his ideas for the promotion of their German supremacy and nationalistic propaganda (Trigger 2009:236, 240). Kossinna used distinctive artefact types to identify "cultures" and the geographical distribution of these artefact types (usually one or a few artefacts) with "cultural provinces", corresponding to specific tribal or ethnic groups (Kossinna 1911 cf. Härke 1991:188; Trigger 2009:240). He argued that these tribal or ethnic groups can be identified within the historic people living in the area provided that there is no major discontinuity or sudden change in the archaeology of that region and that cultural identification of an ethnic group constitutes their 'right' to that particular region (Kossinna 1911 cf. Härke 1991:188; Trigger

2009:239). Kossinna firmly believed that cultural continuity meant ethnic continuity and that culture within a particular region (cultural province) was a static entity and culture changed through migrations from the outside (Kossinna 1911 cf. Härke 1991:188; Trigger 2009:237). He also believed that cultural or ethnic variations were due to racial differences and that racial characteristics constituted valid guides for determining human behaviours (Trigger 2009:237). He also considered Aryans (or Indo-European speakers) as the direct ancestors of modern Germans and that they undertook waves of migrations to conquer most of Europe, and used the indigenous populations to build civilizations in Greece, Italy and the Middle East (Trigger 2009:237-238). Most of Kossinna's ideas were later incorporated by Childe (1929: v-vi) in his understanding of archaeological cultures (i.e. culture-historical archaeology) (Härke 1991:188). Thus, this concept of "cultural province" within the IsMEO model is borrowed from Kossinna's ideas that were fashioned in the early part of the 20<sup>th</sup> century.

The understanding of the protohistoric cemeteries within the Swat valley as a unitary culture and any links with archaeological cultures in Iran, probably stemmed from a policy document of the IsMEO ascribed to Domenico Faccenna, the Director of Excavations, about their research activities in Pakistan, Afghanistan and Iran. This document described IsMEO research in the prehistoric, protohistoric and Islamic periods in these countries as linked together and modelled by shared topography and chronology, claiming that the logical solution to their problems of a "historical, philological, epigraphical, religious and artistic nature" lay in dealing with them through a "unitary conception of the culture of the people" (IsMEO *Attività* 1962:5-7 cf. Callieri 2006:17). Thus, the recurring concepts of the protohistoric cemeteries belonging to the

“same cultural horizon” or as manifestations of “absolute uniformity”, or as “series of homologous cultures” and as belonging to people from the west (Iran) as a result of “actual migrations” should be viewed within the context of an officially approved institutionalized policy, perhaps non-binding but of considerable importance for IsMEO researchers working in Pakistan (Faccenna 1964:66; Salvatori 1975:334; Stacul 1969:87, 1970b:99, 1985:365; Tucci 1977:36).

The conquering of the summit of K-2 Mountain (the world’s second highest mountain after Mount Everest) in Pakistan by Italian mountaineers in 1954 (ahead of English and American mountaineers) was considered helpful in the restoration of national pride after the World War II defeat and probably meant more to the Italians than to the Pakistanis (Alemanno 2002; Olivieri 2006). Perhaps, the IsMEO presence in Pakistan, and Iran and Afghanistan, was linked with this prestige and pride building exercise of the Italians as a nation. Tucci had noted that their research activities in Asia, while in competition with other western countries, were an “ambition of noble and disinterested prestige” by the “enlightened and cultivated” Italians for the interpretation of the past with an aim of bringing the people of Asia and Italy closer to each other (Tucci 1978:16 cf. Callieri 2006:20; Olivieri 2006).

Thus, it may be argued that the Italians presence in Pakistan, particularly in Swat, was not only linked to their genuine interest in the archaeology of the northwestern region, but was also a means of advancing the image of Italy and Italians to the wider world. Similarly, they, as a developed and civilized society, were even interested in the advancement of knowledge in and about remote regions of the world, with apparently no further stake in either the research or the outcomes.



### **3.2 IsMEO model and its main theorists**

Although the IsMEO team working in Swat was a multi-disciplinary and dynamic team, the protohistoric research, particularly work on the protohistoric cemeteries and their understandings, were shaped by the personalities and works of three main researchers; Professors Giuseppe Tucci, Chiara Silvi Antonini and Giorgio Stacul.

Tucci is considered the father of Asian archaeology in Italy and he was responsible for the establishment of the Italian Mission in Swat in 1955, and its later developments (Callieri 2006:13, 19). He was one of the top Italian Orientalists, with special interests in the languages, philosophies and religions of Asia, especially Buddhism (Callieri 2006:11). Although Tucci had many facets to his scholarship, he was essentially a linguist and an art historian, and his interest in Swat was directed by his studies of the Tibetan Buddhism literature (Taddei 1997:346-7). Tucci was known as “the great master” to Italian archaeologists who studied Asia (Goodwin 2004).

Tucci is admired for his skills as a non-archaeologist, who was able to contribute tremendously to the field and for his ability to stimulate new ideas (often without much background research), hoping that this would promote the advancement of knowledge (Taddei 1997:347-8). However, he probably used his influence and ability to stimulate others as a tool to shape the direction of the research of his fellow IsMEO researchers (or junior researchers). Tucci is alleged to have converted to Tibetan Buddhism during his time in Tibet (Maraini 1985 cf. Gnoli 1986:265) and, as Tucci (1977:78-80) considered Swat central to Tibetan Buddhism, his interests in the archaeology of

northwestern Pakistan were probably not just academic but personal and linked to his religious convictions.

Tucci was known for his work within the administration of Mussolini as an advisor on the Orient. He represented the Mussolini administration, and its fascist ideology, to Japan during World War II, where he lectured his Japanese audience on the merits of “racial purity”(Kirkup 2004). He was also a close friend of the fascist philosopher Giovanni Gentile (Kirkup 2004). In fact, it was Gentile and Tucci who founded IsMEO in 1933 with Gentile its first president, and replaced by Tucci in 1947, who remained president until 1978 (Gnoli 2012). IsMEO, as a quasi-public institution, was under the direct supervision of the different Italian Government Ministries, including the Italian Ministry of Foreign Affairs (Gnoli 2012; L. M. Olivieri pers. comm.).

Tucci is accused of having “placed his scholarship at the service of the ideological campaigns of the Italian state” (Clarke 1997:196). In addition, it has been claimed that his love for working in Asia was linked to his fascist ideology, for example he believed that the main features of the Italian fascism could be found in traditional Japanese Zen Buddhism and their warrior creed and love for nature (Clarke 1997:196). Probably, for his fascist background Tucci was relieved in 1944 from his university position after the war, but this was interpreted within IsMEO that Tucci was “unthinkingly ‘purged’ and deprived of his university chair” and that it was politically motivated decision (Gnoli 1986:266). He seemed to have recovered fast through the IsMEO platform (Taddei 1997:346), which was in line with the general academic environment within the Italian archaeology. This was happening when post World War II Italy undertook a tremendous ideological shift, but archaeologists loyal to the fascist regime remained

unharmful and their control of the powerful positions within the archaeological establishment remained unchallenged (d'Agostino 1991:52). The fact that Tucci had an active fascist past has been effectively left out of the discourses about him originating from the IsMEO platform (e.g. Callieri 2011; Taddei 1997).

Tucci was responsible for the first identification of the protohistoric cemeteries of Swat with particular historical and ethnic groups. He first identified the grave people as the Assakenoi, as noted by Greek historians (Tucci 1963b:27-28). He later identified these graves with the migration of the Scythians or their allied tribes from Central Asia to India (Tucci 1997b:329). He identified the protohistoric cemeteries on the Indus River with the Dardic people (Tucci 1997b:329). However, he accepted that it was very difficult to establish his ideas of the timing of the different waves of migrations into Swat, and to assign each wave of people to any of the periods within the established Swat chronology (Tucci 1977:36). With these identifications, Tucci was very successful in keeping his researchers focused on the establishment of the ethnic identities of the people of the protohistoric cemeteries. Furthermore, Tucci's understandings of the archaeology and archaeological evidence are in line with the classical Italian archaeological understandings of interpreting archaeology through textual evidence; however, he was not alone in this and had been preceded by British archaeologists in South Asia, e.g. Cunningham, Marshall and Wheeler, who were also obsessed with identifying ancient people and archaeological cultures through Indian and Classical textual sources (Chakrabarti 1988:35-40; Cunningham, 2007 [1871]; Marshall 1918, 1975 [1951]; Wheeler, 1959, 1992 [1950]).

Tucci (1963:27) projected that S. M. Puglisi would work on the prehistoric and protohistoric remains within the Swat valley. Probably this did not materialize, and instead Chiara Silvi Antonini, an art historian and a student of Puglisi (L.M. Olivieri pers. comm.) joined the IsMEO team. She was the first of the IsMEO researchers to have written extensively on the protohistoric cemeteries in Swat (Silvi Antonini 1963). She was also responsible for linking the pottery assemblages from these cemeteries with assemblages from Central Asian cemeteries, thereby linking the people within these graves with Central Asians and Iranians; however, when faced with glaring inaccuracies in her approach, she quickly retracted her assertions about these links (Silvi Antonini 1963; 1969; 1973). Despite this, her understandings of the graves have hardly been improved by the IsMEO team working in Swat, or the UoP team working in Dir, who in fact actually adopted many of those ideas.

Prof. Giorgio Stacul, a political scientist, was the main pillar of the IsMEO excavations of the protohistoric cemeteries and associated settlement sites. Although his interpretations of the graves and people changed through time, he remained loyal to the IsMEO culture-historical frameworks. Stacul (1976:29) fully adhered to the concept of culture as defined by Childe (1929). Childe (1929-vi) believed that archaeological cultures are very fluid chronologically and that they can appear in different regions in the same period or in different periods. Stacul believed that his excavation data from periods III and IV at Loebanr-III site in Swat valley and period I material culture at Sarai Khola in Taxila valley and also the similarities within terracotta human figurines in different chronological periods at different sites, confirmed Childe's ideas of the spread of culture to different regions and in different chronological periods (Childe 1929: vi; Stacul 1976:28-29, 2005:308). His position as an excavator of several

protohistoric cemeteries and settlement sites in Swat afforded him an opportunity to propose alternative understandings to the succession of different archaeological phenomena in the region.

### 3.3 The deconstruction of the IsMEO chronological frameworks

The IsMEO chronological framework is primarily based upon the excavation of the Ghalegai rock shelter in the 1960s and is still considered relevant by the IsMEO team members working in Swat (e.g. Stacul 1969:82-85; Vidale et al. 2011:94). The excavation at Ghalegai produced 25 layers with five radiocarbon measurements and the cultural sequence was primarily based upon the typologies of the pottery (Stacul 1975a:79). These typologies were constructed on the basis of analysis of form and designs, resting on the assumption that simpler forms and designs occurred earlier in the sequence, and subsequent innovations or improvements marked the passage of time (Salvatori 1975:333; Silvi Antonini and Stacul 1972:16-55; Vinogradova 2001:14). This is a premise of the culture evolution paradigms of 19<sup>th</sup> century archaeologists, who considered the progress of society in terms of linear evolution from simple to complex (Fuller and Boivin 2002:167; Johnson 2010:150; Pluciennik 2005:39-60). Hence, it may be argued that the Ghalegai sequence is based upon cultural evolution ideas.

Swat Chronological Sequence	Assigned Dates (un-calibrated)
<b>I</b>	2400 – 2100 BC
<b>II</b>	1810 ±55 BC
<b>III</b>	1505 ±50 BC
<b>IV</b>	1700 -1500 BC
<b>V</b>	1500 - 1000 BC
<b>VI</b>	6 <sup>th</sup> to 5 <sup>th</sup> century BC
<b>VII</b>	500-400 BC*
* based upon comparison with materials from Hasanlu IIIA in western Iran.	

Table 3.1:Ghalegai rock shelter chronological/Swat sequence (after Stacul 1969:82-85 and 1978:149)

The excavation of the Ghalegai rock shelter in the 1960s was an important milestone in the archaeology of the Swat valley, as it produced the first stratigraphical evidence of the Neolithic phase. Excluding the Neolithic sites in Kashmir valley, India, there are relatively few Neolithic sites in northwestern South Asia. Thus, the datasets from this site are our primary source for the period concerned. However, from the Ghalegai period IV onwards, the region (particularly the Swat valley) settlement activity flourished in this region. Thus, Loebanr-III, Aligrama, Bir-kot-Ghwandai, Kalakoderay and Barama were some of the major settlements sites that were excavated by the IsMEO team in the Swat valley. Thus, though the excavation of the Ghalegai rock shelter has produced a wonderful sequence, it is possible that it may or may not represent all the events within the archaeological sequence of the whole region.

The Ghalegai sequence acts as the bench-mark for research on the protohistoric and historic settlements and cemeteries in northwestern Pakistan by archaeologists from both the IsMEO and UoP teams and it has been continuously validated with fresh data from the region. However, the validation attempts of the Ghalegai sequence from other settlement, cemeteries and Buddhist religious sites by other archaeologists, especially by the IsMEO archaeologists, must be viewed in terms of the heavy reliance on evolutionary pottery typologies for the establishments of the Ghalegai sequence and that the new attempts (e.g. Fritsch 1997; Salvatori 1975; Vinogradova 2001) have fallen into this culture evolution trap without realizing it. Stacul's concept of culture evolution did not remain confine to the site of Ghalegai alone; in fact, it was his *modus operandi* in describing periodization of all the protohistoric sites in Swat valley (e.g. Bir-Kot-Ghwandai) with "evolution", "gradual change" and "gradual turns" as his buzzwords (Stacul 1989b:321-322). In addition, Stacul proposed the Ghalegai sequence as a

temporary measure, open to further integration, and to the possibility of eventual subdivision into sub-phases or sub-periods (Stacul 1969:82). However, from this humble beginning, it later became a rigid, rather established and factual chronological framework that has never been seriously questioned since its promulgation in the 1960s.

Within IsMEO, the use of stratigraphy in the formation of the Ghalegai sequence has not been reanalysed since its inception. A detailed study of the stratigraphy and its associated material culture from Ghalegai is not within the scope of my current PhD research, however, I may suggest that Stacul's use of stratigraphy may need some revisiting. For example, Stacul assigned period I (layers 23-21) and period III (layers 17-16) to two different Neolithic periods with a non-Neolithic period II between them (Stacul 1969:82-83, 1970b:92, 1972:3, 1974:239-240, 1985a:364, 1987:33, 39, 45). However, considering that periods I and III mainly came from the lowest cultural strata on the outside and inside of the rock shelter respectively, it may be possible to reconsider the contexts and interpretations of the two Neolithic periods in future. This falls well within Stacul (1984:205,209) suggestions of continuity between periods I and III within pottery and stone tools' forms and technology and then within pottery assemblages (with Harappan flavour) in periods II and IV and onwards. Furthermore, the Neolithic character of periods I and III at Ghalegai has not been fully accepted by some scholars, such as Possehl (1989:16), who did not consider either of the periods as purely Neolithic but rather Neolithic/Chalcolithic periods, suggesting a degree of doubt in the periodization of the Ghalegai rock shelter.

Based upon radiocarbon measurements, it was initially postulated that the different cultural phases within the Swat valley started in around 2400 BC and continued until

around 400 BC (Stacul 1969:82-85, 1978:149). Almost all these radiocarbon dates, particularly those from the University of Rome radiocarbon laboratory, were obtained through subtracting 1950, the bench mark date set in the honour of C-14 dating method discoverer Willard Libby's first practical usage of the method (Mook and Groningen 1985:1), from the un-calibrated radiocarbon dates from radiocarbon laboratories.

Site	Lab. ID	Radiocarbon age (BP)	Past Assigned/MASCA Calibrated dates (BC)
Ghalegai	R-380	4200 ± 140	2940-2920
Ghalegai	R-379	4245 ± 55	2970
Ghalegai	R-379 $\alpha$	4180 ± 70	2920
Ghalegai	R-378 $\alpha$	3760 ± 55	2180
Ghalegai	R-377 $\alpha$	3455 ± 50	1950-1920
Aligrama	PRL-186	3070 ± 230	1388, 1336, 1325
Loebanr-III	P-2586	3360 ± 60	1730-1690
Loebanr-III	P-2583	3280 ± 90	1650
Aligrama	PRL-246	3080 ± 170	1394, 1331, 1329
Aligrama	P-2151 $\alpha$	3350 ± 40	1710-1690
Loebanr-III	P-2585	3250 ± 60	1640-1600
Loebanr-III	P-2584	3140 ± 60	1500
Aligrama	P-2150	3090 ± 40	1400
Aligrama	P-2151	3010 ± 60	1360-1300
Aligrama	PRL-243	2900 ± 110	1092
Aligrama	PRL-244	2660 ± 103	818
Barama	R-196	2585 ± 80	635
Barama	R-195	2320 ± 45	370
Kalako-deray	BM-2913	3300 ± 35	--

Table 3.2: IsMEO radiocarbon dates from Swat settlement sites (after Agrawal 1978:234; Alessio et al. 1966:408-9, Ambers and Browman 1999:193; Possehl 1989:2; Stacul 1987:167)

However, when corrections to the raw radiocarbon dates became available, such as the MASCA (Museum Applied Science Center for Archaeology, University of Pennsylvania) corrections, they were readily applied to the radiocarbon dates from Swat, especially from the Ghalegai rock shelter and other settlement sites (Stacul



1987:167). These corrected dates were much earlier than previously thought, and pushed the beginning of Swat cultural phases from the middle of third millennium to the beginning of third millennium BC (see Table 3.2). This forced the IsMEO chronological framework to be revised in terms of the actual radiocarbon measurements (e.g. Stacul 1987:167). This did not mean, however, that any of the typological associations of the material culture and their sequencing, especially of pottery, were changed or revised. It was the same old system but with new absolute dates.

Within these converted dates, the association between the different chronological periods and relevant radiocarbon dates was never very clear (Stacul 1987:167). The available dates for period I placed it between 2970 and 2920 BC, while period II was dated to 2180 BC. Period III was dated to 1950-1920 BC. However, period IV was variously dated, ranging from 1730 to 1300 BC (Stacul 1987:167).

The different chronological periods within the settlements were dated through the radiocarbon measurements; however, the different chronological periods of the protohistoric cemeteries within the IsMEO chronological frameworks were dated through their presumed relationship with the Ghalegai sequence without utilizing the available radiocarbon dates from protohistoric cemeteries (e.g. Stacul 1969:84, 1975b:330). The protohistoric grave sites of Swat were linked to the chronological sequence of the settlement primarily by the application of pottery typologies. In fact, radiocarbon measurements from protohistoric cemeteries were seldom noted and only passing remarks were made (usually within the footnotes) in the publications (e.g. Silvi Antonini and Stacul 1972:4).

Site	Lab. No	Radiocarbon age (BP)	Past Assigned/MASCA Calibrated dates (BC)
<b>Loebanr-I</b>	BM_?*	3470 ± 150	1520
<b>Katelai-I</b>	R. 476	3150 ± 150	1200
<b>Loebanr-I</b>	BM_195	2980 ± 151	1030
<b>Loebanr-I</b>	BM_196	2850±150	900
<b>Loebanr-I</b>	R. 477	2870 ± 60	920
<b>Katelai-I</b>	R. 477A	2750 ± 50	800
<b>Loebanr-I</b>	R. 276	2460 ± 50	510
<b>Loebanr-I</b>	R. 474	2390 ± 70	440
<b>Butkara-II</b>	R. 194	2425 ± 40	475
<b>Loebanr-I</b>	R. 278	2380 ± 50	430
<b>Katelai-I</b>	R. 479	2250 ± 50	300
<b>Katelai-I</b>	R. 279	2120 ± 45	170

\* Silvi Antonini and Stacul 1987:4,

Table 3.3: Radiocarbon dates for the protohistoric cemeteries in the Swat valley (after Alessio et al. 1966:408, 1969:491-493, 1970:610; Barker et al. 1969:292, Silvi Antonini and Stacul 1987:4 and Vinogradova 2001:35).

Within the IsMEO reports, there is no information about sampling procedures, such as how much of a sample was provided to laboratories or how the sample was collected for the radiocarbon measurements. The R-194 sample from Butkara-II (2425 ± 40 BP), calculated by the University of Rome radiocarbon laboratory, was obtained from 7 cremation burials, bulked together (Alessio et al. 1966:408; Silvi Antonini and Stacul 1972:4). This combination is not ideal for any radiocarbon measurement as the resultant measurement was a weighted mean of 7 individuals and weighting was probably affected by the actual age of each cremation and the weight of the sample contributed from each cremation. It was not, therefore, a simple average date for all the cremations and could have only worked if all the seven individuals were of the same date (W. D. Hamilton pers. comm.). This sampling strategy ran against the whole concept of radiocarbon measurements, where single entity samples are essential for a reliable dating of the contexts (Ashmore 1999:124-126). Furthermore, dates in the

1960s and 1970s were non-AMS (Accelerator Mass Spectrometry) radiometric dates and they required large samples for conventional processing. All the IsMEO radiocarbon dates were obtained through the conventional method. This means that the sizes of samples were quite large and it is possible that some, if not all samples (as in the case of Butkara-II R-194 sample) were assembled from different contexts in order to meet the criteria of sample weight by the dating laboratory.

### **3.3.1 Sandro Salvatori's dating framework**

With the active encouragement of Stacul, Salvatori (1975) made an effort to redefine the IsMEO chronological framework relevant to the protohistoric cemeteries. He analysed the cemeteries of Katelai-I, Loebanr-I and Butkara-II in order to understand their relative chronology (Salvatori 1975:333). He came up with a six-period system for the protohistoric cemeteries in Swat valley as opposed to the three-period system of Stacul (Salvatori 1975:340; Stacul 1969).

Salvatori (1975:333) claimed that his chronological framework was geared to look for progressive development in the typologies of the material culture within the protohistoric cemeteries. The concept of "progressive development" is an indication of Salvatori's theoretical inclination to cultural evolution understandings of archaeology in general and the development of the material culture, especially the pottery assemblages, in particular. He also made it clear that his research should be considered as the "natural conclusion" of Stacul's work on chronology (Salvatori 1975:333).

Thus, it may be suggested that Salvatori's work was a continuation of Stacul's work and that he only really managed to divide each of his chronological periods into two parts.

Furthermore, his dating model should be seen in the context of the Italian archaeological traditions and the resultant student/teacher and senior/junior relationships, where students are generally not supposed to criticize their teachers (e.g. Gnoli 1986). In addition, the methodological constraints, such as the non-inclusion of double or multiple burials, graves with non-uniform furnishings, graves with 1 to 2 artefacts, and his idea of iron artefacts as representative of the last chronological period of the protohistoric graves, severely restricted his study. Thus, with these constraints applied, his study only took into consideration 233 out of 437 (53%) of the available graves from the three cemeteries. Furthermore, this study was shaped by the application of established typologies (primarily by Stacul) which were themselves based upon weak assumptions. Additionally, Salvatori (1975:334) believed in the existence of a “unitary culture” within the graves and that the “earliest horizon in the Swat valley” was present only at Katelai-I cemetery.

### **3.3.2 Christina Fritsch’s dating framework**

Similar to the work of Salvatori (1975), but more limited, an exploratory approach was undertaken by Fritsch (1997) for her study of grave constructions at Butkara-II cemetery. She based her study on Salvatori’s (1975) study of the Butkara-II cemetery and proposed the merger of the first two periods (IA and IB) of the Salvatori dating scheme (1975:340) at Butkara-II into one (Fritsch 1997:59).

However, Fritsch’s methodologies and interpretations were theoretically weak. By basing her studies of the pottery typologies on those employed by Salvatori (1975), she accepted and fully adhered to the cultural evolution paradigms of the IsMEO model, thus limiting her understandings of the protohistoric cemeteries. She also believed that

cultural change could have been the result, along with other factors, of outsiders coming into the region, which is analogous to the culture-historical paradigms (Fritsch 1997:64). Thus, her theoretical understandings of the dating framework of the Butkara-II cemetery was akin to the general theoretical understandings of the IsMEO model since 1960 and that it seems that she added little to our understanding of the protohistoric cemeteries.

Through statistical analysis, especially the correlation of the dimensions of the upper and lower grave-chambers, she postulated that “some form of measurement was employed in the construction of the graves” (Fritsch 1997:54). She went on to attribute the degree of elaboration and the energy expenditure in the construction of the graves, following Tainter (1978), to the “position of the deceased in the society” (Fritsch 1997:57-60). Tainter’s (1978:125) law of energy expenditure suggests that the grave construction, its size, and methods of disposal of the body is a direct reflection of the status of the deceased and this was a general rule within his studies of the mortuary rituals of 103 societies worldwide. Tainter’s (1978) study is a continuation of the Binford’s (1972:235) rule-based generalization regime that he developed from mortuary studies of 40 non-state societies around the world. However, both Binford (1972) and Tainter’s (1978) cross cultural studies of mortuary practices failed to consider the role of religious and philosophical beliefs in shaping the indirect portrayal of the social status of the deceased in the past (Carr 1995:122; Parker Pearson 1999:31). Furthermore, Fritsch’s (1997:57) results did not indicate any distinctive treatments in the dimensions of grave cuts with the different age and sex groups at the site.

The functional interpretations of the datasets led her to understand grave goods as personal belongings and hence she looked for status related artefacts or rank badges within the material culture from Butkara-II (Fritsch 1997:57, 59, 64). She understood graves in terms of an energy/time expenditure equation with the status of the deceased, although she did express some doubts (Fritsch 1997:57). Furthermore, she asserted that children were probably excluded from Butkara-II cemetery or were buried outside the excavation area (Fritsch 1997:57). However, this statement is not supported as the three major protohistoric cemeteries, including Butkara-II, contained distinguishable child-burials (in both inhumation and cremation burials) either buried individually or within adult graves (see chapter 6 section 6.5). However, the low numbers of the child-burials within any cemetery could have been due to a variety of reasons, including the fact that children's bones, being fragile, decompose quickly, leaving perhaps little for archaeologists, and thus are usually less represented within cemeteries (Crawford 1993:84-86). The 'non-presence' of child-burials at Butkara-II might have been a result of the archaeologists' inability to recognize grave cuts or graves without any wall constructions and containing no bones. Hence, the 'non-presence' of child-burials, as Fritsch (1997) understood it, might or might have not been intentional on the part of the living.

Fritsch's analysis of the grave's dimensions acted as the basis for my own analysis of the grave-dimension study of all the protohistoric cemeteries, however, our results and interpretations of the same datasets, from Butkara-II, are very divergent from each other (see chapter 6 Tables 6.2 and 6.3).

### 3.3.3 Natalia Vinogradova's dating framework

Vinogradova (2001) built upon what Salvatori started and it seems that she has also borrowed heavily from Müller-Karpe (1983); however, my inability to understand the German language has severely restricted my in-depth understandings of Müller-Karpe's work. In fact, Vinogradova's (2001) figures showing grave and burial styles (e.g. her Figure 3) are directly drawn from Müller-Karpe (1983) book. Müller-Karpe was a German archaeologist, who, in the traditional culture-historical style of early 20<sup>th</sup> century archaeologists, collated all the published information from both the IsMEO and UoP models for his book on the protohistoric cemeteries in northwestern Pakistan (*Jungbronzezeitlich-früheisenzeitliche Gräberfelder der Swat-Kultur in Nord-Pakistan*) which he dated to the Late Bronze and Early Iron Age. Nonetheless, it seems to be based upon typologies of the pottery styles, grave constructions and burial practices, and culture-historical/culture evolution paradigms.

Müller-Karpe approved the Ghalegai sequence as a "sound reference" and that the protohistoric graves are a "unitary feature" (Müller-Karpe 1983:74, 114 cf. Stacul 1989b:322). However, Müller-Karpe in an over-arching discussion of the protohistoric cemeteries, suggested that the Ghalegai sequence period V to VII (corresponding to the protohistoric cemeteries in the IsMEO model) should be dated from the 11<sup>th</sup> to the 8<sup>th</sup> century BC (Müller-Karpe 1983:76 cf. Vogelsang 1988:110). This is perhaps the most flawed, controversial and uneducated assessment of the protohistoric cemeteries and runs contrary to the radiocarbon measurements from the protohistoric cemeteries. Stacul criticized it on the grounds that it leaves a potential gap from 8<sup>th</sup>/7<sup>th</sup> century BC to 4<sup>th</sup> century BC in the profile of Swat valley (Stacul 1989b:322, Vogelsang 1988:110). Besides, Vinogradova (2001), Vogelsang's (1986) study (and perhaps Dittman study

(1984 cf. Voglesang 1986)) is based upon Müller-Karpe's approaches to the protohistoric cemeteries and are set within the culture-historical paradigms of the German archaeology of the early 20<sup>th</sup> century archaeology. Thus, if Vinogradova (2001) had borrowed from Müller-Karpe, which appears she did, she has based her chronological framework on wrong premises and faulty theoretical understandings.

Nevertheless, Vinogradova's (2001) chronological framework represents the maturity of almost 40 years of previous research within the IsMEO model. Her work is built upon Stacul's (1969), Silvi Antonini and Stacul's (1972), Salvatori's (1975) and Fritsch's (1997) chronological models. Her dating framework has been accepted by archaeologists working in the field within the region as the representative system of the Swat graves (e.g. Coningham and Batt 2008:94).

Vinogradova's (2001) chronological framework is, in fact, a classic example of culture-historical understandings of an archaeological culture and provides an exhaustive list of the works and opinions of the scholars working on the subject without her own analytical discussions or interpretations. She also failed to provide precise methodological details of her work with the graves and their periodization. She set out her framework, in a mark of approval for Stacul's (1969) chronological framework, by claiming that the "approach of the Italian scholar is absolutely correct as the correlation of different forms of a burial rite should be based on a relative chronology for the graveyards which had already been worked out" (Vinogradova 2001:11). This means that she approved the Stacul's (1969) extension of the Ghalegai sequence to the protohistoric cemeteries, without establishing their independent chronological links in the first place. Further, she also approved the relationship between the Ghalegai



sequence and the protohistoric cemeteries as based upon pottery typologies as a result of culture evolution understandings.

Vinogradova (2001:12) recorded the details of the superimposition of one grave over the other, from Katelai-I, Loebanr-I and Butkara-II graves, and utilized that for her study. It is likely that Vinogradova believed that the stratigraphical location of the grave was an indication of the age of the graves and buried individual, which is based upon Stacul's interpretation of the unusual concentration of graves in some parts of the Katelai-I cemetery, where he considered that superimposition of graves was not surprising, as 42 graves were constructed in a 100 square meters area (Stacul 1966a:48). However, Stacul noted that the depths of the graves as "compared with the present surface cannot afford a criterion for chronological differentiation" citing the presence of "numerous instances" of later graves cutting into the earlier graves and "reaching greater depth" than the older one (Stacul 1966a:48). Thus, Stacul did not associate the depth of the grave, even in cases of superimposition of graves, as a criterion for its relative age. However, Vinogradova (2001:12) using the same data, considered the depth of the graves as a valid criterion for her chronological model. It may be worth noting that Stacul later on changed his position and associated "the superimposition of the graves" with "different periods", meaning that he now considered the grave's relative depth as a sign of chronological patterning (Stacul 1997b:342).

Vinogradova listed all the superimposed graves (94 in all) from Katelai-I including 70 graves occurring in double layers, while 24 graves were in triple layers (Vinogradova 2001:12). Although she provided a complete list, she eventually utilized 59 of these graves in her individual grave-based chronology of the site (Vinogradova 2001:28).

Vinogradova understood graves as a “closed complex” and considered grave constructions to consist of only the lower grave-chambers (Vinogradova 2001:12-13). Thus, her understandings of the graves (read lower grave-chamber with no interpretation of the upper grave-chamber) are based upon their relative depths from the ground surface as shown by her recording of the general trends in grave depths (for the lower grave-chamber) within all the three sites (*contra* Stacul 1966a:48; Vinogradova 2001:12-13).

Vinogradova continued with Salvatori’s (1975) belief of assigning graves with iron to the period III of the graves, corresponding to the period VII of the Swat sequence (Vinogradova 2001:13). However, this association of the latest period graves with iron by Stacul (1997), Salvatori (1975) and Vinogradova (2001) seems to be largely assumed rather than proven.

### **3.4 Summary**

The IsMEO model of the protohistoric cemeteries in northwestern Pakistan is a reflection of the early and mid-20<sup>th</sup> century Italian archaeology and their approaches, primarily framed within culture-historical and Marxist understandings of archaeology. There is a strong influence of Kossinna’s and Childe’s ideas of the archaeological culture within their interpretations of the protohistoric cemeteries. The ideas, with their own histories, of the main researchers (Tucci, Stacul and Silvi Antonini) of the IsMEO model have remained valid for more than half of century, through continuous institutional patronage. The IsMEO model understand the protohistoric cemeteries in terms of the particular ethnic identifications in the past (primarily from the outside),

culture evolution based typological studies of the material culture and rigid chronological frameworks, established at the site of Ghalegai rock shelter. The deconstruction of the IsMEO chronological frameworks is a key to the understandings of the IsMEO model of the protohistoric cemeteries. The existing chronological frameworks of Stacul (1969, 1984, 1987), Salvatori (1975), Fritsch (1997) and Vinogradova (2001) are primarily set within culture-historical frameworks and are based upon a debateable stratigraphical sequence, evolutionary pottery typologies and radiocarbon measurements from Ghalegai rock shelter, which was not even clearly linked with the protohistoric cemeteries in the first place. Thus, all the chronological frameworks used the material cultures from the protohistoric cemeteries to conform to this overarching sequence and hence are not useable for understanding the chronological extent of the protohistoric cemeteries.

## **Chapter 4: The Deconstruction of the UoP Archaeological Model**

The purpose of this chapter is to deconstruct the UoP archaeological model, primarily known as the Gandhara Grave Culture, of the protohistoric cemeteries in northwestern Pakistan. This is undertaken through a critique of the building blocks of the UoP model, primarily its theoretical backgrounds and the main researchers. A key part of this is the re-analysis of the datasets used by Dani for the construction of chronologies of the protohistoric cemeteries. This involves the analysis of published and unpublished datasets from the UoP excavations in Swat and Dir valleys in the 1960s. The unpublished datasets (photographs and field drawings) comes from my field trip to the archives of the UoP in June 2009.

The UoP model is based upon Dani's interpretations of the protohistoric cemeteries in Dir and Swat valleys and emerged from his culture-historical understandings and colonial lineage. The model is constructed through circular and interchangeable interpretations of the material culture, *Rigvedic* literature and burial practices. The chronological framework for the material culture and burial practices within the protohistoric graves revolve around the concepts of migrations from the west and literary Aryans as proven facts. These lines of enquiry resulted in circular reasoning, rendering the arguments and datasets largely unintelligible.

### **4.1 Theoretical context of the UoP model**

The traditional understandings of archaeology, culture, and change in Pakistan are understood in terms of the classical and culture-historical paradigms of the 19<sup>th</sup> and 20<sup>th</sup> centuries. Most research by Pakistani archaeologists, with the main exception of

Mughal's research in the Cholistan desert (Fuller and Boivin 2002:163), is culture-historical in nature and most archaeologists largely remain conservative. In fact, Mughal also believed in the coming of new groups of people, cultural change from outside and Aryans (Mughal 1989:56, 1990:268-269).

Dani's (1968) approaches to the discovery of protohistoric cemeteries in northern Pakistan were true to the commandments of the culture-historical interpretations and methodologies. Thus, to Dani (1968:27), the discovery of protohistoric cemeteries with certain cultural traits occurring together meant that it was a culture and because it was coming from graves and was known through the grave goods, it was a "grave culture". Furthermore, he claimed, though without elaborating, that the term culture was chosen "to fit the material equipments to the hill pattern of the region" (1968:25). Perhaps this was also part of his arguments of aligning his Gandhara Grave Culture with the mythical Aryans in the past. The South Asian mountainous regions and the possibility of the people surviving the Biblical Flood were central to the developing of the Aryans theory by European scholars of the 18<sup>th</sup> century (Shaffer 1984:78).

Dani created an elaborate classification of the burials styles and artefact assemblages, mostly pottery (Dani 1968:64-65). Once he established the classification and chronological settings, he proceeded to interpret the changes and variations within material culture through the medium of migration of people from Central Asia and Iran (Dani 1968:34, 49-55; 1967:1, 3). The evidence for the migration, in fact his waves of migrations in different times, was provided by the stylistic association of mainly pottery assemblages from these protohistoric cemeteries and other protohistoric cultures, mainly from Iran (Dani 1968:49-55). As soon as he established the migrations, he went

on to create the ethnic identity of the people, Aryans, through the corroboration of archaeological cultures and literary evidence (Dani 1978b:53, 1980:132).

The discovery of similar burial styles and material culture in a different region, for example Gilgit-Baltistan, meant to Dani, a different, albeit an older, group of Aryans, who were the ancestors of the present day non-Muslim Kalasha people of Chitral, Pakistan (Dani 1998:155). Thus, Dani shaped a very complex archaeological phenomenon into the simple mathematical equation of Gandhara Grave Culture and Aryans, and he continued preaching this throughout his life (e.g. Dani and Durrani 1964; Dani 2007). However, this approach, although relevant within the then contemporary archaeology of Pakistan, was theoretically weak and it was based upon inconsistent circular arguments.

These alleged Aryans, in their movement towards the South Asia, followed the historical routes and passes of the Hindu Kush Mountains, and thus entered India through the Khyber Pass (Dani 1997:33). As the modern day Pathans happen to live within these mountain passes and wider areas, Dani (1967:1, 3) equated the social structure of the Aryans with the modern Pathans of the region, thereby enabling him to construct a link from an obscure past to the present. It might not be out of context to refer to the generally accepted belief, within many Pathan intellectuals residing in northwest Pakistan, of their ethnic and racial origins in the Aryans coming to South Asia and that there was no such debate before the British invention of the theory of Aryans in the 19<sup>th</sup> century (Sultan-i-Rome 2008b:35-62).

Most of Dani's interpretations of the graves were based upon the assumed functions of the material culture and human remains from the graves. Thus, a smaller-sized grave was always of a child even if it contained adult human remains (Rahman 1968a:71, 76). He decided that the graves were re-opened because making graves was a difficult and time consuming job, and that the later people avoided this labour by opening the earlier graves (Dani 1968:35). Dani decided that the urns were only meant to contain human remains (Dani 1968:32). He also interpreted double burials as those of family burials, possibly of wife and husband, as he felt that it was "difficult to accept" that "strangers" could be buried in one grave, and the "question of ownership" implies that the persons buried together should be of the same kinship or family (Dani 1968:35). It may be worth noting that Dani's whole concept of the chronology was mainly based on the assumptions of flexed and fractional burials coming from double/multiple graves. He made it very clear that flexed inhumations were of the first period, while fractional were of the third period and that both belonged to different sets of people (Dani 1968:27, 64-65). Thus, if his concepts of the chronological settings of the burial styles are considered in conjunction with the family burials, all his arguments of different burial practices within mixed burials as evidence of different people from different time periods are rendered invalid and self-contradictory.

The concept of interpreting archaeological phenomena from literary sources was a legacy of the colonial archaeologists to Pakistan archaeology. All the leading colonial archaeologists, such as Sir Alexander Cunningham (1814-1893), Sir Aural Stein (1862-1943), Sir John Marshall (1876-1958) and Sir Mortimer Wheeler (1890-1976), were very much involved in the identification of archaeological sites through Western and Indian texts (e.g. Cunningham 2007 [1871]; Marshall 1975 [1951]; Stein 1980 [1921];

Wheeler 1992 [1950]). These archaeologists were also interested in training and launching native archaeologists, for example the training and career building of Dani in Pakistan by Wheeler, as an instrument of legitimacy and continuity of their thoughts and practices without any change and hindrance. This has tremendously affected the concepts of archaeology and research in Pakistan in many ways; for example, the common practice of citing the oldest possible historical and archaeological references within new research articles/works is considered as the mark of approval within the traditional Pakistani archaeology. This tradition has undoubtedly contributed to the lack of academic critique of earlier research and researchers within the archaeology of Pakistan.

#### **4.2 Dani and his legacy**

Prof. Ahmad Hasan Dani (1920 – 2009) had served in various academic positions (e.g. Professor, Director of the Taxila Institute, Emeritus Professor and Distinguished National Professor) in different universities of Pakistan and was bestowed with many civilian awards by different governments and organizations for his contributions to the field of archaeology and history of South and Central Asia (Dani 2008b).

Dani was instrumental in creating awareness about archaeology through his frequent publications, talks and appearances on popular television programmes and thus enjoyed an unparalleled respect and goodwill throughout Pakistan (e.g. Dani 1966 a-e, 1968, 1988; 1999a, 2001, 2007; 2008a-b). My own career shift, from a prospective mathematician/physicist to an archaeologist was largely due to his appearance on television talking about archaeology. In fact, my interests in researching the protohistoric cemeteries in northwestern Pakistan for my PhD studies stems for my



admiration for Dani personality as an archaeologist and my understandings that Gandhara Grave Culture was his highest achievement as a researcher.

Dani was one of the very few native South Asian archaeologists who were trained by Sir Mortimer Wheeler and who served in the archaeological establishment of the government of British India. These archaeologists went on to shape the archaeologies of India and Pakistan after the partition of India in 1947. He was responsible for the establishment of the first teaching archaeology department at the University of Peshawar in 1962, and immediately embarked upon field works in northwestern Pakistan.

The research into the protohistoric cemeteries in Swat and Dir valleys was one of the first projects of the department and its staff. Dani explained these new findings to his novice staff and students and acted as the main theorist for these excavation projects. He grouped all the protohistoric cemeteries in Dir and Swat into a single archaeological culture, and called it the Gandhara Grave Culture (Dani 1968:37-55). However, due to his ill health, Dani could not be in the field except for some ‘timely checks’ (Dani 1968: acknowledgement) but he profoundly influenced his fellow researchers and students there, who later became principal investigators and administrators of different archaeological establishments in Pakistan, promoting Dani’s ideas and the UoP model as facts.

The UoP model is based upon the corpus of the excavation reports of the protohistoric cemeteries of Timargarha 1, 2, 3, Thana, and the Balambat settlement site, which were published in the Bulletin of the Department of Archaeology, University of Peshawar

(*Ancient Pakistan* 3) with Dani as its editor. Besides presenting the summary of all these excavations, Dani (1968:65, 70, 100, 213) claimed to have “thoroughly revised” the text of the excavation reports by other team members and have “reclassified the graves” as an editor. Without carrying out any further cemetery research, Dani continued to popularize his first interpretations of the protohistoric cemeteries throughout his professional career (e.g. Dani 1968, 1978a-b, 1980, 1988, 1997, 1998, 2007, 2008a), thereby granting the status of an archaeological tradition to his ideas and the UoP model within the archaeology of Pakistan.

### **4.3 Dani and his Research Pedigree**

Dani’s understandings of the protohistoric cemeteries as an archaeological phenomenon were hugely influenced by four personalities. These were Sir Mortimer Wheeler (as a mentor) Field Marshall Muhammad Ayub Khan (as a politician), Dr. Fazal Ahmed Khan (or Dr. F. A. Khan as a senior colleague) and Chiara Silvi Antonini (as a contemporary archaeologist with the IsMEO team).

Sir Mortimer Wheeler remained the Director General of the Archaeological Survey of India from 1944 to 1948. Beside his brilliant excavations, during his tenure as Director General, Wheeler was responsible for the establishment of the ‘Training School in Field Archaeology at Taxila’, the development of archaeology in universities across India and the publication of a now defunct journal, *Ancient India* (Paddaya 1995:134). The field school at Taxila has been claimed as the “first true training-school in world archaeology” and as a great achievement of Wheeler (Hawkes 1982:241-243). Dani was one of his trainees at this field school, and later in his life, as head of the

Department of Archaeology, University of Peshawar, named the bulletin of the department '*Ancient Pakistan*'.

The rise of Hindu nationalism in India in the 1980s meant that most of the colonial theories were abandoned in favour of the indigenous cultural development of India (Bernbeck and Pollock 1996; Trigger 2009:270). However, no such movement, with conflict of interests with the colonial theories of the past, exists in Pakistan, which ensures the continuity and legacy of the colonial traditional archaeology in Pakistan until now. In fact, theories of migrations and cultural exchanges suited the state, and the academia, in the creation of an identity for Pakistan as an Islamic country with links to Central Asia, Iran and Middle East, rather than east, to India. Some academics even voiced concerns over the adaptation of the name of India by the Congress Government after the partition, as they consider it the right of Pakistan to call herself India based upon the proof of its ancient origins, the Indus Valley Civilization (A. Ali 1951:197).

Wheeler developed the Aryan invasion theory, the resultant destruction of the Indus Valley Civilization and entrenchment of it, as an accepted fact within South Asian Archaeology (e.g. Wheeler 1992 [1950]:32-34; 1968:131-2). Thus, Wheeler became one of the first archaeologists who lifted the literary Aryans of the *Rigveda* to an acclaimed position of the conquerors of the Indus Valley Civilization, and assigned to the gods of the Aryans the destruction of the Indus cities, living within their large citadels (Wheeler 1947:82). Gordon (1958) was probably the first archaeological researcher to have directed the archaeological search for Aryans towards Iran, Central Asia and beyond. However, due to the absence of archaeological evidence, Wheeler

(1966:78; 1992 [1950]:32) increasingly got disillusioned with his own Aryan invasion theory of India and came to see the theory as mere “guesswork”.

The Aryan invasion theory, based upon the “conflict for resources and hegemony”, was consistent with Wheeler’s experiences in the World War I and II (Shaffer and Lichtenstein 2005:80). Wheeler linked the end of the Indus Valley Civilization with Aryan invasion during the mid-2<sup>nd</sup> millennium BC, which became “received wisdom guiding much of the discussion about the Pre- and Early Historic periods of South Asia” till 1980 (Shaffer and Lichtenstein 2005:81). The 18<sup>th</sup>-19<sup>th</sup> century Aryan race theory, a mythical and linguistic story, was consistent with British colonial interests (Lal 2005:61; Leopold 1974). It was designed to show that the British rulers and their Indians subjects (the upper caste Hindus (particularly Brahmins)) are equal and belong to the same race (Leopold 1974:580, 589).

The Minister of Education of the Government of Pakistan appointed Wheeler as a part-time advisor on archaeology for three years, 1948-1950 ((Hawkes 1982: 261). During this time, he wrote a book, *5000 Years of Pakistan: An Archaeological Outline*, in 1950; whereupon he conferred on the ideology of the nascent state of Pakistan, longevity and an existence of five thousand years. It has been suggested that Dani had claimed to have written part of the book, a section on East Pakistan (Abid 2009:12). This book was the first academic attempt to define, the obvious, cultural, linguistic and racial differences within the two Pakistans; East and West Pakistan.

This book was published by the Education Ministry of Pakistan, which illustrated the commitment of the state to the active creation of a national identity, even if it was to be

based upon myths, such as the Aryan invasion theory. The development of education, the promotion of national, albeit Islamic, identity and loyalty to the citizenship of Pakistan and the sponsorship of archaeology, were considered as the top priorities of the Education Ministry (Rahman 1953:3-15). The conformity of the outsiders, or invaders, coming to South Asia with, the newly formed Pakistan's Islamic identity (Islam being from outside South Asia) meant that the Aryan invasion theory received a state patronage. The propagation of the Aryan invasion and the Islamic identity became an essential part of the curricula at all levels of education in Pakistan. Furthermore, with the publication of Wheeler's book, the archaeology of a new nation was born, and the involvement of Wheeler meant that this new national archaeology was a continuation of the colonial archaeology in Pakistan. Although all the British colonial archaeologists could have not been conscious of or wilfully interpreted archaeology to suit the State or her policies, the State sponsored British archaeology of India (linked with ancient texts, e.g. *Rigveda*) was meant as a tool to justify the colonialism of South Asia (Leopold 1974). In fact, some of the colonial researchers are seen with bias, particularly by archaeologists aligned with Indian nationalism, and as "paternalists at their best and racists at their worst" (Chakrabarti 1997: 208; 2003: 190-193).

As an ardent supporter of archaeology, Field Marshall Ayub Khan, the first military dictator of Pakistan (1958 – 1969), established the Department of Archaeology at the University of Peshawar in 1962 and brought Dani from Dhaka University, East Pakistan, to run it. Khan inaugurated the Swat Museum in 1963 to display archaeological artefacts from the Wali of Swat's personal collection and those excavated by the IsMEO team in the Swat valley (Olivieri 2006:33). Around the same time, Ayub Khan justified the shifting of the capital city of Pakistan from Karachi to

Islamabad by referring to the Palaeolithic and Buddhist past of the region of Islamabad, quoting Sir Mortimer Wheeler; this constituted the first political advocacy of archaeology in Pakistan's history (Khan 1967:97). In reality, he used archaeology as cover for bringing the new capital of Pakistan to the borders of his ancestral village (Rehana village, Haripur District).

Ayub Khan (1967:186) claimed that, in 1954, "in few hours" he wrote down the basic structure of the 1956 constitution of Pakistan. There were two salient features of this document with huge consequences in terms of national identity and future conflicts within then the state of Pakistan and her society. This document declared Pakistan an Islamic Republic and envisaged Pakistan as two, racially and culturally distinct, divisions of West Pakistan (present day Pakistan) and East Pakistan (present day Bangladesh). Islam as the centre of the Pakistani culture still persists within the policies of Government of Pakistan (e.g. Cultural policy); however, these distinctions constructed through the perceived differences in culture (and language) are blamed for the division of Pakistan in 1971 and is remembered as a bad example, only to be countered by the promotion of democracy and religious harmony (see Ministry of Culture, Government of Pakistan 2012:10).

Ayub Khan decried "regional identities" and wanted a "national identity" for the state of Pakistan (Khan 1967:195,197). As his top priority, he wanted the education system to produce "trained and disciplined men and women" and the higher education system to "build itself into a unified community professing a common ideology" (Khan 1967:98-102).

Using the protohistoric cemeteries, Dani (1968) tried to create a past that was relevant and current to the administrative division of the then West Pakistan. This line of thinking is still popular with many of the South Asian archaeologists, who understand archaeology in terms of modern state boundaries (Fuller and Boivin 2002:160). Dani's (1968:77) concept of the ethnic identification of Aryans was (probably) politically motivated to provide depth and legitimacy to the concept of the division of Pakistan on ethnic lines and to the state-sponsored homogeneity and identity drive, an identity that had to be different from the Hindu identity of India and had to have history behind it. Furthermore, this was also confounded by the fact that he was part of, and affected by, the mass migration on the eve of partition of India and Pakistan in 1947 as a consequence of the "Two Nation Theory" (Ahmed 2002 [1997]:142,180). This theory was founded on the newly-found logic of segregation of the Hindu and Muslim communities based upon their religions (Ahmed 2002 [1997]:110). This was a predominantly Muslim stratagem in their freedom struggle from the British colonial rule and an identity ploy in response to the Hindu majority. This theory inspired the Muslims of India in their struggle for an independent Islamic country, Pakistan, rather than living in the united India, and after independence forced the Muslims of Pakistan to look to the west (Central Asia, Iran and Middle East) rather than to the east (India) for their religious and historic connections. This almost echoes Wheeler's (1992 [1950]) theory of the Aryan invasion and thus, there is no conflict within the Muslim identity of the Pakistan and the Aryan invasion theory.

Dani (1968b), in an overtly political move, dedicated his booklet, "*Gandhara Art of Pakistan*", to "Towards Progress of Archaeology in Pakistan during "Decade of Reforms" (1958 – 1968)", a clear reference to the seizure of power by Ayub Khan in

1958 and the government mantra of the era of political and economic reforms then followed. Thus, Dani's views of archaeological progress were clearly politically motivated and he used archaeology to legitimize an essentially illegal usurper and his decade long autocratic rule, and the ideology and political agendas of his government.

Dr. F. A. Khan (1965:13) linked archaeological discoveries with "the antiquity of Pakistan", thereby becoming the first native archaeologist to try to create an identity through archaeology for the new state of Pakistan. Dr. Khan was also closely linked with Wheeler and was instrumental in bringing him back to resume his research at the major Indus Valley Civilization site of Mohenjodaro (the corner stone of Wheeler's story of the Aryan invasion) in 1958 (Olivieri 2006:25). Dr. Khan was also closely involved with the IsMEO team, especially Tucci, working in the Swat valley (Olivieri 2006:28). He accompanied Tucci on his first visit to Swat as the representative of the Department of Archaeology, Government of Pakistan and considered Tucci the "rediscoverer of the ancient Swat" (Khan 1997 [1984]:337-340). Dr. Khan was also responsible for the excavation of the protohistoric site of Kot Diji in Sindh province of Pakistan, which showed continuity from Pre-Indus Valley cultures to the Indus Valley Civilization. He established the attributes of this Pre-Indus phase, and named it the Kot Dijian Culture (Khan 1965). It was a major milestone for any native archaeologist, which made him an instant icon within the archaeology of Pakistan. Thus, I may suggest that Dr. Khan's (1964) concepts of culture and Aryan invasions were borrowed from Childe (1929) and Wheeler (1992 [1950]) ideas respectively. Furthermore, his tendency to seek ethnic identifications for the archaeological cultures and hypothetical groups of people from the past was probably linked with his associations with



prominent scholars, e.g. Tucci, who argued for these in their explanations of the archaeological culture.

The UoP excavations of protohistoric cemeteries in Dir and Swat valleys, as part of a five year plan for the department (1963-1968), ran into financial troubles soon after its initiation. Dr. Khan (the first Director General of the Department of Archaeology and Museums, Government of Pakistan (Olivieri 2006:4)) agreed to sanction funds and assigned their staff members for the project. Khan made frequent visits to the excavations and advised on “many knotty problems” arising from the excavations of the protohistoric cemeteries (Dani 1968: acknowledgments). Dani’s ideas of the Aryans in the northwestern region of Pakistan, their relationships with passes, the chronological gap between the two urbanization and ‘culture’ were influenced by Dr. Khan’s imagination and concepts (Dani 1968: 49-55, 1996; 1997:33; Khan 1964:3-11). It thus seems possible that young Dani considered it fashionable to align with Dr. Khan’s ideas as a senior archaeologist and the highest ranking government representative in archaeology. This was probably meant to impress Dr. Khan and to get recognition and continuation of funding for his research projects in northwestern Pakistan.

The first preliminary publication of the Italian Archaeological Mission to Pakistan by Chiara Silvi Antonini in 1963 laid the foundation of the understandings of the protohistoric cemeteries both within the IsMEO and UoP models (Silvi Antonini 1963). Despite Dani’s (1966d; 1968a) public posturing against her interpretations, most of his understandings of the protohistoric cemeteries were either straight borrowing or an extension of her ideas. Thus, his major categories of the burial styles, flexed inhumation, fractional or exposed burials and cremation in urns, were her ideas. The

classification of pottery in grey and red wares, and its association with the northern Iranian Tepe Hissar pottery were her ideas. The structure of the graves, the location of the artefacts within graves and the concept of dominant orientations of the graves, were all absorbed in Dani's explanation of the graves. Silvi Antonini (1963:15) also promoted the idea that the double burials may represent a custom of sacrifice, which Dani associated with historical Hindu tradition of the ultimate sacrifice of the wife over her husband's pyre, the tradition of *Sati* (Dani 1968: 32-33). The description of *Sati* has always been a favourite subject of British "colonial administrators" and a popular imagination of the Hindu India (Biddulph 1971 [1880]:114; Sinopoli 2006:676). Although Dani did not agree with her assertion of calling the protohistoric cemeteries as "pre-Buddhist", he made sure that he dated these graves before the arrival of Buddhism into the region.

#### **4.4 Contexts of the protohistoric cemeteries and UoP model**

Two of the three principal sites of the Gandhara Grave Culture in Dir, Timargarha 1 and 2, are located on the left (eastern) side of the Panjkora River near the village of Timargarha in Dir Valley, while Timargarha 3 is located on the right (western) side of the river, near Balambat settlement (Dani 1968:pl. 1, Fig. 1). The first two are situated near the major modern road linking Dir with Chitral, Swat and the Vale of Peshawar, while the site of Timargarha 3 is situated on a road linking Dir with Bajaur Tribal Agency (Dani 1968: plate 1, Fig. 1). Dani considered these two roads as trade routes linked with Alexander the Great's invasion of northwest Pakistan (Dani 1978b:43-4, 1980:122).

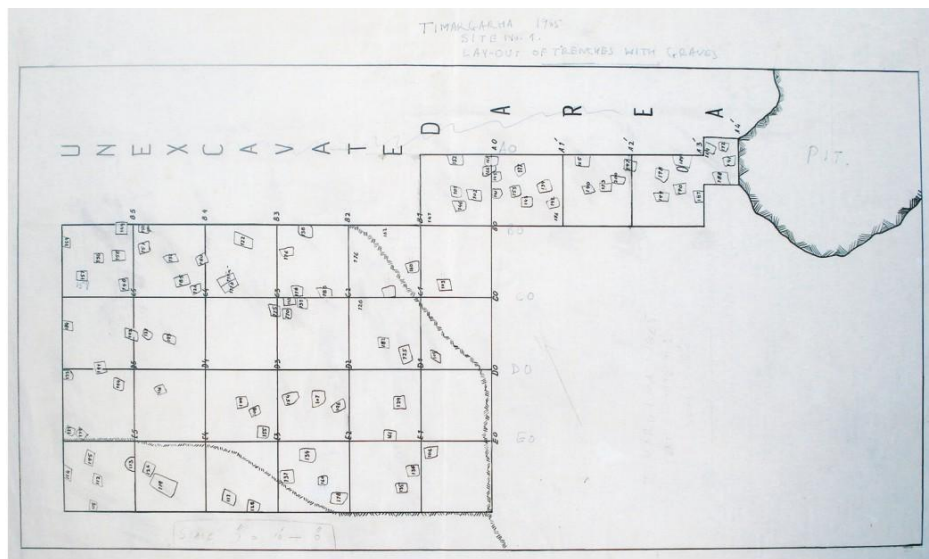
The description concerning the location of the Timargarha 1 and 2 cemeteries are not entirely clear as Dani (1968:60, 95) explained their locations in relation to localized non-geographical and geographical features. Thus, the site of Timargarha 1 is explained through the location of a 'pit' excavated by villagers in the middle of the site, while Timargarha 2 is described in relation to a seasonal torrent (locally called a *Khwar*), of which there are many near the village. The location of Timargarha 1 in relation with the pit resulted in confusion over the directions of the trenches laid in 1964 and 1965 seasons. Consequently, the north arrows in the published drawings (Dani 1968:Figs. 2 and 12) of the site are at right angles with each other in relation to the 'pit' and the orientation of the trenches are in opposite directions, hence it is difficult to establish the locations of 1964 and 1965 seasons' trenches through the text, drawings and using the 'pit' as the locus.

In his explanation of the site of Timargarha 1 Dani said that the excavation trenches were laid in cardinal directions (Dani 1968:61). However, if we take into account the orientation of the north arrow in the published figures, the trenches were rather oriented in ordinal directions (Dani 1968: Figs. 2 and 12). Thus, his trenches were not oriented in the N-S and E-W but were rather in ENE-WSW and WNW-ESE directions. This cast doubts over all the orientations of the graves and skeletons either published or unpublished, which in turn makes it impossible to work out the original orientation of the graves using either the published drawings or unpublished sketches. This may mean that all of the Dani's interpretations based on orientations are wrong. Thus, it has become difficult to consider even the most basic data (that is pencil sketches from field/excavation) and ideas and interpretations of the graves on the basis of their

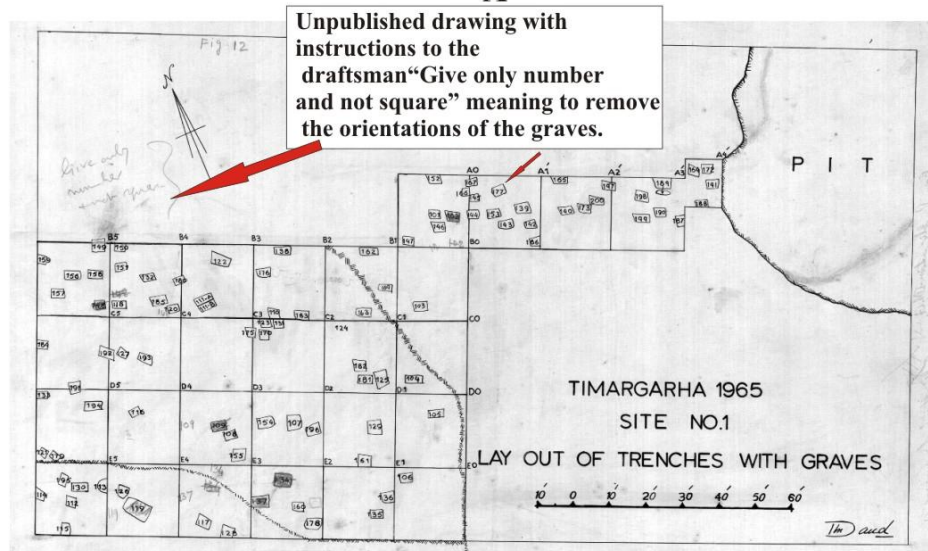
directions at the site itself as accurate. Furthermore, there is evidence of masking or omission of the data from the graves during the process of publication, for example the removal of the orientation of the graves from the published figure 12 (Fig. 4.1)

Dani claimed that there were actual stratigraphical differences between various burial practices, complete burials were stratigraphically earlier and that the depth of the grave was an indicator of its relative age within his excavations at Timargarha (Dani 1968:64-65, 99). However, this claim was not verifiable at any of the four cemeteries he used for the UoP model; in fact the photographic data from his excavations contradict this (e.g. Fig. 4.2).

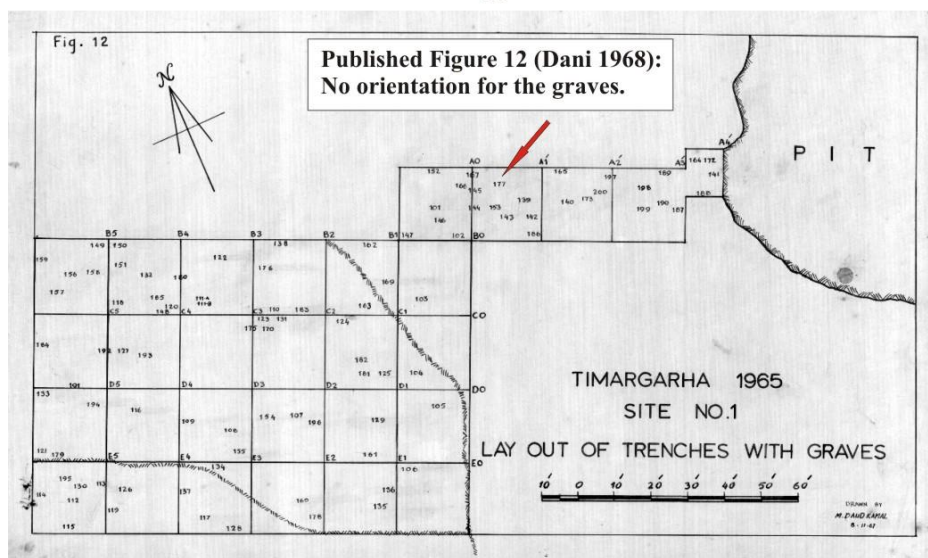
Dani's grave sites were mainly located in agricultural fields and on high sloping grounds, meaning that the ground surface was probably extensively modified due to agricultural and natural erosions. Dani's arguments for differences in stratigraphical location as proof of the different periods were based on the principle of the deeper the deposits the earlier the date. However, graves near the surface could have been the result of human choice and agency but could also have been the result of differential erosion processes at the site. Further, the difference in depths of the graves might have been related to social, economic or ideological factors connected to the living and/or the dead in each particular burial. These potentially undermine Dani's use of relative depth of the grave chamber from the ground for chronology, at the site of Timargarha 1 in particular and UoP model in general.



A

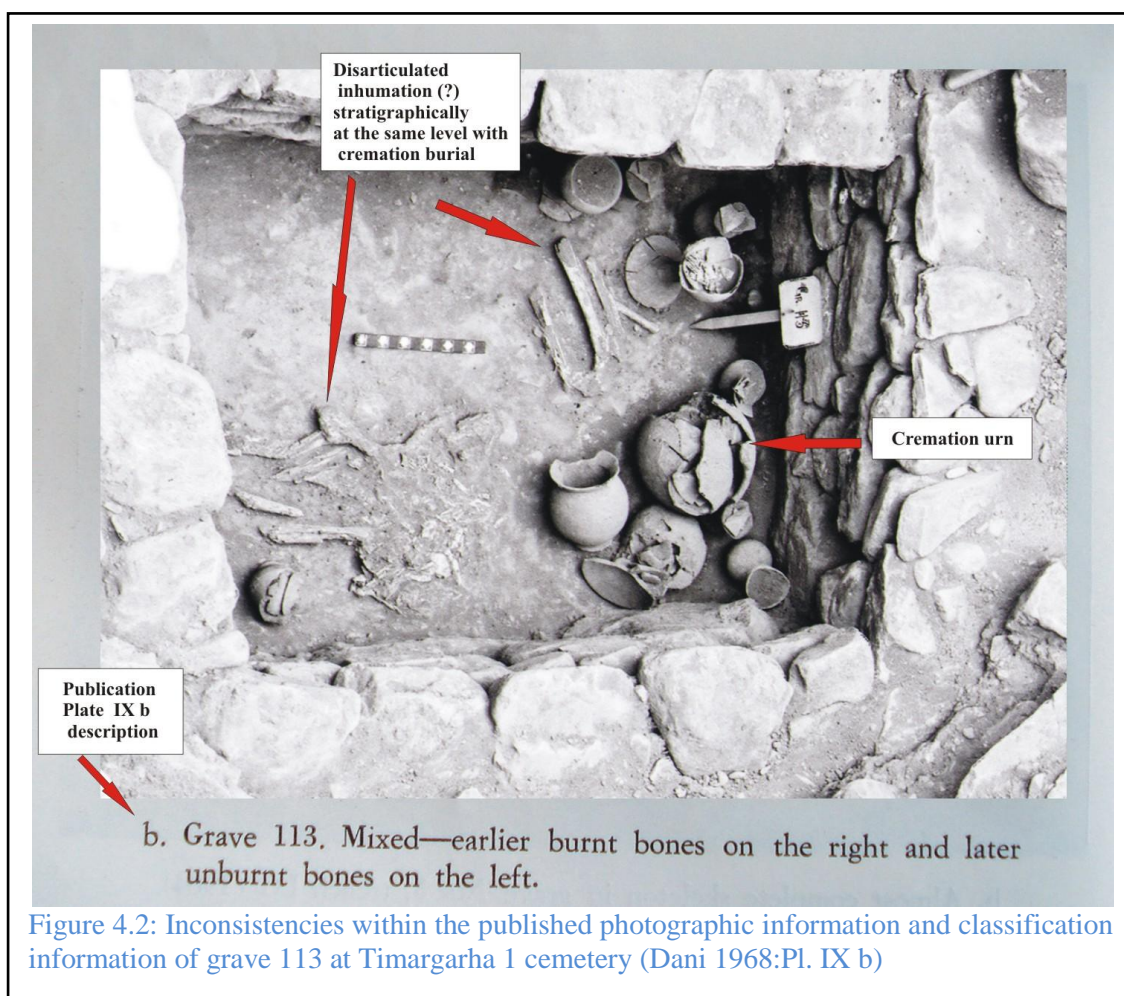


B



C

Figure 4.1: Systematic masking and/or omission of information within unpublished (A, B) and published (C) drawings at Timargarha 1 cemetery (Dani 1968)



Dani put considerable emphasis on the nature of the soils within the upper grave-chamber and the lower grave-chamber. It was recorded that the upper grave-chamber was filled with ‘rammed earth’, while the lower grave-chamber contained ‘loose soil’ with the sealing composed of dozens of small and medium-sized stones at Timargarha 1 (Dani 1968:62, Figs. 4-10). Physically, it would have not been possible, as the loose earth could have not been able to support this large number of stones in place under tons of rammed earth. In fact, the loose soil could have been the result of the slow process of fine soil filtering through the stone sealing over the years (if the graves were covered), and the lower grave-chamber was probably only used for human remains and associated material culture, and was probably never filled intentionally with loose soil



(Silvi Antonini and Stacul 1972:11). This large number of stones could have been part of a stone monument constructed over the grave (Fig. 4.3).



Figure 4.3: Upper stone construction/monument of grave 160 at Timargarha 1 cemetery (Dani 1968)

Dani considered differences in stratigraphy and burial traditions as interchangeable and corroborating each other, and/or, perhaps, differences in burial practices were more important to him, than differences in stratigraphy. Thus, based upon Mr. Sharif's (the excavator of the Timargarha 2 cemetery) field report, Dani noted that there were no stratigraphical differences to suggest any chronological division of burial practices at Timargarha 2 (Dani 1968:99). However, citing disturbed graves (217 and 240) with a fractional burial in the middle and cremation burial in a corner at a lower level, he established that there was chronological patterning within the burial practices at the site and that the cremation burial was earlier than the fractional burial. There are evidence, for example grave 113 at Timargarha 1 (Fig. 4.2) with cremation and disarticulated human remains at the same level within the lower grave-chamber.

## 4.5 Deconstruction of the UoP chronological framework

The periodization and dating of the Gandhara Grave Culture presented a difficult and complex phenomenon to Dani and he tried to approach it from different directions and using multiple tools and sources of information, such as radiocarbon dates, burial practices, pottery comparison and ancient literature (Dani 1968:36-55). From these multiple sources, he dated Period-I of Timargarha 1 from 16<sup>th</sup> to 13<sup>th</sup> century BC, but very few burials belonged to this period. Period II and III were dated 12<sup>th</sup> to 10<sup>th</sup> century BC and 9<sup>th</sup> to 6<sup>th</sup> century BC (Dani 1968:48). Dani did not associate period IV, dated to 6<sup>th</sup> to the 3<sup>rd</sup> quarter of the 4<sup>th</sup> century BC (corresponding to Alexander the Great invasion of the region), with the protohistoric cemeteries but recorded it only at the Balambat settlement site (Dani 1968:48, 240). However, without providing any justification twenty years later, he dated period I from 16<sup>th</sup> to 14<sup>th</sup> century BC, period II from 14<sup>th</sup> to 11<sup>th</sup> century BC and period III from 10<sup>th</sup> – 9<sup>th</sup> to 4<sup>th</sup> – 3<sup>rd</sup> century BC (Dani 1988:70, 73). In 1992, Dani again revised his dating of his three periods to 1700 to 1400 BC, 1400 to 1000 BC and 1000 to 500 BC respectively (Dani 1992:397). Thus, this fluidity of Dani's chronological system (without the provision of data to back it up) for his Gandhara Grave Culture makes it imperative to investigate his sources of information.

### 4.5.1 Radiocarbon Measurements

The two un-calibrated radiocarbon dates of 3380±60 and 2805± 60 BP (both from Grave 101 at Timargarha 1 cemetery) provided Dani with an excellent opportunity to work out the chronology of his Gandhara Grave Culture (Dani 1968:37).

“The burial inside the grave was most revealing. Underneath was a complete burial of an individual in flexed position with the skull facing

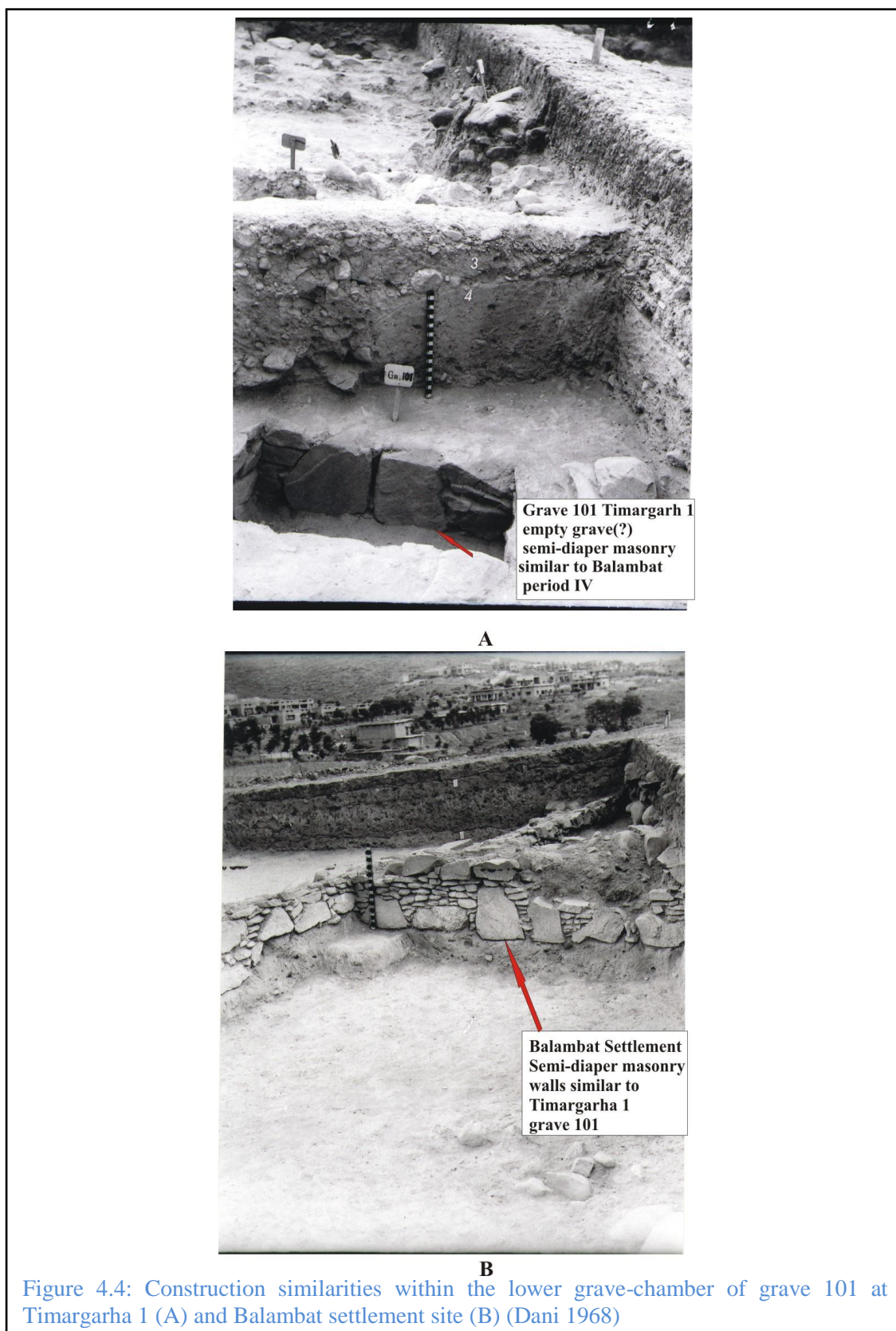


north. Besides this individual, there was a double burial of fractional type – bones of two individuals lying in disorderly fashion. Obviously this double burial is of a later period. ... Though the grave has not produced any stratigraphic evidence to differentiate chronologically the two types of burials, the way in which the dead has been disposed one on top of the other, suggests a chronological difference between the two rituals” (Rahman 1968a:82).

There is no information about the context of the bone samples for radiocarbon measurements within the grave and we do not know which bone sample came from which skeleton inside the grave 101 (Rahman 1968a:82). In addition, no photograph or drawing of the most important grave 101 was published. However, the only unpublished photograph from the UoP archives of this grave suggests that rather than having three skeletons within it, it is in fact nearly empty, although the angle of the photograph does not allow a full view of the grave, but enough to suggest that it was probably empty (Fig. 4.4 A). There is no record to suggest or confirm if this particular photograph was taken after the removal of the human remains from the grave and it was not actually an empty grave; however, based upon my exposure with the archives of the UoP, I can suggest that there was no tradition within the UoP of taking photographs of the empty/emptied graves after excavations. Furthermore, the un-published pencil sketches from actual excavations suggest a different orientation (WNW-ESE) rather than the suggested W-E orientation noted in the description for grave 101 (Rahman 1968:82).

The lower grave-chamber of grave 101 has, in the un-published photograph, a rough semi-diaper masonry wall (of roughly cut square shaped stones) construction (Fig. 4.4 A). Dani associated these types of walls at the settlement of Balambat with period IV

and ascribed the construction style and related material culture to the presence of Achaemenids in the region (Dani 1968:48, 240; Fig. 4.4 B).



Dani (1968:37, 48) has suggested that the end of the Gandhara Grave Culture (period III) corresponded with the coming of the Achaemenids into northwestern Pakistan. Diaper masonry constructions within Taxila valley have survived until the end of 2<sup>nd</sup> century AD (Behrendt 2003:260). If Dani's correlation between the architectural style and Achaemenids presence is correct, it implies that the lower grave-chamber was constructed after period III of the Gandhara Grave Culture. This means that this grave could not have had human remains in their original context from the middle of the 2<sup>nd</sup> millennium BC, as suggested by the radiocarbon dates.

Thus, I may suggest that either Dani's dating of the stone masonry was not accurate or, the human bones for dating were not from this grave or that during the process of sampling for radiocarbon dates, the original contexts of the samples were lost. In addition to the lost context information, the laboratory identification for these samples was also not provided in the publication and thus despite my extensive communications with the Heidelberg University laboratories, it was impossible to corroborate their contexts from the dating laboratory, who mandatorily keep the context information.

Even if we accept that these radiocarbon dates were from a secure context, these two radiocarbon dates should have not been used for fixing the chronological sequences at the site, but should have been more carefully used as an indicator of the probable age of a part of a site or rather a grave. In addition, even if accurate for Timargarha 1, it is difficult to then extend two radiocarbon date estimates across other sites in the region, let alone the whole of Dani's Gandhara Grave Culture. Further, the re-calibrated radiocarbon measurements from Timargarha 1, 1870 – 1520 cal BC and 1160 – 830 cal

BC, differ widely from Dani's presumed dates (Dani 1968:37, see chapter 7 section 7.1).

#### **4.5.2 Graves and Burial Practices**

Within the UoP model, multiple, albeit overlapping, schemes were employed in different protohistoric cemeteries, however, the overarching three chronological periods corresponding to three burial practices (i.e. period I for flexed inhumation, periods II and III for cremation and fractional burials respectively) was based upon 1965 season excavation report of Timargarha 1 cemetery in Dir valley (Dani 1968:64-65; Rahman 1968a). But, even at Timargarha 1 cemetery, Dani came up with two classification systems (Dani 1968:63-65). First, Dani classified the graves into four types; single individual, multiple, children's and mixed or disturbed burials (Dani 1968:64). Secondly, complete flexed burials, cremated burials, and fractional and multiple burials made up the chronological based classifications (Dani 1968:64-65).

Dani classified Timargarha 2 graves into two types: type 1 being the earlier cremation burials (urn burials); and type 2 the later inhumations of one or more individuals (Dani 1968:99). However, in his detailed description of the graves, Dani classified three groups of graves with the first group being the mixed burials, followed by cremation (urn) burials, and fractional burials (Dani 1968:100).

There is no information about the classification of the graves from Timargarha 3. In fact no proper burial was reported from this site (Dani 1968:113). All the twenty reported graves at Timargarha 3 except one had circular lower grave-chambers. As no human remains were reported from Timargarha 3 and coupled with the fact that these

graves were located near the settlement site of Balambat, these might possibly have been intended as storage or rubbish pits rather than graves (see Figs. 4.5 and 4.6). Interestingly, Dani (1968:114-117) reported the alleged grave cuts as ‘pits’ rather than graves; however, he included them within his overall understanding of his Gandhara Grave Culture. In close proximity of the Timargarha 3 site, Dani reported “some pit structures” that were destroyed by the villagers before they could excavate (Dani 1968:47, 260 Fig. 62). Dani also reported a “few pointed butt stone axes and ring stones” from Balambat settlement which he thought to have survived from the Neolithic settlement before the appearance of the “grave people” at the site (Dani 1968:47).

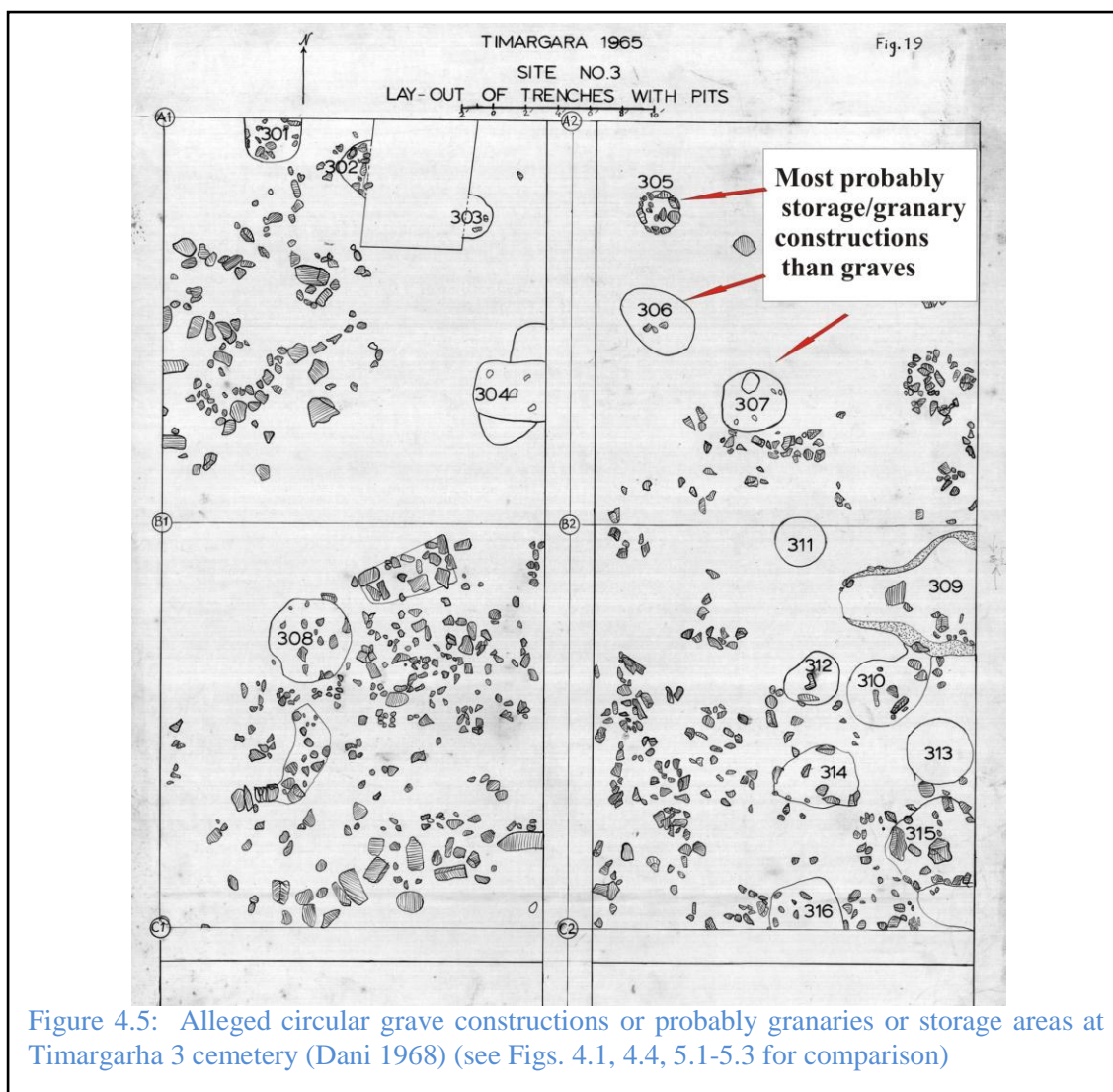


Figure 4.5: Alleged circular grave constructions or probably granaries or storage areas at Timargarha 3 cemetery (Dani 1968) (see Figs. 4.1, 4.4, 5.1-5.3 for comparison)





A



B

Figure 4.6: Alleged circular grave constructions (A, B) or probably granaries or storage areas at Timargarha 3 cemetery (Dani 1968), (see Figs. 4.1, 4.3- 4.4 for comparison)

The existence of the Neolithic 'dwellings' (interpreted by some as granaries or storage pits) at Loebanr-III and Kalako-deray in Swat and Burzahom in Kashmir are well

documented (Coningham and Sutherland 1998; Stacul 1977b, 1993, 1994, 1995, 1997a, 1997c; Ghosh 1964, 1996[1961],). Coningham and Sutherland (1998:183) associated these pits in Swat and Kashmir with the subsistence strategies of transhumant groups which Young (2003) and Young et al. (2008) developed into an elaborate model, strongly linked to the rise of second urbanization in the region. Thus, it is quite possible that Dani's 'pits' at Timargarha 3 were associated with the nearby settlement of Balambat, and/or linked with undocumented Neolithic/Chalcolithic or subsequent groups of people at the site, who might have practiced transhumance.

At Thana cemetery in Swat valley, Durrani, the principal investigator, distinguished three types of burials based upon the burial practices (Durrani 1968b:214). Durrani's type A consisted of complete inhumation burials along with funerary urns; fractional burials after exposure constituted type B; while type C consisted of cremation (urn) burials (Durrani 1968b:214). He noted that in at least one instance, burials of type A were stratigraphically overlying type C burials (Durrani 1968b:215; *contra* Rahman 1968a:82). This is contrary to Dani's (1968:64-65) theory of associating particular burial practices with chronological periods. Durrani (1968b:227-8) dated Thana type A and B graves to periods II and III of his Timargarha (probably Timargarha 1) dating sequence respectively and suggested that type A and B graves of Thana have the burial practices that Dani associated with periods I and II of the Timargarha 1 respectively (Dani 1968:47; Durrani 1968b:227-8). The existence of these later than period III cremation burials at Thana are not reflected within the general periodization of Dani's Gandhara Grave Culture (Dani 1968:37, 47-48). This scenario contradicts and cancels all of Dani's arguments of periodization based upon distinctive burial practices.

In addition, Dani's use of the three distinctive burial practices as markers for his three chronological periods of the Gandhara Grave Culture was a sudden innovation and was not consistent with his past interpretations. In 1966, Dani reported complete inhumations in period I, complete inhumations, cremation and urn burials in period II and complete inhumations, cremation and urn burials along with fractional burials in period III (Dani 1966e, 1968a:108). However, in his major work on the Gandhara Grave Culture, Dani did not refer to it and rather came up with the concept of three periods with three different burial practices (Dani 1968:37, 64-65). In fact, Dani (1968:42) suggested that cremation burial practice evolved from complete flexed inhumations and that complete flexed inhumations continued in period II and III as well. However, he did not reflect upon it in his general chronological framework, as it was not fitting in to his narrative of Aryan invasions.

I may suggest that Dani did not utilize the full extent of the data available for his construction of the chronological framework of his Gandhara Grave Culture and he intentionally avoided information that could jeopardize his preconceived ideas. Further, Dani's grave classifications and their internal association were not consistent even within the UoP excavated sites at Timargarha 1, 2 and Thana. Through the application of preconceived ideas without corresponding data, Dani's chronological generalization has rendered chronological datasets from individual sites as irrelevant (e.g. Timargarha 1 and Thana cemeteries) even to the concerned sites themselves so much so that we cannot utilize it now for getting a general sense of the chronological patterning within each of the UoP excavated cemeteries. Thus, Dani's three periods' chronological system with three different burial practices is an over-simplification of a rather complicated story of the burial practices within his different chronological periods and



that it is not supported by contextual evidences or even by his earlier research and that he was not consistent in his approaches to deal with the chronological periodization of his Gandhara Grave Culture (Dani 1966e, 1968:64-65).

#### **4.5.3 Pottery**

Pottery was the most common group of artefacts within the graves. Without going into the details of pottery typologies, I will only comment on some of the obvious methodological discrepancies, in order to understand some of the key problems in the way these typologies were used by Dani in the periodization of his Gandhara Grave Culture. Dani's classification of the pottery assemblages within the protohistoric cemeteries was based upon the periodization and classification of the graves (Dani 1968:121-2). As discussed above, Dani's periodization of the graves was based upon the perceived differences in burial practices, meaning a distinctive burial practice corresponding to each of the three chronological periods. Thus, pottery was not an independent media to authenticate the different chronological periods, but was entrenched within Dani's circular arguments (Dani 1968:121).

“... [A]ttempt is made to distinguish the varieties of pots belonging to the complete burials from those of the cremated and fractional burials. Mixed burials are then taken up and finally a contrast is made between the pottery types of one ritual from those of the others. This process has enabled us to confirm the evidence reached by the analysis of the excavation” (Dani 1968:121).

“... [C]remation is a later growth from the earlier practice, well documented in the evolution of the pot forms” (Dani 1968:47).

Thus, I may argue that Dani intentionally classified and manipulated pottery assemblages from his Gandhara Grave Culture cemeteries in such way as to confirm his

ideas of the burial practices and these circular arguments and classifications were never meant to give an idea of the chronological development of the protohistoric cemeteries. Furthermore, this also shows that Dani's understandings of the chronological patterning within the pottery assemblage were also based upon culture evolution understandings of the archaeology. He believed that the "gradual evolution" of the pot forms show the adaptation of the cremation burial practices by the period II people from flexed inhumation in period I (Dani 1968:42).

In addition, in the absence of secure stratigraphical data, it would be impossible to differentiate and associate pottery assemblages with conviction with either different burial practices or chronological periods, especially if it is shown that the whole classification of Dani for the graves could be questioned. Hence, it might not be feasible to use Dani's pottery typology as chronological markers for Timargarha and Thana, and other protohistoric cemeteries.

Dani (1968:42-43) put considerable emphasis on the similarities of form and technique of the pottery assemblages with those from northern Iranian sites, such as Tepe Hissar, Shah Tepe and Turang Tepe; particularly with Tepe Hissar periods IIA, IIB and IIIC, mainly on the premise that Tepe Hissar and the Gandhara Grave Culture belonged to the same cultural horizon. It may be of interest that the minimum direct distance between Timargarha, Dir (where Dani was working) and Tepe Hissar (where association was sought) is not less than 1500 kilometres and is suggestive of how far Dani could stretch his arguments to show a relationship (based on the movement of people) between two very remote archaeological sites (Mortazvi 2005:107). The radiocarbon dates (from Bovington et al. (1974:198) with my recalibrations with OxCal 4.1 software) for the

Hissar II from Tureng Tepe are  $4325 \pm 250$  BP (3620 – 2290 cal BC),  $4090 \pm 250$  BP (3620 – 1970 cal BC) and for Hissar IIIB is  $3970 \pm 200$  BP (3040 – 1940 cal BC). Similarly the Hissar IIIB date of  $3966 \pm 242$  BP (3260 – 1880 cal BC) and Altin Depe Hissar IIIB date of  $4025 \pm 100$  BP (2870 – 2250 cal BC). Thus, it is clear that most of the Tepe Hissar cultures, as cited by Dani were much earlier than his assumed chronological horizon, but it conformed well with his theoretical perspective of the movement of people from Iran and Central Asia to Pakistan (Dani 1968:42-45). Dani's work of creating chronological associations with Iranian cultures was based upon pottery typologies and these later radiocarbon dates exposed the extent of his stretching.

#### **4.5.4 Rigvedic Literature**

Dani genuinely believed that the history of the Aryans who were the people named in the *Rigveda* and these Aryans were to be substantiated through archaeology, which will bring the 'hypothetical Aryans into history' (Dani 1968:23, 55). However, it was quite premature to assume that the *Rigveda* and the Gandhara Grave Culture were of the same date. Perhaps the most hotly contested issue in the literary history of the South Asia is the probable date of the *Rigvedic* literature (e.g. Gonda 1975; Misra 2005), and it is difficult to link it clearly to the supposed time period of the Gandhara Grave Culture.

Dani (1968:55) noted that it is very easy, especially working within culture-historical frameworks, to associate certain hypothetical and vague groups of people with any archaeological culture, and to explain changes only through the medium of migration or invasion without understanding and valuing other possible explanations, for example human ingenuity, and ideologies, rituals and beliefs. This translates that ancient literature and historical milestones do not provide adequate information to date and

distinguish between the different periods of Gandhara Grave Culture. However, it is ironic that Dani himself recognised the problems of associating archaeological cultures with imaginary groups of people in the past, but that is what he appears to have done himself.

Furthermore, when the evidence from the protohistoric graves in northwestern Pakistan are correlated with the *Rigvedic* literature, the tenets of Dani's (1968) correlation of the people buried within these graves with Aryans seem to be based upon untenable propositions (Gupta 1972:264). In fact, *Rigvedic* literature is a biased, elitist, upper-caste male dominated, wished-for narrative and representation of the society than it probably was and the *Rigvedic* narratives can be contradicted or supplemented through archaeology (Boivin and Fuller 2002:199). Furthermore, the *Vedic* literature is generally very ambiguous and subjective and can be interpreted in different ways, depending upon "what one wants to prove" (Chakrabarti 1988:40).

Gupta (1972:168) considered Dani's (1968:23-24) association of different chronological periods with events from the Indian mythology and history (e.g. Mahabharata or Achaemenid's invasion) as "premature". Thus, there is no reference to elaborate grave constructions (e.g. stone-lined lower grave-chambers, upper stone circles) and rectangular shapes in *Rigveda* (Gupta 1972:165). Dani's complete inhumations of period I and the flexed inhumations are not mentioned in *Rigveda* (Gupta 1972:167). In *Rigveda*, no grave or monument is reported to have been erected over urn burials and the multiple cremation (of sex and age based groups) burials in urns run against the teaching of the *Rigveda* (Gupta 1972:166-7). Dani's category of "mixed-burials" (containing inhumation and cremation burials) has no parallels within the *Rigvedic*

literature and burial practices within South Asia (Gupta 1972:168). There is no reference to large scale cemeteries, such as Timargarha 1, in *Rigveda* (Gupta 1972:167). Thus, it shows that Dani (1968) invented a fiction, based upon a mythical story of the Aryans picked from the *Rigveda*, and gave Pakistan archaeology the most oft-repeated narrative of the Aryan invasions, ethnic identities and their linkages with the material cultures from the past.

#### 4.5.5 Population Groups

Graves with two burial practices, presented a unique opportunity to Dani, which he found it difficult to believe (Dani 1968:33).

“It is difficult to conceive that two different burial rites should occur in the same grave. If such was the general practice, that should have been the normal rule. But when such cases are limited ... it is reasonable to suppose that the mixed burials are really mixtures of two different rites practiced by two different peoples probably at two different times. ... a particular grave must belong to a people practising one and the same ritual” (Dani 1968:33-4).

Dani considered each burial practice as the proprietary right of a single group of people and that can only be practiced by them alone and he did not conceive that difference within burials could have been linked with personal choices, agency or ideology of the living and the deceased. Furthermore, Dani (1968:27, 33) believed that the people practicing fractional burials in his period III graves would open the “older graves” of period II (cremation burials) and would “not destroy the urns” but would rather move those to a side, showing that “there was some sanctity attached to the burial rite”. However, when they would open the complete inhumation burials (period I) they would “dump” their fractional remains (Dani 1968:33). Dani assumed that the different burial

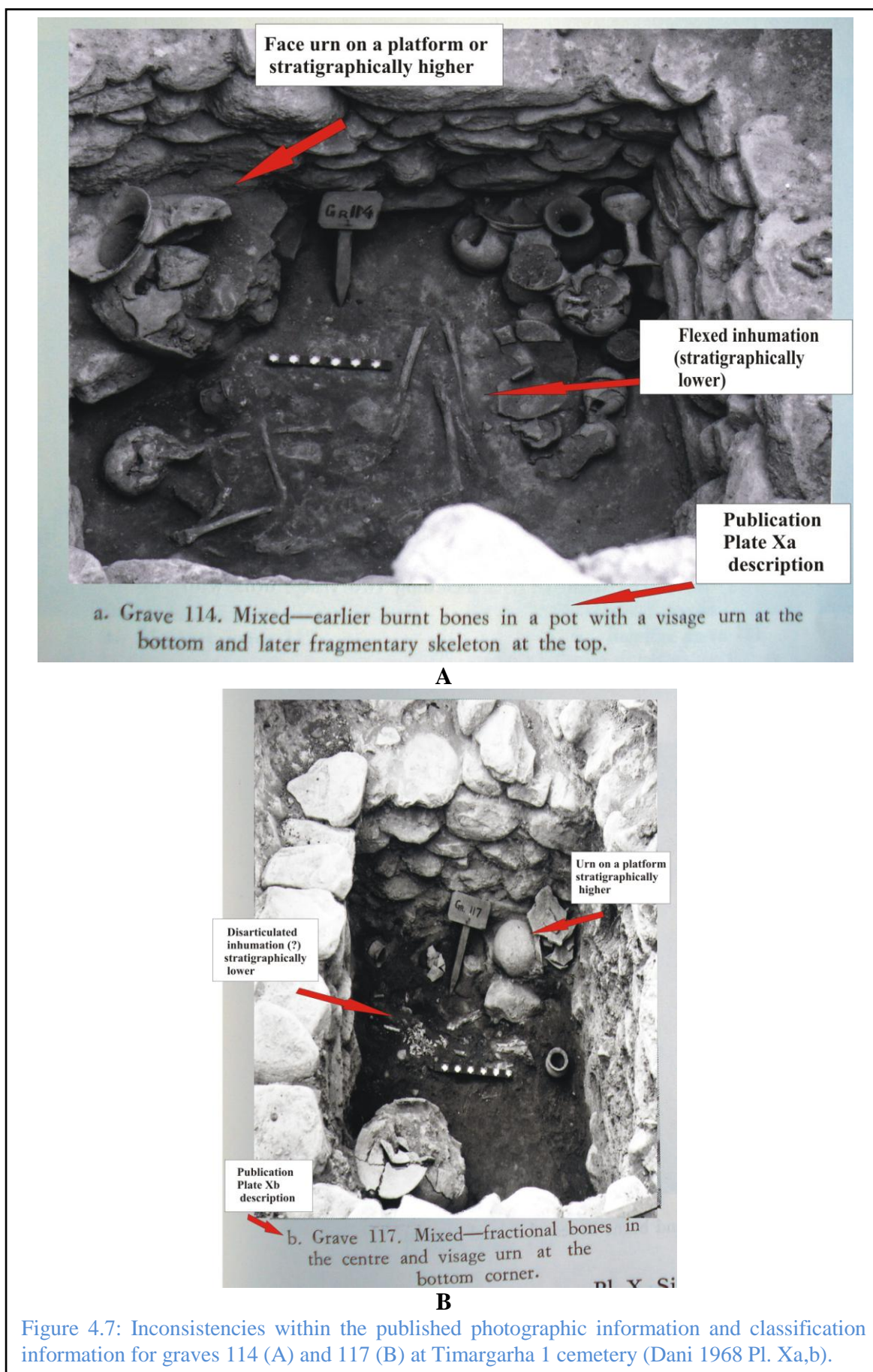
practices had remained static for more than half a millennium with no changes whatsoever, and that he only recognized drastic changes within burial practices to have come from outside invasion.

Thus, I may argue that Dani's (1968) interpretation of the protohistoric graves are based upon the assumptions of singular racial/ethnic attribution of the burial practices and periods, however, the anthropological data from his excavation does not support this singular racial/ethnic implications, irrespective of the fact that even the physical anthropological data is itself was based upon Dani's cultural associations (Bernhard 1968:380). However, Bernhard (1968:71) claims that there are at least five main distinguishable morphological types within the Timargarha 1 and 2 populations. Bernhard (1968:371, 381) claimed that besides the Mongoloid admixture within the population, the majority of these people are distinctly European (perhaps as a result of Dani's cultural association). However, in the same paper he states that "the material and specially the typological variation range, is great and comprises practically all types common in South, West, Middle and North Asia" (Bernhard 1968:381). Furthermore, studies of skeletal materials of the region (from early Chalcolithic, Harappan, Post-Harappan and Gandhara Grave Culture sites) suggest that there is a biological continuation from 5<sup>th</sup> to 1<sup>st</sup> millennium BC populations within the regions now comprising Pakistan, including the people from Timargarha (Hemphill et al. 1991:173-174; Kennedy 1995:49, 54). Thus, as Kennedy (1995:54) argued, if Aryans were a biological entity from the outside, they are not represented within the skeletal record of the region; hence, Dani's assumptions of population movements are not valid.

#### 4.6 Comparison of Timargarha 1 Cemetery Datasets

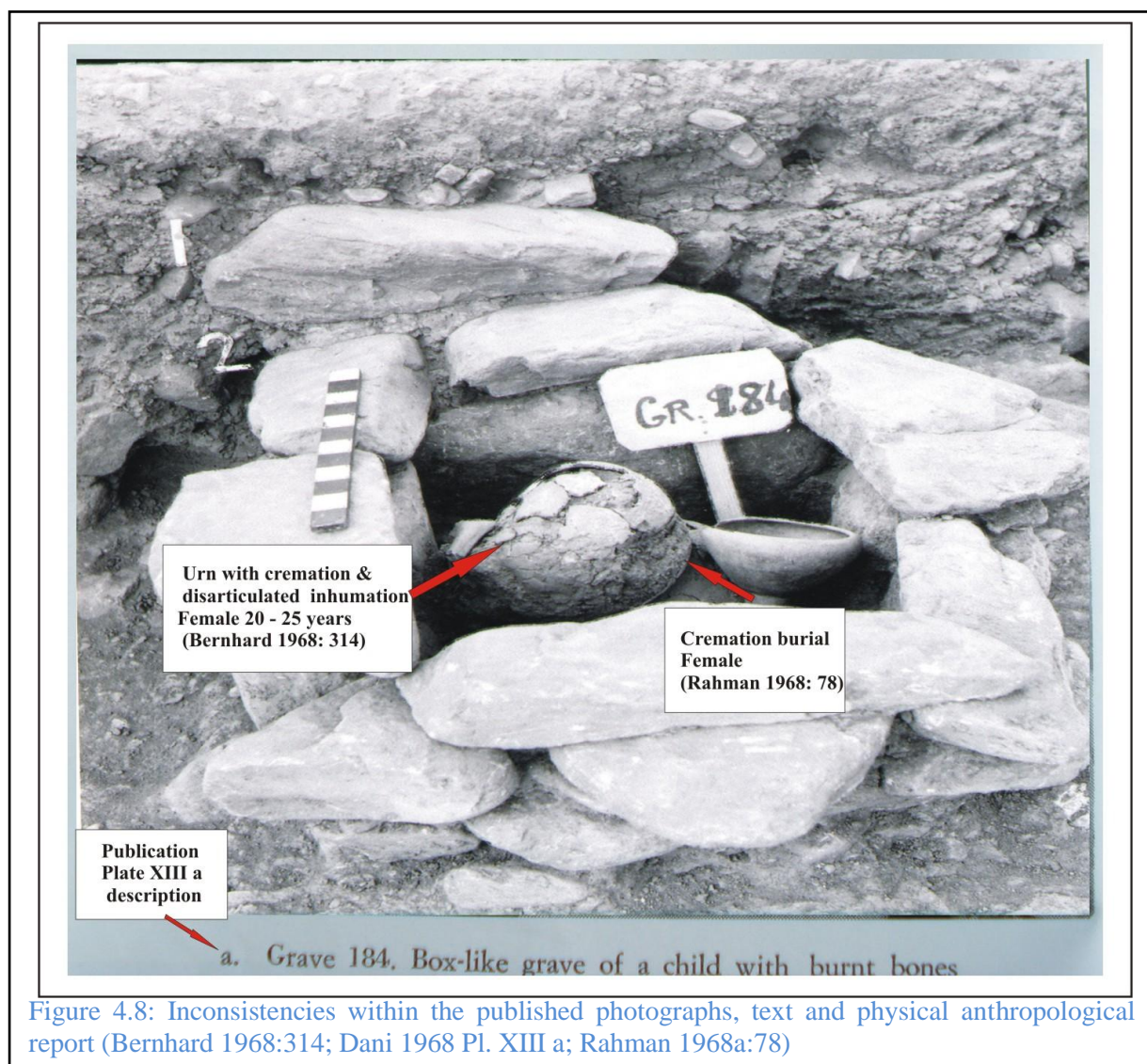
Timargarha 1 cemetery in Dir valley is the type site of the UoP model and (as mentioned above) the 1965 season excavation datasets have been primarily used in the formulation of the UoP model. Thus, to substantiate Dani's (1968) claims about the different aspects of the three burial practices at Timargarha 1, I compared the published description of the graves with published/unpublished photographs and drawings to find out whether or not they lent support to Dani's classification. Within the 82 published (out of the 111 excavated) graves, the description of only 4 graves (103, 143, 165 and 191) completely matched with their published photographs. A single complete flexed burial was recorded within Timargarha 1 (Rahman 1968a:70). However, within the published photographic record, there were at least 12 graves with flexed inhumation. These include 6 adult flexed inhumations (e.g. graves 148 and 190 see Dani 1968: pl. XVIIId and XXb) along with flexed burials of 2 adults as part of multiple burials (e.g. graves 183 see Dani 1968: pl. XIXd) and 4 children (e.g. graves 146 and 159 see Dani 1968: pl. XXIc and XXIIc) (*contra* Rahman 1968a:71, 87, 89, 90, 92-4).

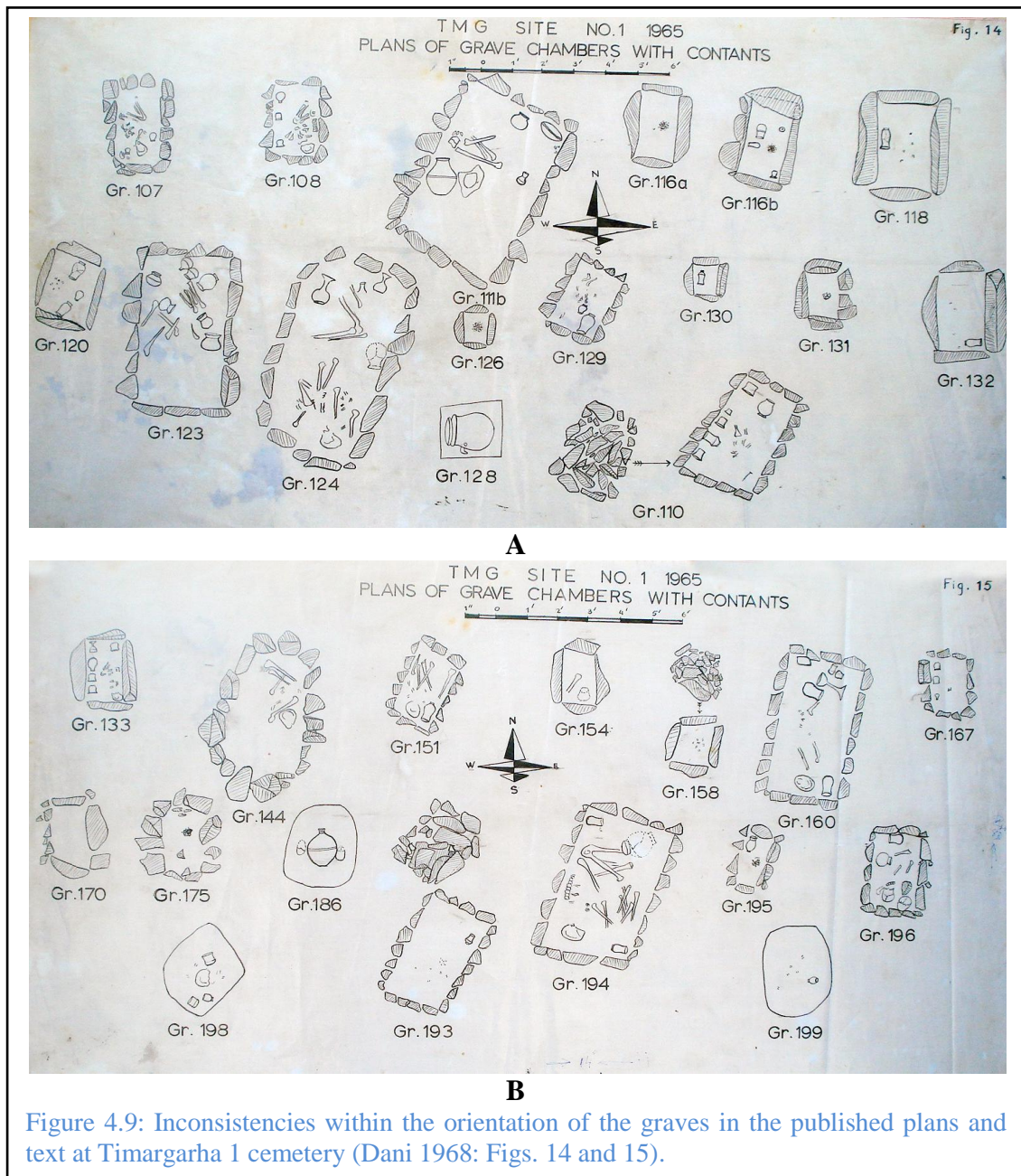
Similarly, cremation burials included graves with single flexed individuals (e.g. graves 114 and 194 see Dani 1968: pl. Xa and Rahman 1968:75) or scattered bones (e.g. grave 113 see Dani 1968: pl. IXb) or disarticulated inhumations (e.g. graves 117 and 149 see Dani 1968: pl. Xb and Xc) (*contra* Rahman 1968a:71-2, 73-5). Rahman (1968a:71) also declared 8 graves with burnt bones (e.g. graves 112 and 118) and 12 graves with darkened soils (e.g. graves 116a and 195) as cremated burials of children without any evidence or anthropological input.





Furthermore, 28 cremation burials (excluding grave 111b) from Timargarha 1 season 1965 were divided into three sub-categories; mixed burials (earlier burnt and later fractional), cremated bones (multiple burials in urns) and children graves (Rahman1968a:72, 75, 76). The published photographic records do not support the sub-classification even in a single instance. Thus, for example, the photograph (Dani 1968:pl. Xa) of grave 114 is suggestive of single flexed inhumation with an urn burial rather than as a mixed burial with cremation (earlier) burial and fractional (later) burial (*contra* Rahman 1968a:73).





In fact, it is very clear from the photograph that the face-urn containing cremation burial is placed at a higher level, possibly on a stone platform, within the grave than the flexed inhumation, which negates the propositions of Dani and Rahman (Fig.4.7). While describing graves, Rahman claimed NW-SE orientation for 16 out of the 28 cremation burials at Timargarha 1 (Rahman 1968a:72-81). However, none of the published drawings (Dani 1968: Figs. 14 and 15; Fig. 4.9) matched the NW-SE orientation for any



of the cremation burials (e.g. graves 194 and 120) as reported in the published text (*contra* Rahman 1968:75, 77).

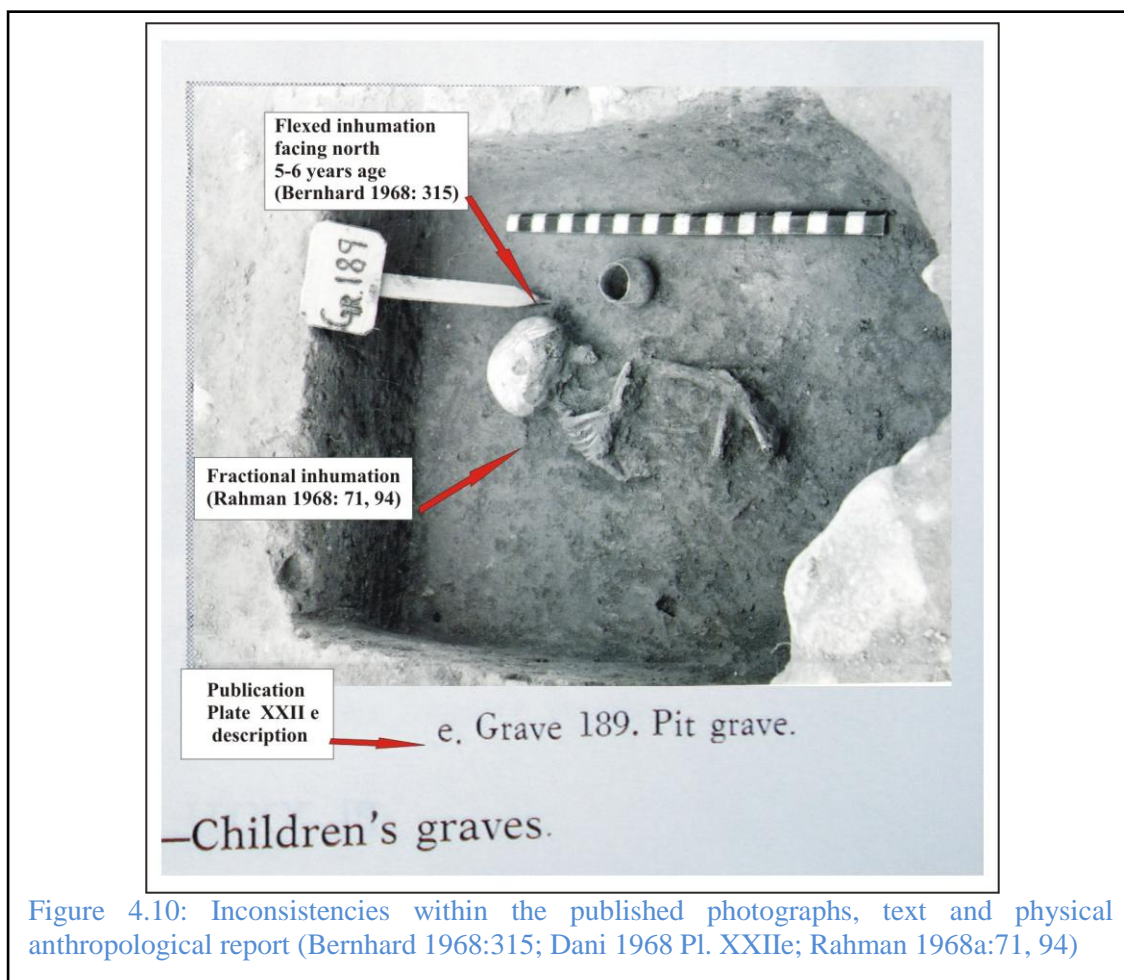


Figure 4.10: Inconsistencies within the published photographs, text and physical anthropological report (Bernhard 1968:315; Dani 1968 Pl. XXIIe; Rahman 1968a:71, 94)

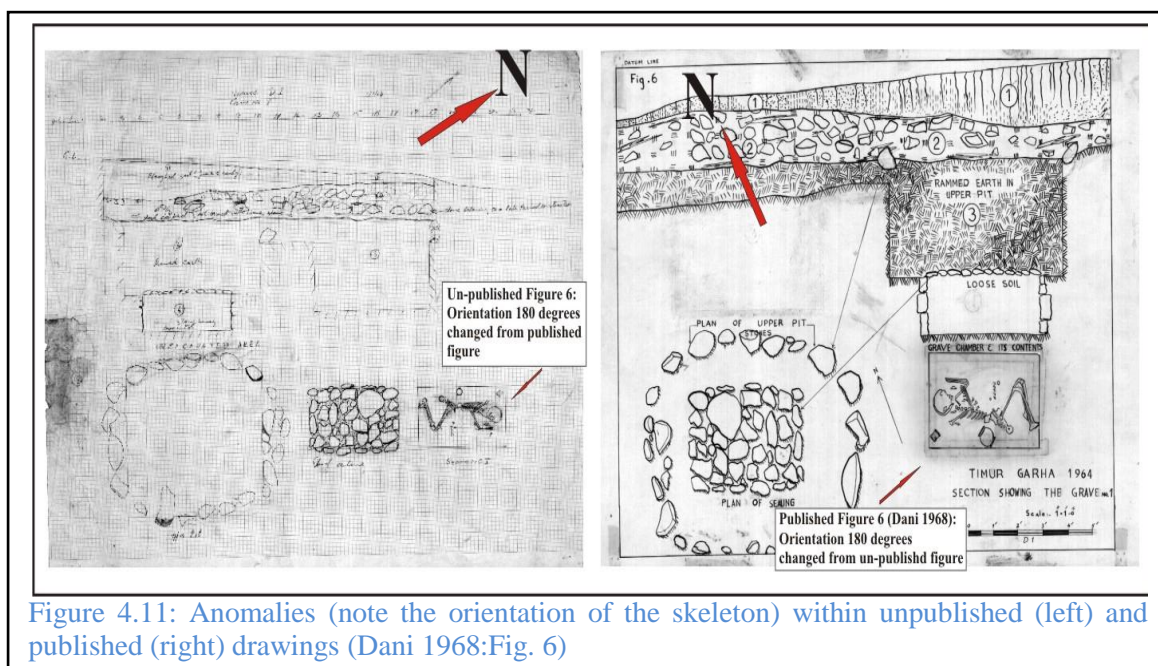


Figure 4.11: Anomalies (note the orientation of the skeleton) within unpublished (left) and published (right) drawings (Dani 1968:Fig. 6)

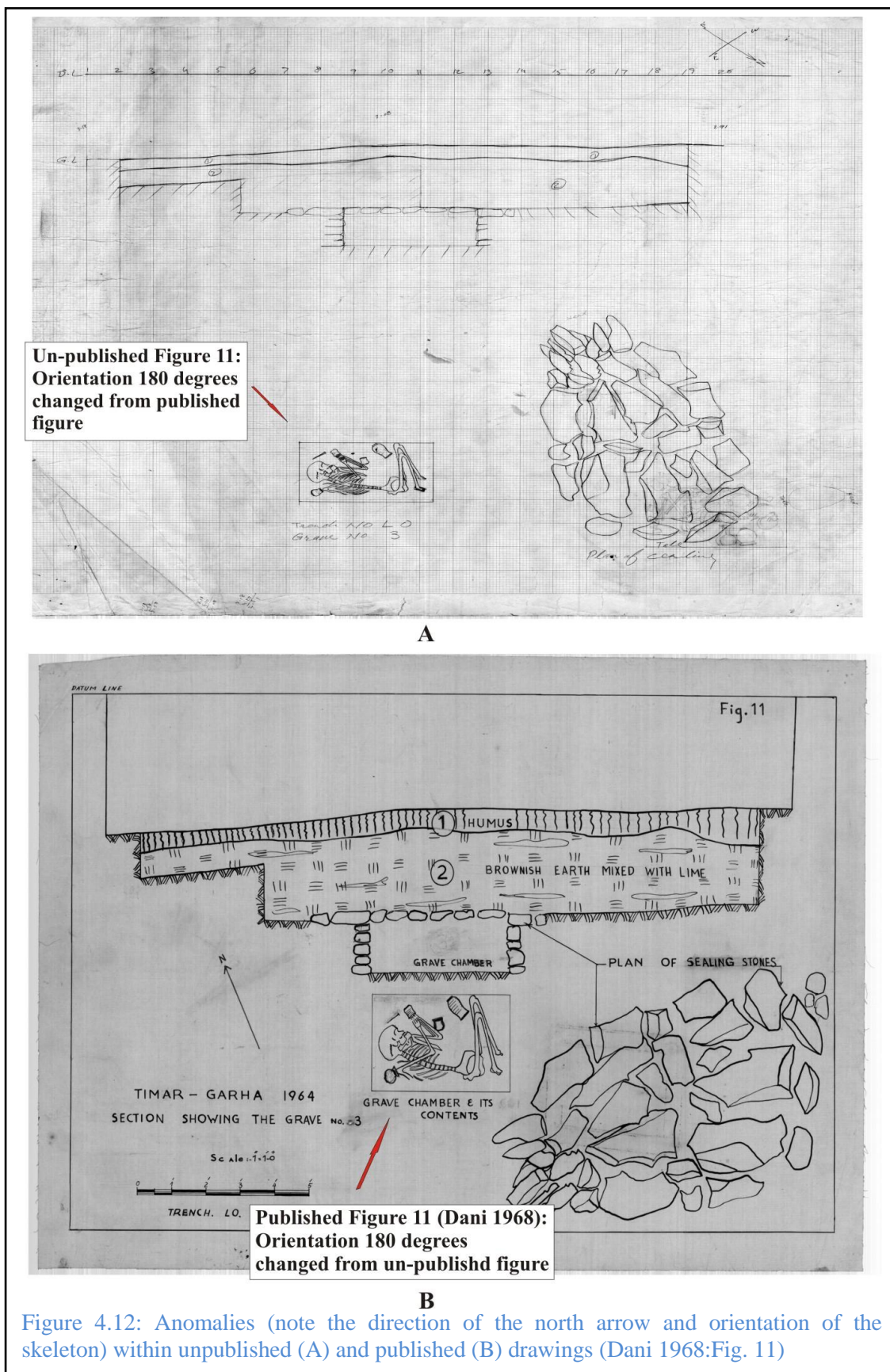


Figure 4.12: Anomalies (note the direction of the north arrow and orientation of the skeleton) within unpublished (A) and published (B) drawings (Dani 1968:Fig. 11)

Furthermore, Rahman (1968a) category of alleged fractional burials (which does not seem to have any supportive evidence) also included anatomically connected flexed burials (e.g. grave 157 see Dani 1968: pl. XVIIIa; *contra* Rahman 1968:71, 87). In addition, 5 single adult (e.g. graves 182 and 190 see Dani 1968: pl. XIXc and XXb – Fig. 4.8) and 5 flexed child-burials (e.g. graves 159 and 189 see Dani 1968: pl. XXIIc and XXIIe – Fig. 4.10) were also included in fractional burials (*contra* Rahman 1968:71, 89, 91, 93, 94). Rahman (1968a: 81-95) reported 25 fractional graves with NW-SE orientation. None of Rahman's fractional graves with the NW-SE orientation was recorded in the published drawings (Dani 1968: Figs. 14-15). In fact the published figures do not match with the unpublished figures of the same graves (see Figs. 4.11 and 4.12).

Thus, I may argue that there seem to be no coherence within the different published datasets about Dani's (1968) flexed inhumation, cremation burials and fractional burials within the different published datasets of 1965 season excavation report of Timargarha 1 cemetery and hence it could have not acted as the basis of the UoP model.

#### **4.7 Summary**

The UoP model of the protohistoric cemeteries is solely based upon Dani's interpretations of this archaeological phenomenon and is set within the culture-historical understanding of archaeology, contemporary political and academic environments. Thus, the UoP model is linked with Dani's personal history as a student, archaeologist and researcher. Dani's ideas of the protohistoric cemeteries are shaped by his relationships and concepts of Mortimer Wheeler, F. A. Khan, Ayub Khan and Silvi

Antonini. Dani's understandings of the protohistoric cemeteries in northwestern Pakistan are largely based upon his two main concepts of their geographical location and their ethnic identification. Thus, he understood this archaeological phenomenon in terms of the Gandhara Grave Culture, linked with the region of Gandhara, and Aryan invasions, as suggested by the *Rigvedic* literature. The datasets from the protohistoric graves were then moulded to conform to these concepts. However, a close examination of these datasets reveals that none of the cited datasets support his arguments of the Gandhara Grave Culture.

The deconstruction of Dani's understandings of protohistoric cemeteries has been particularly painful for me as a product of the UoP and as an admirer of Dani. The questioning of assumptions within the UoP model resulted in my own disillusionments with the research and involved a lot of soul searching. However, I believe that this healthy questioning would lead to better understandings of a field of studies that Dani had popularized and propagated throughout his career as an archaeologist in Pakistan.

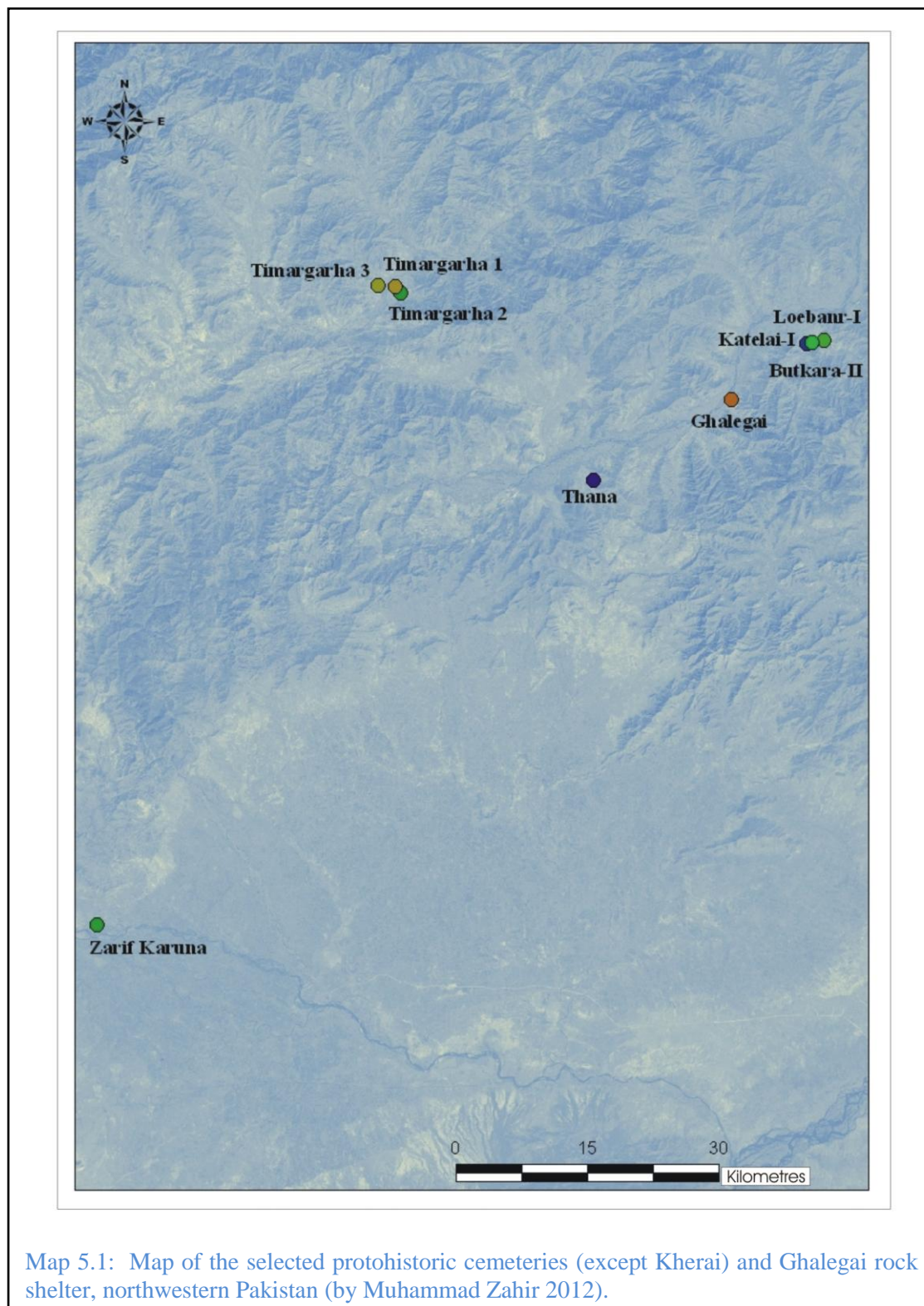
## Chapter 5: **Methodologies for Analyses and Interpretations of IsMEO and UoP models**

The purpose of this chapter is to outline my methodologies for the analyses and interpretations of the protohistoric cemeteries in northwestern Pakistan. These methodologies are primarily aimed at coming up with new interpretive model of these protohistoric cemeteries. The two existing models of IsMEO and UoP teams are based upon their excavations data from the Swat and Dir valleys, so my analyses and interpretations are based upon the same data as far as possible. I carryout systematic analysis of the grave constructions, human remains and grave goods. I include only those protohistoric cemeteries, where detailed documentation of the graves, human remains and grave goods in the form of plans, drawings, photographs and descriptions were published.

Within the IsMEO model, grave constructions, burial practices and grave goods were carefully recorded and were meticulously published. Thus, I mostly utilize the IsMEO datasets concerned with the graves, burials and grave goods (see Figs. 5.1 to 5.3). The UoP model provides greater detail of the physical anthropological datasets from the graves than the IsMEO work, and so forms the core of analysis of the sex and age-based groups within the protohistoric cemeteries. I analyse the constructions of the graves, their shapes and orientations to assess their interpretations within the existing models and reinterpret these for my new model. The understanding of how the human remains are treated and the ensuing burial practices is another area that I analyse. Grave goods have been the mainstay of both the existing models; however, their studies derived primarily from typologies, based upon culture evolution understandings of archaeology.



I analysed the grave goods beyond their typological associations, for their frequency and relationships with burial practices and age and sex-based groups within the protohistoric cemeteries.



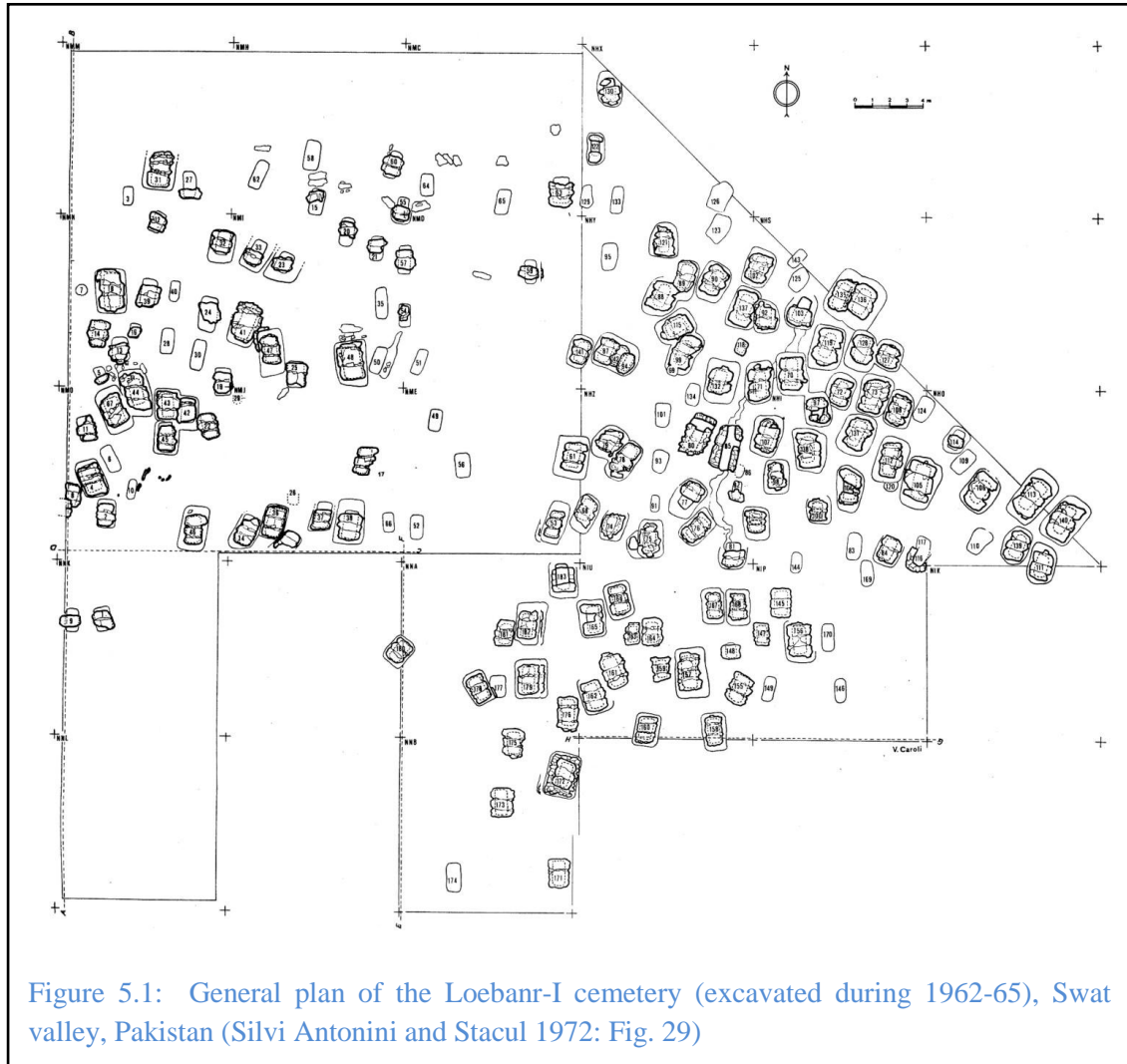


There is no precedent for methodical reanalysis and reinterpretations of the past cemetery excavations within the archaeology of Pakistan, South Asia or other nearby geographical regions. However, the excavations of Anglo-Saxon cemeteries in East Yorkshire, England, originally explained through culture-historical understandings and migration models, have been successfully reanalysed and reinterpreted through the application of simple statistical methods and new theoretical understandings (e.g. Lucy 1992, 1998, 2002). I draw primarily on some of the ideas and methodologies from the Anglo-Saxon cemetery studies; however, in order to explain and interpret the protohistoric cemeteries in northwestern Pakistan, I also engage with the relevant archaeological information from cemeteries around the world and ethnographic analogies from northern and northwestern South Asia.

### **5.1 Graves**

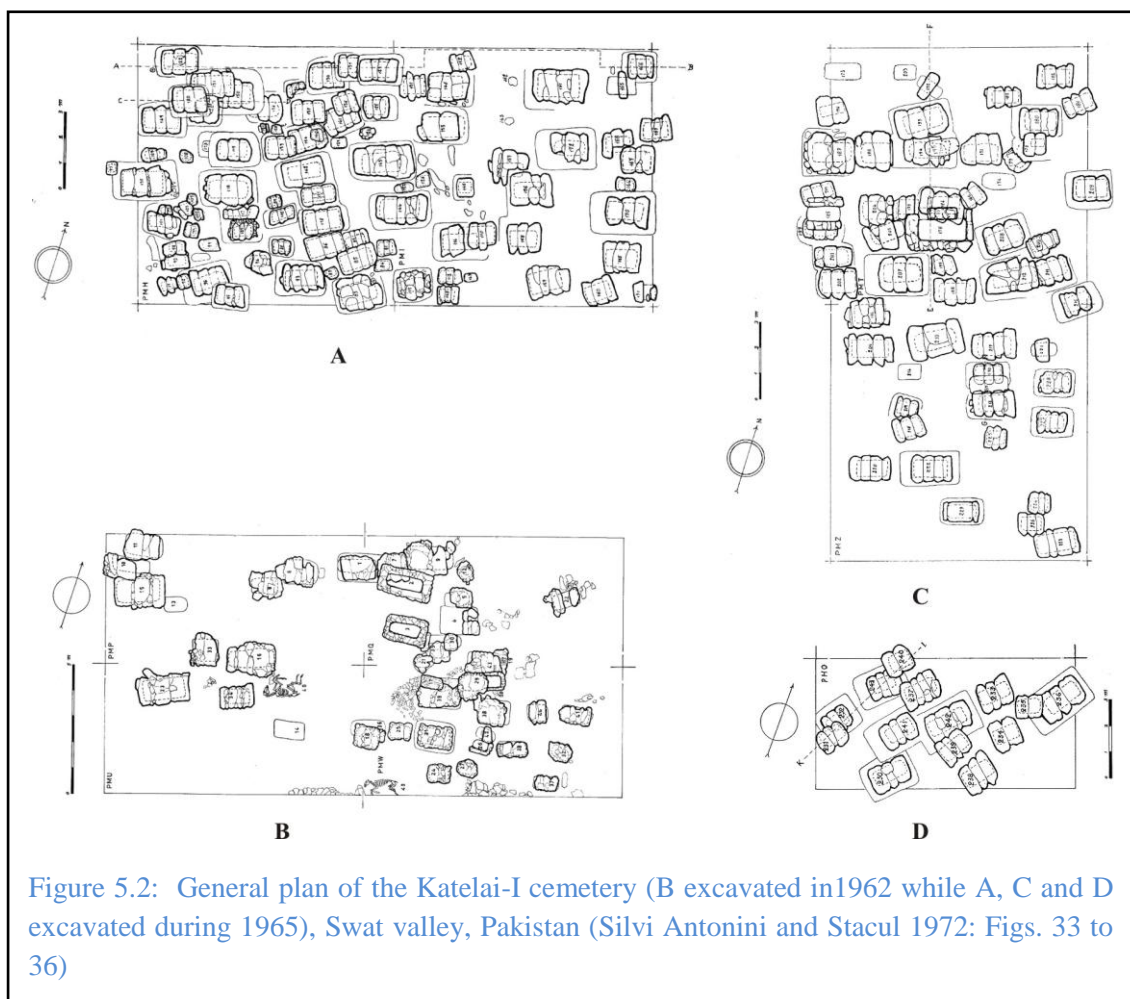
Graves are deliberately constructed interment places for the disposal of human (physical) remains (O’Neil 2005:341; Soanes and Stevenson 2005:756). The shape and depth of the graves may be associated with the social status and social identities (e.g. age, sex) of the buried person, and the degree of formality of the burial rituals (Parker Pearson 1999:5). Ethnographic examples have suggested that the shapes, orientations and dimensions of the graves may also relate with other contexts, for example the Batammaliba graves in Togo and Benin, Africa, which are constructed as underground miniature houses for the deceased (Preston Blier 1987 cf. Parker Pearson 1999:5). Abandoned grain storage pits, for example those at the Neolithic site of Burzahom in Indian Kashmir and at the Iron Age site of Danebury hill fort in England, have sometimes been used as graves (Saar 1992:25; Parker Pearson 1999:5). The orientation

of the graves is of prime importance within the Muslim burials, as the graves have to be oriented in such a way as to facilitate the facing of *qiblah* (i.e. facing Mecca, Saudi Arabia) (Insoll 1999:172; Parker Pearson 1999:6).



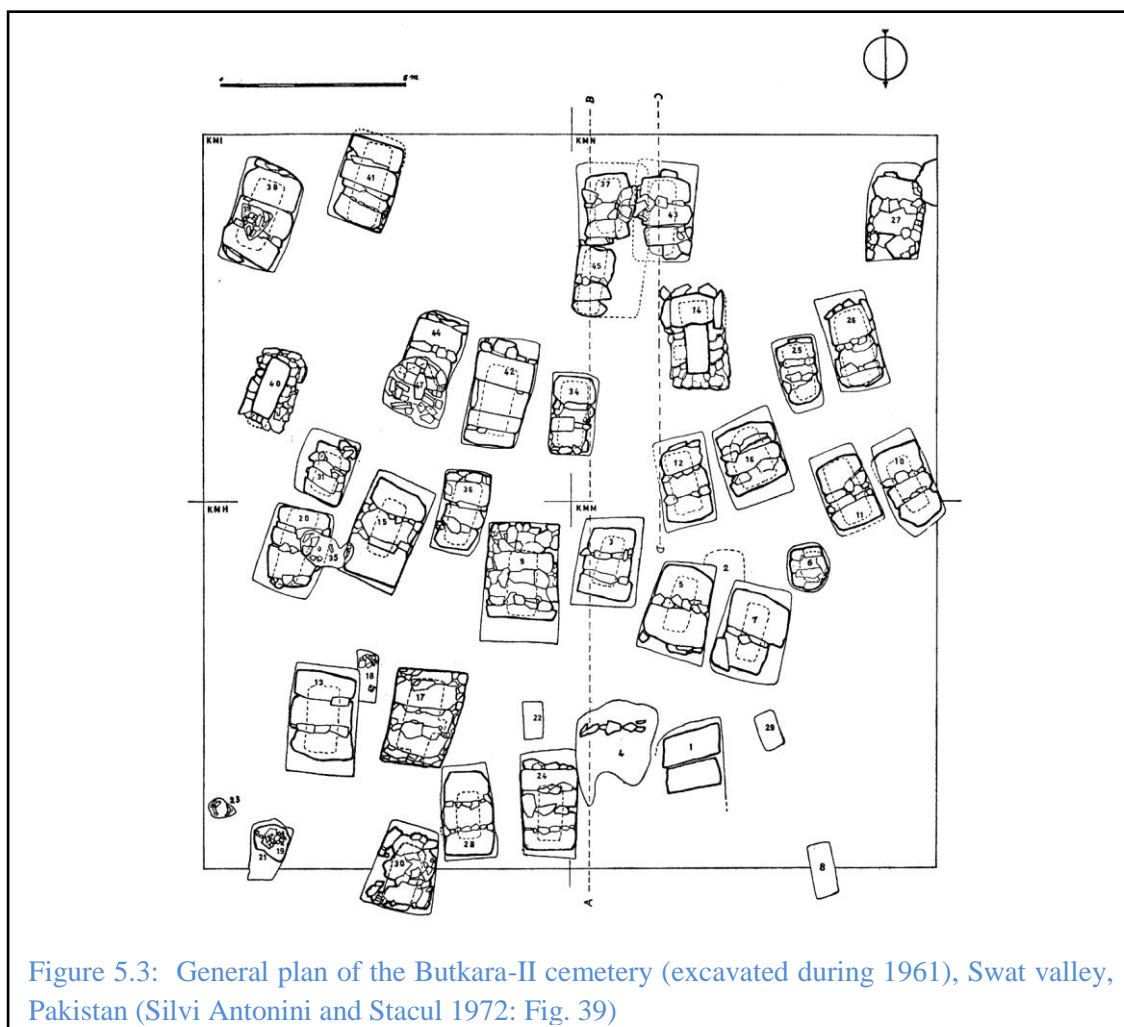
In fact, the elaboration of the grave structures has been associated with the amount of energy spent on their construction, which in turn was directly linked with the social ranking of the dead (Tainter 1978:125). Tainter suggested that the higher the energy spent on the grave (meaning the more elaborate the grave), the higher rank of the deceased (Tainter 1978:125). However, this formulaic generalization does not reflect the social, ritual and religious behaviours of the mourners and the dead, which might dictate or obscure the social or political status of the deceased and the construction of

the graves. Within the Muslim burials, elaborate rules and regulations guide and encourage the tradition of deep (at least not less than half the size of the deceased's height), wide and spacious constructions, in fact, the deeper the better principle is usually invoked (Abdul-Hameed 1984:24; Abdul-Haye 1982:63). All Muslims are theoretically buried in the same manner with no reference to their social statuses, particularly within the underground construction of the graves.



Both the IsMEO and UoP archaeological models are based upon the interpretations of the sizes, shapes, construction methods and orientations of the graves and nature of the burial practices. The construction of the graves has been used as a mark of the age of

the buried individual and chronological settings of the graves and the buried individuals (e.g. Dani 1968:71, 76; Stacul 1966a:272, 1987:65).



A total of thirty-five protohistoric cemeteries have so far been excavated by IsMEO and UoP teams within northern and northwestern Pakistan (see chapter 2 Table 2.1 and 2.2; Maps 2.1 and 2.2); however, I include only nine protohistoric cemeteries for my analysis of the graves, where relevant published information exists though in varying degrees (see Map 5.1). A total of 708 graves have been excavated within these 9 protohistoric cemeteries, of which I analyse 636 (90%) graves. The published records of these protohistoric cemeteries suggest that 612 of 636 (96%) graves had lower grave-chambers/single burial chambers; however, this vagueness about the lower grave-chamber/single burial chamber is a reflection of the lack of proper information about the

grave construction. In my analysis, I am using the term lower grave-chamber to represent both graves comprising single burial chamber and lower grave-chamber

Cemetery	Graves		Grave constructions		Grave orientations	Size
	Excavated	Present Analysis	Upper grave-chamber	Lower grave-chamber/Single burial chamber		
<b>Timargarha 1</b>	111	91	13	87	-	80
<b>Timargarha 2</b>	32	32	-	30	-	31
<b>Timargarha 3</b>	20	20	-	15	-	-
<b>Thana</b>	14	12	-	11	-	9
<b>Katelai-I</b>	243	206	65	201	206	196
<b>Loebanr-I</b>	183	183	89	183	183	180
<b>Butkara-II</b>	48	48	42	45	48	40
<b>Kherai</b>	12	12	-	12	12	-
<b>Zarif Karuna</b>	45	32	2	28	2	-
<b>Total</b>	<b>708</b>	<b>636</b>	<b>211</b>	<b>612</b>	<b>451</b>	<b>536</b>
	<b>100%</b>	<b>90%</b>	<b>33%</b>	<b>96%</b>	<b>71%</b>	<b>84%</b>

Table 5.1: Datasets for analysis of the total and available graves within the selected protohistoric cemeteries

Of the 636 graves, a total of 211 (33%) graves had both upper and lower grave-chambers. The reliable information of the orientation of 451 (71%) graves came from only 5 of the 9 selected protohistoric cemeteries. The measurements of 536 (84%) graves, primarily of the lower grave-chambers, were provided within the published excavations reports of 6 of the 9 selected protohistoric cemeteries.

To analyse patterns within the constructions of the graves, their shapes and orientations, I utilize frequency and cross-tabulation methods. Frequency analysis is a simple

recording of the number of occurrences of a variable (e.g. grave orientation or size) within the datasets and then the results are presented in the form of tables and graphs. I utilize frequency analysis within the descriptive statistical technique within the Statistical Package for the Social Sciences (SPSS), recently renamed as Predictive Analytic Software (PASW), software for calculating the number of occurrences of the desired or required variables within the datasets from these nine protohistoric cemeteries. This is undertaken to know the actual occurrences of the particular aspects of the graves in order to understand the choices and options available and utilized by the mourners for the burials of their loved ones. Cross-tabulation is also method of descriptive statistics, within the SPSS/PASW software which analyses the relationships, patterning and associative choices between the different types of variables (such as nominal (e.g. orientation) and scale variables (e.g. grave sizes)). This is important to know the combinations of the different choices made by the living for the deceased or by the deceased before their deaths. Lucy's (1998), for her analysis and reinterpretation of the early Anglo-Saxon cemeteries in East Yorkshire successfully utilized these simple methods for working with analogous datasets from different cemeteries. She suggested that the applications of these simple analytical methods are powerful enough to render patterns within the archaeological record visible (Lucy 1998:63).

Fritsch (1997) utilized the frequency analysis technique for the analysis and interpretations of the Butkara-II cemetery in Swat valley, particularly for the analysis of the burial practices and grave goods. She also utilized the Pearson's coefficient analysis, using SPSSx software (an older version of the SPSS/PASW software), to find correlations within the different measurements of the construction of the graves at Butkara-II (Fritsch 1997:53-55). She suggested that some form of measurements were

employed within the construction of the graves as suggested by “significant relationships between the dimensions of the upper and lower cavities” in all chronological periods at the site (Fritsch 1997:54). Thus, to test her analysis and results at Butkara-II cemeteries, I utilize Pearson’s coefficient analysis for my reanalysis of the Butkara-II cemetery. I also extend it to other protohistoric cemeteries (i.e. Timargarha 1, 2, Thana, Katelai-I and Loebanr-I) to find out if similar or different trends exist there and if there is any significance to these trends. This Pearson’s coefficient analysis of the measurements of the protohistoric graves is conducted through the SPSS/PASW software.

Pearson’s correlation is the most common and mathematically robust method to describe the strength and direction of the linear relationship between different variables, and works on the principle of average deviation from the mean value. The Pearson’s correlation coefficient takes the values from +1 to -1 for positive and negative values; the nearer the value to the zero, the stronger the relationship (Field 2000:84-9; Walpole 1976:184-5). Positive values represent a positive dependency of the variables on each other, meaning that an increase or decrease in one variable would affect the other variable in the same way. Negative values show negative or inverse relationships between the variables. Zero value for Pearson’s correlation coefficient means that no linear relationship could be established between the different variables, and that the value of one variable cannot help in predicting the value of the other variable. There are two types of tests within this method, one-tailed test and two-tailed test (Field 2000:84-9; Pallant 2004:121; Walpole 1976:184-5). However, their use is dependent upon the nature of the desired analysis; I utilize the two-tailed test, for the bivariate Pearson’s

correlation, to find a direction of the expected relationship between the lengths, widths and depths of the graves within the protohistoric cemeteries of northwestern Pakistan.

## **5.2 Human Remains**

Human remains are central to the understandings of the burial practices as human bodies provide “agency to affect the experience and actions of mourners and evoke memories of the past” (Williams 2004:265). Thus, the placements of the human remains within graves are linked with the living and their lives and pasts, and are not just static objects that are disowned to the grave (Williams 2004:265). Furthermore, burial practices are related to the identity and memory of the deceased and the living and these are actively manipulated to convey these messages (Williams 2006:84-85). In fact, a slight difference within the manipulation of the bodies, e.g. the position of the arms or legs, within graves may divulge information about different social groups within a cemetery (Parker Pearson 1999:6). Thus, the study of the human remains and how they are buried within graves is of prime importance and I analyse the treatment of the human remains and the resultant burial practices to understand and interpret the protohistoric burial practices in northwestern Pakistan. Both the IsMEO and the UoP models have remained focused on these burial practices within the graves; however, both have treated the different burial practices as static objects. Dani (1968) used these burial styles as chronological markers and evidence of the migration of new groups of people into the region. However, most of Dani’s (1968) classifications are highly deceptive and do not represent the excavation datasets (see chapter 4 sections 4.5 and 4.6).



Cemetery	Inhumation	Cremation	Inhumation + Cremation
<b>Timargarha 1</b>	66	22	5
<b>Timargarha 2</b>	24	5	2
<b>Thana</b>	10	2	-
<b>Katelai-I</b>	142	32	4
<b>Loebanr-I</b>	116	53	3
<b>Butkara-II</b>	20	17	1
<b>Kherai</b>	8	-	-
<b>Zarif Karuna</b>	10	20	-
<b>Total</b>	<b>396</b>	<b>151</b>	<b>15</b>
	<b>70%</b>	<b>27%</b>	<b>3%</b>

Table 5.2: Datasets for analysis of the total available burial practices within the selected protohistoric cemeteries

Out of the thirty-five excavated protohistoric cemeteries in northwestern Pakistan by IsMEO and UoP teams, the publications of eight cemeteries include information (with varying details) of burial practices. Within these protohistoric cemeteries, there are two dominant types of burial practices; inhumation and cremation burials. A third type of burial practice is a blend of inhumation and cremation burials within a single grave. Inhumation involved the placement of human skeletal remains without altering the physical conditions of the bones. This included both articulated and disarticulated human remains within the graves. Cremation burials included human skeletal remains that were exposed to fire and then either collected within an urn and buried subsequently in the grave or buried directly within the grave after cremation. There are 396 graves (70%) with inhumations, while 151 (27%) graves contain cremation burials. There are only 15 (3%) graves which contained both inhumations and cremation burial.

Detailed physical anthropological studies (covering all the human remains) of all the major protohistoric cemeteries, particularly of the Katelai-I and Loebanr-I cemeteries, has not been carried out. Timargarha 1, 2 and Butkara-II are the only protohistoric

cemeteries with published anthropological data. There are a total of 497 individuals for which the general age (i.e. adult and child-burials) distinctions I could infer, primarily through the published photographs and drawings of the graves with inhumations at Katelai-I and Loebanr-I cemeteries. I also utilized the physical anthropological data from Timargarha 1, 2 and Butkara-II cemeteries for general and particular age (i.e. age ranges in years) distinctions. However, the age distinctions for cremation burials are totally based upon published anthropological data for Timargarha 1, 2 and Butkara-II cemeteries.

Cemetery	Child-burials	Adult-burials	Male	Male?	Female	Female?
<b>Timargarha 1</b>	21	77	29		28	
<b>Timargarha 2</b>	13	37	15		16	
<b>Thana</b>	2	7				
<b>Katelai-I</b>	19	124	36		22	
<b>Loebanr-I</b>	1	150				
<b>Butkara-II</b>	4	33	4	3	2	4
<b>Kherai</b>	2	1				
<b>Zarif Karuna</b>	2	4				
<b>Total</b>	<b>64</b>	<b>433</b>	<b>84</b>	<b>3</b>	<b>68</b>	<b>4</b>
	<b>13%</b>	<b>87%</b>	<b>17%</b>	<b>-</b>	<b>14%</b>	<b>-</b>

Table 5.3: Datasets for the analysis of the available age and biological sex based groups within the selected protohistoric cemeteries

Of the 497 individuals in the 8 protohistoric cemeteries in northwestern Pakistan, there are 433 (87%) adults and 64 (13%) child-burials within the graves. Physical anthropological studies assign biological sexes to 159 (32% of 497) individuals of which 84 (17%) and 68 (14%) are male and female respectively. There is information of 104 (21% of 497) individuals from Timargarha 1 and 2 for which the age ranges in years are provided (Bernhard 1968).

In order to analyse and interpret the use of burial practices, age and sex-based groups within these two existing archaeological models, I perform frequency and cross-tabulation analyses of the different burial styles and their associations with each other and with grave constructions and grave goods. Frequency analysis affords me with information through which I can check the existing models (see Appendix 2) and come up with my own understandings and interpretation of the different burial practices. The cross-tabulation analysis shows the different choices and options available to the mourners and the deceased before their deaths for their burials.

However, to conduct the frequency and cross-tabulation analysis, I quantified the datasets regarding the particular burial aspects in order to engage with their use in both the previous models (such as Dani's usage of the openness or closeness of the mouth after death as a sign of different grave cultures (Dani 1972:40, 1992:402)) and to come up with new interpretations. Furthermore, I analyse the different orientations of the bodies, faces, and placements of the hands, arms and feet. In fact, of all the body parts, the legs of the flexed individual received special attention and it is this flexing of the legs that led to the characterisation of the flexed inhumation in the first place within both the existing models. The legs were usually pulled towards the upper body, though in different directions, making a measureable angle with the axis of the body. The femur and tibia bones make different angles, and thus create a measurable or quantifiable position of the body within a grave. As the flexed individuals were usually placed on their sides, the flexing of the upper and lower legs was not necessarily the same. I measured the angles of flexing of the legs of the buried individuals through the published drawings; however, my data is only limited to Katelai-I, Loebanr-I and Butkara-II cemeteries published by Silvi Antonini and Stacul (1972). There are no

reliable published or unpublished drawn datasets for either graves or buried individuals from the UoP excavated cemeteries and hence, they are not included within this analysis. I measure the angles through the use of a half-disc protractor (or an angle measure); a simple mathematical device for measuring angles up to 180 degrees. The angles are counted from the main axis of the upper body (i.e. vertebral column) of the buried individuals. I divide the angles of flexing (0-180 degrees) of legs into 6 groups of 30 degree intervals each. Most of the arms of the buried individuals are pulled towards their upper bodies which can be measured; however, I did not measure the angles of the arms, but noted their position, particularly the position of the hands, vis-à-vis the position of the face and head.

Disarticulated burials refers to “fractional” or “bone dumps” and “bone pile” within the UoP and IsMEO models to describe to a form of inhumation, in which disarticulated human skeletal remains are buried within a grave, usually, but not necessarily, involving the burial of another flexed individual in the grave (Dani 1968; Silvi Antonini and Stacul 1972). The disarticulated burials, the human remains were buried in two ways, either simple disarticulated burials without any particular attentions to the placement of bones or disarticulated burials with the careful placement of the bones with skull on top in the graves. Within the IsMEO model, the disarticulated remains of two or more individuals within a grave were considered as “family tombs” as deemed from the “uniformity” of grave goods belonging to the same chronological period (Stacul1975b:324). The presences of disarticulated human remains were considered to be the result of the usage of the grave on more than one occasion (Stacul 1975b:324). However, the presence of single disarticulated remains within an undisturbed grave was considered as the final phase of the two part (initial and final) burial practice, where

initially the human remains were either left in the open to the elements or animals or buried in a grave for decomposition of the flesh before the final burial (Stacul 1975b:324). In my analysis of the disarticulated inhumations, I analyse the frequency and cross-tabulation analysis of disarticulated inhumations with or without skull placed on top in the eight selected cemeteries.

A similar study of the frequency and cross-tabulation analysis of the different burial practices and positions of the bodies within graves was conducted by Evans (2004:50-76) to statistically show the chronological and geographical differences within the Iron Age cemeteries in north-eastern France. Similarly, Lucy (1998) conducted a reanalysis and reinterpretation of eight Anglo-Saxon cemeteries in East Yorkshire for frequency analysis of the body positions within the graves, their orientations, flexures and biological sexes. She also undertook cross-tabulation analysis of the grave dimensions with burial practices, biological sexes and grave goods within the eight selected Anglo-Saxon cemeteries (Lucy 1998). Through this study, she was able to show variations and similarities within the selected cemeteries in different chronological periods, biological sex and age based groups (Lucy 1998:65).

Salvatori considered that “the circular arrangement of the graves, or of groups of graves, or the particular concentration of the graves in a single period” could be linked with the use of certain areas within the protohistoric cemeteries of Loebanr-I and Katelai-I as related with “family or inter-family groups” (Salvatori 1975:351). Salvatori (1975:351) went on to claim that these are premature conclusions and rather a “working hypothesis” for future researchers. Salvatori (1975) did not provide any evidence as to how these were considered as family burials without undertaking any scientific analysis

involving human bones from these cemeteries (Salvatori 1975). Bernhard (1968:331), based upon the anthropological similarities of the buried individuals' "fragmentary lower jaws" from a single grave (grave 256) at Timargarha 2 cemetery suggested that the multiple burials belong to a "family or clan [sic]" and that the graves with individuals of different ages and sexes are also "family graves". As both the IsMEO and UoP models lack reliable (both physical anthropological and chronological) datasets for each of their protohistoric cemeteries, a thorough analysis of the choices of locations of the graves based upon gender and family lineage of the buried individual could not be undertaken.

### **5.3 Grave goods**

Within the protohistoric cemeteries, there could have been two main classes of grave goods; the non-perishable grave goods that the excavators could exhume and perishable grave goods that excavators could not recognize, e.g. wooden objects such as spindle-whorls and vessels (Biddulph 1971 [1880]:113; Robertson 1985 [1896]:641) without the help of specialists. However, within these two models, we are dealing with only non-perishable grave goods and the research by both the teams is almost exclusively focused on two aspects of these grave goods; pottery assemblage and metal artefacts. The emphasis has always been on objects that were large, visibly attractive and in pristine conditions. We do not know much about the mundane, broken and difficult to exhume (e.g. millimetre size beads) grave goods. Thus, I am arguing that both the models essentially present a partial picture of the grave goods from protohistoric cemeteries.

Within the IsMEO model, the general understanding of the grave goods was that of personal possessions (Faccenna 1964:59; Silvi Antonini and Stacul 1972:12) and as direct reflections of the status of the individuals within society (Olivieri 2003:18). The findings of weapons in a grave meant that it was a “warrior grave” (Olivieri 2003:18). In fact, within the UoP model, the number of grave goods was used to indicate the richness of the grave, implying the richness of the buried individuals and this richness was based upon the number of unbroken pottery vessels (Rahman 1968a:72-83).

Both the IsMEO and UoP models used grave goods for the basis of their chronological scheme to explain the protohistoric cemeteries in northwestern Pakistan. The grave goods (particularly the pottery assemblages) are shown to have connections with Central Asia and Iran and hence these were linked to different Central Asian and Iranian archaeological cultures and population movements from these regions. In fact both the models, especially their chronological frameworks, were based upon concepts of typological associations of the grave goods and their presumed age. This meant that finding an iron artefact within a grave automatically relegated the grave to the last period of the protohistoric cemeteries within both the IsMEO and UoP models (e.g. Dani 1968; Salvatori 1975; Vinogradova 2001).

Within the nine protohistoric cemeteries in northwestern Pakistan, 560 or 88% graves were provided with grave goods. These grave goods were placed primarily within the lower grave-chambers, however, grave goods in the upper grave-chambers and over the sealing stones of the lower grave-chamber were also not unknown (e.g. 70 or 11% graves at Katelai-I, Loebanr-I and Butkara-II had grave goods in the upper grave-chamber and over the sealing stones). Some of the grave goods (e.g. copper/bronze pins

in 41 or 7% graves and terracotta spindle-whorls in 34 or 6% graves) were placed within relatively larger pottery vessels, mostly urns in the graves, especially at Katelai-I and Loebanr-I. Graves without artefacts were also significant in all the excavated sites, particularly at Katelai-I, where 26 or 13% graves were recorded without the presence of any artefacts.

Grave goods per se cannot be meaningfully analysed as a series of unique objects, but have to be grouped together so that statistical analyses could be conducted within a cemetery in order to find out the general variations and similarities within the grave goods (Jensen and Nielsen 1997:31). Thus, within the protohistoric cemeteries I am analysing the four major categories of grave goods (i.e. pottery assemblage, copper/bronze artefacts (along with copper/bronze pins), terracotta spindle-whorls and iron artefacts) for their frequency and cross-tabulation analyses. Beside these four groups of artefact, I am also analysing a minor group of human and animal figurines within their graves' contexts.

Almost all the protohistoric graves with grave goods contained pottery vessels, while copper/bronze artefacts were recovered from 182 or 33% graves. Of the copper/bronze artefacts, pins were found within 138 or 24 % graves. Terracotta spindle-whorls were recovered from 88 or 16% graves, while iron artefacts were found in only 37 or 7% graves. Though the finding of iron artefacts within graves was considered an important phenomenon within both the IsMEO and UoP models; iron, however, was not very common within the graves.



	Pottery	Bronze/copper artefacts	Bronze/copper Pins	Terracotta spindle- whorls	Iron artefacts
<b>Timargarha 1</b>	77	23	15	4	7
<b>Timargarha 2</b>	22	9	8		
<b>Timargarha 3</b>	12				
<b>Thana</b>	10				
<b>Katelai-I</b>	169	48	39	29	14
<b>Loebanr-I</b>	175	79	61	47	6
<b>Butkara-II</b>	48	22	15	8	10
<b>Kherai</b>	9				
<b>Zarif</b>	26	1			
<b>Koruna</b>					
<b>Total Graves</b>	<b>555</b>	<b>182</b>	<b>138</b>	<b>88</b>	<b>37</b>
	<b>99%</b>	<b>33%</b>	<b>24%</b>	<b>16%</b>	<b>7%</b>

Table 5.4: Selected groups of grave goods occurrences within the nine selected protohistoric cemeteries

Within the metal objects, I concentrate on the frequency of the metal pins as it has remained the focus of detail typological classifications within the existing models (Silvi Antonini and Stacul 1972:40-42; Rahman 1968b:185-188). Within the UoP model, these copper pins were considered to be mainly related with the fractional and cremation burials and this association justified that these pins were not used to hold together the garments worn by the deceased or used as hair ornaments, but were considered, not without their doubts, as of ritual significance (Rahman 1968b:197).

However, within the context of the graves, these metal pins have been referred to as “hair pins” (e.g. grave 114 at Timargarha 1), and it this interpretation that the later archaeologists working within the UoP model, followed (Khan 1979:pl. XIXb; Khan 2000:113, 118; Rahman 1968a:73). In fact, in the absence of physical anthropological data, the presence of these hair pins within graves was used to signify the biological sexes of the buried individuals and was considered, along with other jewellery items, as

an identity marker of female burials within graves (Khan 2000:118). The absence of jewellery objects, and especially “hair pins” meant that the buried individuals were male (Khan 2000:118).

Within both the IsMEO and UoP models except for Khan’s (2000:118), there is no tradition of explicitly associating grave goods with gender based (e.g. jewellery for female and weapons for male) classification. However, the findings of jewellery or spindle-whorls have been associated with female burials in northwestern Pakistan (Biddulph 1971 [1880]:113; Robertson 1985 [1896]:641). Thus, I conduct cross-tabulation analyses of the grave goods categories within the protohistoric cemeteries, particularly the terracotta spindle-whorls and copper/bronze pins, with the age and sex-based groups to find out if there were any relationships within the deposition of these artefacts and the age and sex-based identities of the deceased.

Human figurines, mostly in terracotta, from the protohistoric settlements and cemeteries in northwestern Pakistan are primarily understood in terms of their shapes and styles, particularly within the IsMEO model (der Meulen 2000; Stacul 2005). A total of 21 human figurines (from 15 of 560 or 3% graves) have been reported from Loebanr-I (8 figurines from 5 graves), Katelai-I (6 figurines from 5 graves), Butkara-II (2 figurines from 2 graves), Timargarha 1 (a single figurine from grave 183 and 2 from unknown contexts) and Zarif Karuna (2 figurines from grave 9B) cemeteries. The majority of these figurines (17 of 21 or 81%) are female figurine with additional two possible female figurines and two male figurines. A total of 17 animal figurines (from 4 of 560 or 0.7% graves) were also reported at Katelai-I (one each from graves 187 and 242), Zarif Karuna (9 from grave 12B and 3 from grave 24) and Timargarha 1 (3 from

unknown contexts). The low numbers of figurines do not allow a detailed frequency analysis; however, I will be undertaking a contextual grave-based cross-tabulation analysis of the figurines within graves, particularly to explore their relationships with different burial practices.

Lucy (1997, 1998) conducted similar studies of Anglo-Saxon cemeteries in East Yorkshire, where she systematically looked at the frequencies of jewellery and weapons within graves and their assumed associations with sex-based groups. She used these studies to deconstruct the stereotyping of the biological sexes and grave goods, and their roles (i.e. house-wives and warriors) within the Anglo-Saxon archaeology (Lucy 1997:164).

#### **5.4 Chronology**

The chronological analysis of graves, burial practices and grave goods is an integral part of the cemeteries' studies and their interpretations (e.g. Evans 2004; Lucy 1998). Thus, the chronological analyses of the IsMEO and UoP dataset should lead to better understandings of the different aspects of the protohistoric cemeteries through time. However, my deconstruction of the existing chronological frameworks of IsMEO and UoP models (see chapter 3 section 3.3 and chapter 4 section 4.5) demonstrated that these generally accepted frameworks are based upon weak theoretical understandings, evolutionary typologies, inaccurate application of the excavation datasets and radiocarbon measurements and hence all of the existing frameworks are unreliable in their current forms. In addition, my recalibration of the existing radiocarbon measurements shows that these chronological frameworks are not representative of the chronological ranges of the protohistoric cemeteries and that none of these are coherent

in their attribution of their chronological periods (see section 5.5 below and chapter 7 section 7.1). This means that the chronological analysis of the different aspects of the protohistoric cemeteries in northwestern Pakistan is not possible using the IsMEO and UoP chronological frameworks.

A total of 14 radiocarbon measurements from 17 graves (3% of the 562 graves containing human remains) have been obtained from Timargarha 1 (2 dates), Loebanr-I (4 dates), Katelai-I (7 dates) and Butkara-II (1 date) cemeteries (see Fig. 7.8 and Table 7.2). A single date from Butkara-II cemetery was obtained from samples bulked together from 7 graves without individual grave contexts. I have also demonstrated (see chapter 4 section 4.5.1) that the two radiocarbon dates from grave 101 at Timargarha 1 are unreliable for their context. The wide ranges of the two radiocarbon measurements ( $3470 \pm 150$  and  $2850 \pm 150$  BP; see Table 7.2) from grave 61 at Loebanr-I cemetery suggest to the same sampling strategy as probably employed at Timargarha 1 grave 101 or as Butkara-II cemetery. Grave 39 at Katelai-I cemetery has produced two radiocarbon dates within almost the same chronological range ( $2250 \pm 50$  and  $2120 \pm 45$  BP). Furthermore, graves 46 to 80 (including grave 48 and 64 with single radiocarbon measurements) at Katelai-I cemetery have not been accessible for my detailed analysis due to their publication in Italian language only (Castaldi 1968). The context of the sample from grave 48 at Loebanr-I cemetery is also not very clear. Silvi Antonini and Stacul (1972:4) recorded that the sample was obtained from charred bones from the grave. However, in their description of the graves, grave 48 is recorded as containing double inhumations (flexed burials) with no mention to the presence of the cremation in the grave. However, the repertory of the grave goods includes a vessel (VTf 68), which has been recorded from other cremation burials and which might have contained

cremation remains but we do not know it from the excavation report (Silvi Antonini and Stacul 1972:109). Thus, out of 17 graves a maximum of 7 graves or 1% of 562 graves with human remains from Loebanr-I (grave 21, 28, 48, 54, 61 and 87) and Katelai-I (grave 39) cemeteries can be utilized with some confidence for the chronological analysis. All these radiocarbon measurements, except from grave 101 at Timargarha 1, come from cremation burials and hence, these do not represent graves with inhumations (flexed and disarticulated burials) or 70% of the graves with human remains. However, their contextual applications is important in understandings continuity, for example grave construction style or artefacts' choices, within the cremation burials, particularly at Loebanr-I cemetery.

### **5.5 Recalibration of radiocarbon measurements**

The existing dating methods of the graves and settlement sites are primarily based upon relative chronology, with the casual application of radiocarbon dates, mostly uncalibrated, and these radiocarbon dates are usually referred in the footnotes of the publications (e.g. Silvi Antonini and Stacul 1972:4; Stacul 1969:82-85, 1978:149). However, the availability of internationally agreed methods to calibrate raw radiocarbon results now provide us an opportunity to have all of the radiocarbon measurements collected from over the years in the Swat and Dir region analysed and presented in a unified fashion. This offers an opportunity to make the recalibrated radiocarbon dates the central focus for understanding the chronological extent of the protohistoric settlements and cemeteries in the region in future research. Recently, the IsMEO team has recalibrated 12 radiocarbon measurements from four settlements (Ghalegai, Loebanr-III, Aligrama and Kalako-derai) in the Swat valley (Vidale et al. 2011:95); however, they failed to provide details of their methodology. It seems (from Vidale et

al. 2011:95 Fig. 1) that they used the online OxCal recalibration software for the conversion of the radiocarbon measurements into a calendar year.

With the help of Dr. Derek Hamilton (an expert on the use of radiocarbon measurements and the development of chronological frameworks for archaeological sites at Scottish Universities Environmental Research Centre, East Kilbride, Scotland), I analysed 45 radiocarbon measurements, including 24 from settlement sites and 21 (including 7 from Chitral) cemeteries, recalibrated to the calendar dates (cal BC/cal AD). All of these calendar dates have been calculated using the calibration curve of Reimer et al.(2009) and the computer program OxCal (version 4.1) (Bronk Ramsey 1995; 1998; 2001; 2009a; 2009b). The calibrated date ranges cited in the text are those for 95% confidence and these dates are quoted in the form recommended by Mook (1986), with the end points rounded outwards to 10 years, where the error is 25 years or greater, and to 5 years, where it is less than 25 years. The calibrated ranges in tables 7.1, 7.2 and 7.4 (chapter 7 section 7.1) have been calculated according to the maximum intercept method (Stuiver and Reimer 1986), while those in figures 7.1 and 7.2 (chapter 7 sections 7.1) are derived from the probability method (Stuiver and Reimer 1993). This type of chronological modelling has recently been utilized in the radiocarbon measurements of the three protohistoric cemeteries (Gankoreneotek, Singoor and Parwak) in Chitral, northwestern Pakistan (Ali et al. 2008). A total of seven radiocarbon dates were obtained from these protohistoric cemeteries, ranging from 8<sup>th</sup> century cal BC to 10<sup>th</sup> century cal AD (Ali et al. 2008). I utilize these new radiocarbon measurements with those from Swat and Dir regions to suggest the extent of the chronological ranges of the protohistoric cemeteries in northwestern Pakistan.

## 5.6 Summary

My analyses are aimed for reinterpretation of the IsMEO and UoP models of the protohistoric cemeteries in northwestern Pakistan. This analysis involves the detailed study of the grave constructions, human remains and grave goods within the nine selected protohistoric cemeteries in the region. The analysis of the grave constructions focuses on the frequency and cross-tabulation analysis of the grave orientations and their association with the different aspects of the burial practices and grave goods. Furthermore, the analysis of the size of the graves, through the Pearson's coefficient analysis technique, aims to find out relationships within the different measurements of the graves at the cemetery and regional levels. The analysis of the human remains is primarily concerned with the frequency analysis of the burial practices at the cemetery and regional levels. However, these burial practices are also analysed to see if there are any relationships through cross-tabulation analysis. The grave goods are also analysed through frequency and cross-tabulation analyses to find out general and chronological patterns within their distribution in the graves and their association with different aspects of the graves constructions, burial practices and buried individuals (e.g. age-based groups). The chronological analysis of grave constructions, human remains and grave goods cannot be undertaken within the current chronological frameworks and radiocarbon measurements. Furthermore, the application of raw radiocarbon measurements as central to all the chronological frameworks within both the models of the protohistoric cemeteries needs revision in view of the easy availability of the new calibration methods and softwares.

## **Chapter 6: Analyses of Graves, Grave Goods and Human Remains**

The purpose of this chapter is to present my analyses of the protohistoric cemeteries in northwestern Pakistan. As outlined in chapter 5, my analyses are focused on three main aspects of the protohistoric cemeteries: graves as structures, human remains and grave goods in terms burial practices, age and gender based groups. I conduct these analyses primarily through the application of frequency and cross-tabulation methods for exploring patterns and interrelationships within the graves, burial practices and grave goods and their relationships with age and sex-based groups. I also conduct Pearson Coefficient analysis in order to investigate patterns and interdependences within the different measurements of grave construction. In addition, I carry out contextual analysis of seven cremation burials from Loebanr-I and Katelai-I cemeteries with radiocarbon measurements for investigating different aspects of the graves and grave goods.

The investigation of the individual graves, goods and buried persons within individual graves is the centre of my analyses. Thus, within graves, I am analysing the construction methods, measurements, shapes and orientations of the graves individually and as a group within their particular cemeteries and their position vis-à-vis other protohistoric cemeteries in northwestern Pakistan. Similarly, I also analyse the four main categories of the grave goods within their grave contexts at cemetery level and regional levels. My aim is to go beyond the typological associations and analyses within the existing models. I also analyse the treatments of the individual human remains within graves and how the different age and sex groups were treated, by looking into the position of the body, its orientation, physical treatments of the different parts of the body, the number and types of artefacts and their frequencies, and shapes of



the graves and graves orientations. The results of these analyses help shape my understandings of the protohistoric cemeteries in northwestern Pakistan.

## **6.1 Graves**

Recording the physical construction of the graves, their sizes, shapes and orientations were of prime concern within the IsMEO and UoP publications of the protohistoric cemeteries. However, with the exception of Fritsch's (1997) analysis of the grave sizes no detailed analysis has been conducted within both the existing models. Furthermore, contrary to their traditions of creating elaborate typologies of the material culture within the protohistoric graves, the grave constructions themselves were primarily understood in terms of the presence or absence of the cist-graves or graves with dry-stone masonry walls within the IsMEO and UoP models. In fact, the presence of cist-graves was used as a marker of the age of the site (e.g. at Kherai) or of the buried individuals (e.g. at Timargarha 1 – Fig. 6.4) within both the models (Dani 1968:76; Stacul 1987:71).

### **6.1.1 Construction**

Based upon the construction and construction methods of the graves, the protohistoric graves within northwestern Pakistan can be classified into five groups. The first group of graves are perhaps the most elaborate and consist of an upper stone construction (under the modern ground surface) and upper grave-chamber and a lower grave-chamber. These graves are not widely reported and only come from the Timargarha 1 and 2 cemeteries where they comprise 33 or 5% of all the graves (Figs. 6.1 and 6.2). Dani (1968:62) reported that the construction of these graves included headstones; however, only two graves have been recorded with probable headstones within the upper stone construction (Durrani 1968a:65-66). It may be suggested that upper stone

construction might have been used to demarcate the limits of the grave above the contemporary ground surface. It might also be possible that these stones were part of some sort of a perishable construction over the top of the graves; probably similar to current practice within Muslim graves in northwestern Pakistan (e.g. compare Figs. 4.3 and 7.8).

Cemetery	Upper construction	Stone	Upper grave-chamber	Sealing	Lower grave-chamber	Wall Construction		Flooring
						Cist/box	Dry-stone masonry	
<b>Timargarha 1</b>	14		24	67	91	27	50	27
<b>Timargarha 2</b>	19		16	25	32	4	23	
<b>Timargarha 3</b>					20			
<b>Thana</b>				11	12			10
<b>Katelai-I</b>			72	178	206		14	19
<b>Loebanr-I</b>			88	131	183		9	7
<b>Butkara-II</b>			30	32	48		7	6
<b>Kherai</b>				10	12	12		0
<b>Zarif Karuna</b>			1	10	32	1	25	15
<b>Total</b>	<b>33</b>		<b>231</b>	<b>464</b>	<b>636</b>	<b>44</b>	<b>128</b>	<b>84</b>
	<b>5%</b>		<b>36%</b>	<b>73%</b>	<b>100%</b>	<b>7%</b>	<b>20%</b>	<b>13%</b>

Table 6.1: Frequency analysis of the different parts of the grave constructions within protohistoric cemeteries

The second group of graves consist of upper and lower grave-chambers and are without the upper stone construction as reported at Timargarha 1 and 2 cemeteries. However, it is not clear whether this absence was related to people choosing not to erect a stone construction over the upper grave-chamber, or due to the erosion of the upper strata of the cemeteries (e.g. Loebanr-I) or agricultural activities (e.g. Katelai-I and Thana) or

due to the lack of proper recording within the excavation reports. A total of 231 or 36% graves could be assigned to this group.



Figure 6.1: Upper stone construction/monument of grave 202 at Timargarha 2 cemetery (Dani 1968)



Figure 6.2: Upper stone construction, upper grave-chamber and sealing stones of grave 211 at Timargarha 2 cemetery (Dani 1968)



Figure 6.3: Adult disarticulated human remains in cist-grave at Timargarha 1 (Dani 1968)



Figure 6.4: Cist-grave 118 at Timargarha 1 cemetery (Dani 1968)





Figure 6.5: Cremation burial in a face-urn in dry stone-masonry wall grave 218 at Timargarha 2 cemetery (Dani 1968)



Figure 6.6: Flexed inhumation in dry stone-masonry wall grave 241 at Timargarha 2 cemetery (Dani 1968)

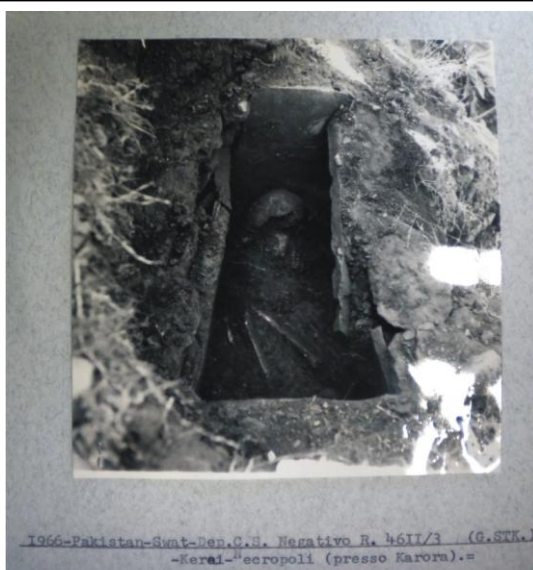
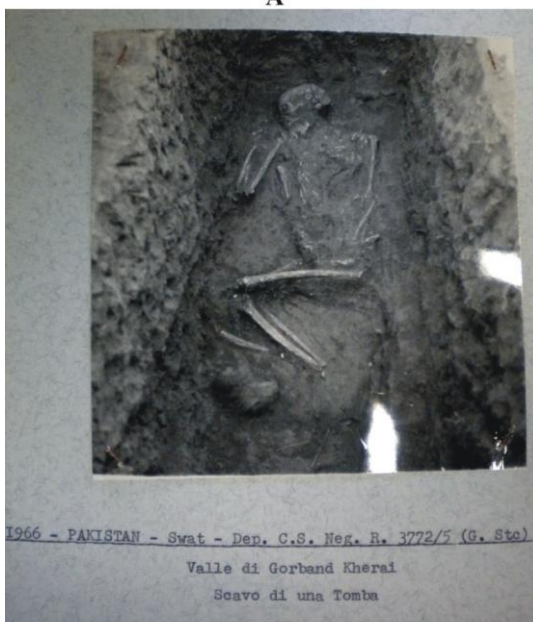
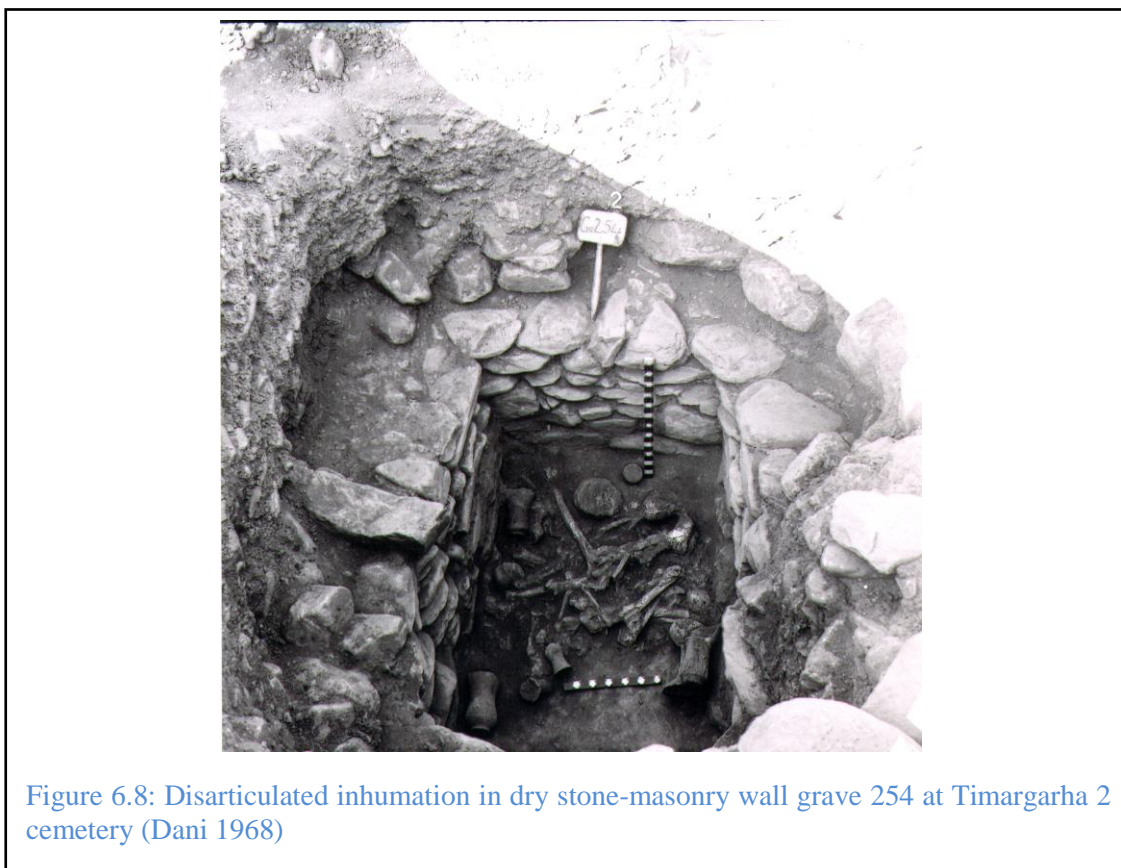
**A****B**

Figure 6.7: Cist-graves (A) and graves without any stone structure in the lower grave-chamber (B) from Kherai cemetery, Swat valley (IsMEO Archives 2009; *contra* Stacul 1987:65)

The third group consists of cist-graves (constructed of four vertical stone slabs, usually schist) with no upper stone construction or upper grave-chamber. These 44 or 7% graves are only reported from Timargarha 1 and 2, Kherai and Zarif Karuna cemeteries (Fig. 6.4). The published report of the Kherai cemetery suggests that it is unique in terms of the construction of the graves, as all the graves (for adults and child-burials) were cist-graves (Stacul 1987:65; Fig. 6.7 A). However, my study of the IsMEO

archives at Rome suggests that graves without any wall structures (e.g. C.S. Neg. No. 3772/5) at Kherai were also present and have probably been purged from the published records (Fig. 6.7 B). These cist-graves were constructed of long, relatively thin, schist slabs, which have not been reported from any other analysed protohistoric cemetery. The cist-graves at Timargarha 1 and 2 cemeteries are not similar to Kherai graves, in terms of the size and construction methods (e.g. compare Figs. 6.3 and 6.4 with 6.7 A). Thus, all the cist-graves at Timargarha 1 and 2 are small-sized graves, meant only for containing cremation or disarticulated human remains and were not supposed to house flexed adult inhumations. The walls of the cist-graves at Timargarha 1 and 2 cemeteries are much thicker and rough as compared to Kherai cemetery. There is a significant similarity within the grave construction methods at Kherai and Dhok Malot cemeteries in the plains of Chakwal, Punjab (Appendix 1: site no. 244).





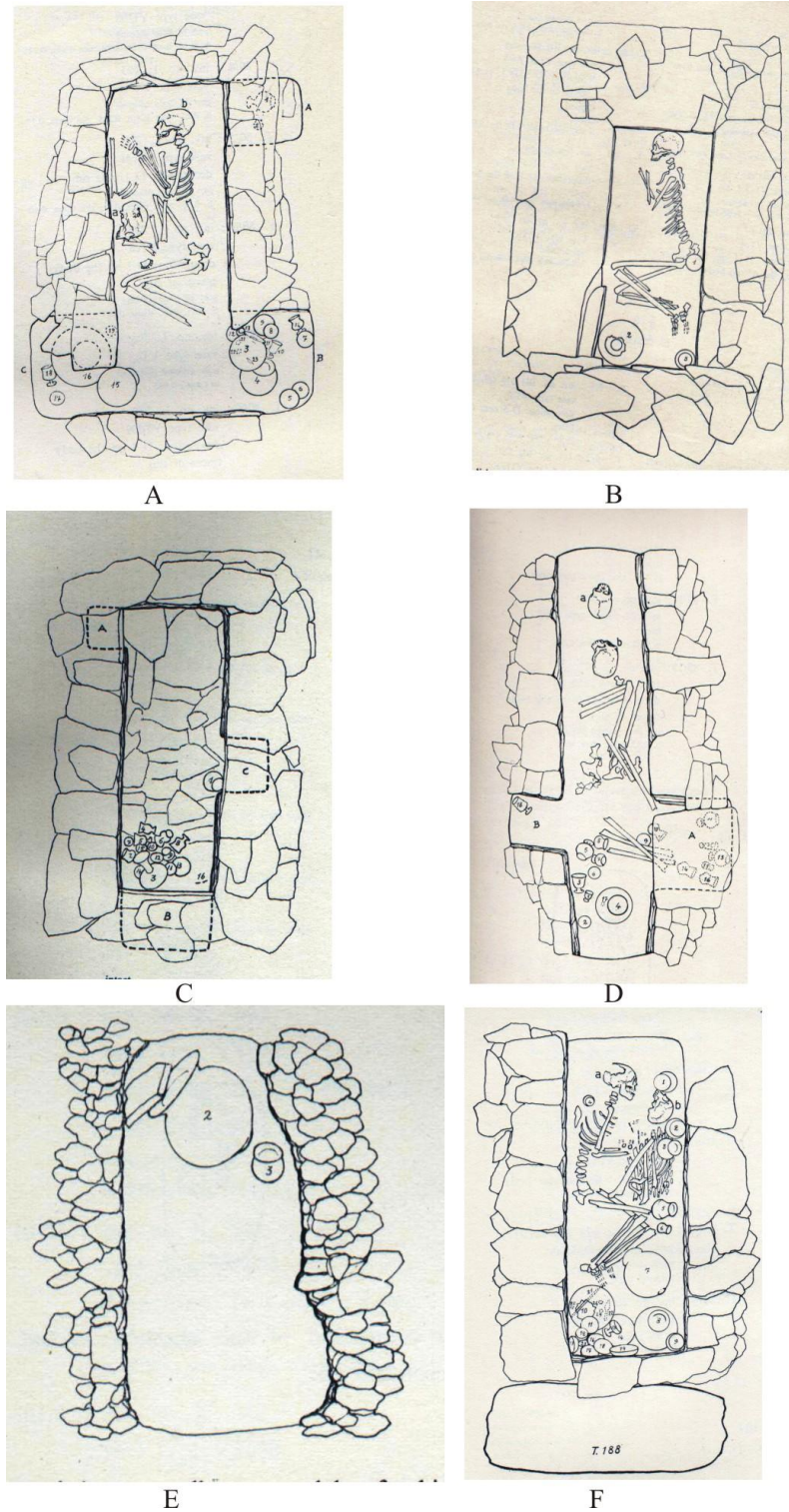


Figure 6.9: Dry-stone masonry walls in the lower grave chambers at Butkara-II (A, B and C), Loebanr-I (D) and Katelai-I (E and F) cemeteries (Silvi Antonini and Stacul 1972)



Graves with dry-stone masonry lining or walls within the lower grave-chamber constitute the fourth group of graves and they comprise 128 or 20% graves of the total analysed graves (Figs. 6.5, 6.6, 6.8 and 6.9). However, the number of graves with wall structures varied from within different cemeteries. Thus, at Timargarha 2, 23 of the 32 or 72% of the analysed graves were provided with wall structures within the lower grave-chamber. At Timargarha 1, 50 of 91 or 55% of the analysed graves had a wall in the lower grave chamber. Similarities within the construction method of the walls (of river rolled stones) and their higher representation within the lower grave-chamber link Zarif Karuna cemetery in the Vale of Peshawar with the Timargarha 1 and 2 cemeteries in Dir valley. In fact, my Pearson's correlation analysis below (see Table 6.3) of the lengths and widths of the lower grave-chambers suggest that the lower grave-chambers of both the Timargarha 1 and Zarif Karuna cemeteries had enjoyed almost exact relationships.

However, very few graves at Katelai-I (14 of 206 or 7%) and Loebanr-I (9 of 183 or 5%) cemeteries were provided with walls in the lower grave-chamber. The walls of these graves are usually (99%) constructed of irregular shaped schist pieces or sometime with river rolled stones, placed over each other without the use of any mortar. At Timargarha 1 cemetery, the walls within the lower grave-chamber of grave 101 were constructed of rough diaper masonry. Some of these walls within the lower grave-chambers (e.g. graves 80 and 85 at Loebanr-I cemetery) were provided with inbuilt niches or vaults, primarily containing grave goods. Some of the graves (e.g. graves 96 and 100 at Loebanr-I cemetery) had a wall dividing the lower grave-chamber into two parts and with a see-through niche at the floor level with a single pottery vessel placed inside. Sometimes, these walls were not constructed on the four sides of the lower

grave-chamber and graves with walls on single or two sides are also known (e.g. grave 106 at Katelai-I cemetery). The fifth group of graves consists of a simple pit dug (either uniformly or irregularly) into the earth and is represented by 89 or 14% of the analysed graves.

The majority of the lower grave-chambers (464 of 636 or 73% graves) were covered by sealing stones. The sealing was usually constructed of three large schist slabs, connected by many small stones that effectively sealed the lower grave-chamber from the upper grave-chamber. The construction of a sealing of three schist slabs was one of the most consistent (69%) patterns at Katelai-I and Loebanr-I cemeteries. In fact, at Loebanr-I cemetery, 103 of 126 or 82% graves with sealing were constructed of three slabs. The difference between the widths of the upper (wider) and lower (smaller) grave-chambers left a terrace. This terrace (and in case of the lower grave-chambers with walls) and the walls were utilized for the placement of the sealing stones. Similar constructions are still used in Muslim and Christian graves within the Vale of Peshawar (see Fig. 7.4 and 7.9). Many of the lower grave-chambers (13%) were provided with floorings, ranging from single schist slabs (e.g. at Thana cemetery) to small pieces of stones (e.g. at Katelai-I cemetery) to beaten gritty earth (e.g. Timargarha 1 cemetery). The lower grave-chambers at Thana cemetery were mostly (10 of 12 or 83%) provided with a single slab floor, however, none of the graves at Timargarha 1 and Kherai cemeteries had flooring.

I may suggest that all the analysed cemeteries were individually (or in some cases in smaller groups e.g. Katelai-I and Loebanr-I in Swat valley as a group, and Timargarha 1 and 2 in Dir valley as a group) had distinctive grave construction traits or styles within

the generally recognized plan (e.g. upper and lower grave-chambers) of the graves. These styles of the graves (e.g. the construction of the cremation graves at Loebanr-I cemetery without the provision of a wall in the lower grave-chamber) continued for the entire known duration of these particular cemeteries.

### 6.1.2 Measurements and Pearson's Correlation Analysis

Within both the models, especially the IsMEO model, special attention was given to the recording of the separate measurements of lengths, widths and depths of the upper and lower grave-chambers, which made it possible to undertake Pearson's correlation analysis for these measurements. However, within both models, the measurements of the upper grave-chambers were represented far less often when compared to the lower grave-chambers, which were published in greater detail and hence the numbers of available measurements of the upper and lower grave-chambers differ widely for this analysis.

Upper grave-chambers' Pearson correlation coefficient				
		Length	Width	Depth
<b>Katelai-I</b>	Pearson Correlation	1	.561**	.374**
	Sig. (2 -tailed)		.000	.004
	N (No. of Graves)	57	57	57
<b>Loebanr-I</b>	Pearson Correlation	1	.511**	.448**
	Sig. (2 -tailed)		.000	.000
	N	88	88	88
<b>Butkara-II</b>	Pearson Correlation	1	.656**	.424*
	Sig. (2 -tailed)		.000	.025
	N	29	28	28

Table 6.2: Pearson's correlation for upper grave-chamber measurements

\*\* . Correlation is significant at the 0.01 level (2-tailed)

\* . Correlation is significant at the 0.05 level (2-tailed).

The Pearson correlation coefficient suggests a positive and robust relationship within the lengths and widths of the upper grave-chambers at Katelai-I, Loebanr-I and Butkara-II cemeteries, thus, the lengths and widths are interdependent and correlated. The

Pearson's coefficient (Table 6.3) suggests that a 1% change in length would cause a significant change of 0.56%, 0.51% and 0.66% in the depth of the upper grave-chambers at Katelai-I, Loebanr-I and Butkara-II cemeteries respectively. In addition, this would also cause a positive change of 0.37% and 0.45% at Katelai-I and Loebanr-I in the depth, and would have a small, though positive, influence on the depths of the upper grave-chambers at Butkara-II.

Pearson's correlation coefficient analysis for lower grave-chamber				
		Length	Width	Depth
<b>Timargarha 1</b>	Pearson Correlation	1	.882**	.679**
	Sig. (2 -tailed)		.000	.000
	N (No. of Graves)	80	80	76
<b>Timargarha 2</b>	Pearson Correlation	1	0.684**	0.676**
	Sig. (2 -tailed)		.000	.000
	N	31	31	31
<b>Thana</b>	Pearson Correlation	1	0.573	0.949*
	Sig. (2 -tailed)		0.106	0.014
	N	9	9	5
<b>Katelai-I</b>	Pearson Correlation	1	0.713**	0.477**
	Sig. (2 -tailed)		.000	.000
	N	196	196	196
<b>Loebanr-I</b>	Pearson Correlation	1	0.552**	0.403**
	Sig. (2 -tailed)		.000	.000
	N	180	180	180
<b>Butkara-II</b>	Pearson Correlation	1	0.112	0.259
	Sig. (2 -tailed)		0.502	0.116
	N	40	38	38
<b>Kherai</b>	Pearson Correlation	1	.370	.501
	Sig. (2 -tailed)		.237	.097
	N	12	12	12
<b>Zarif Karuna</b>	Pearson Correlation	1	0.810**	.481
	Sig. (2 -tailed)		.000	.069
	N	15	14	15

Table 6.3: Pearson's correlation for lower grave-chamber measurements

\*\* . Correlation is significant at the 0.01 level (2-tailed)

\* . Correlation is significant at the 0.05 level (2-tailed).

These changes are reciprocal, and are repeated in the same ratio when changes are made in widths and depths. However, the relatively weaker relationship between the lengths

and depths might have been deliberate on the part of the people burying the dead but could have also been induced by erosion or later agricultural activities at the sites.

The Pearson's correlation analysis was not possible for Timargarha 1 and 2, Thana, Kherai and Zarif Karuna cemeteries due to the lack of information of the upper grave-chamber measurements. However, Pearson's correlation coefficient analysis for the lower grave-chambers (Table 6.3) suggests a very strong and positive relationship between the different measurements at Timargarha 1 and 2, and Katelai-I cemeteries. Thus, in these three cemeteries, the lengths, widths and depths of the lower grave-chambers are robustly interdependent and are defined by each other. However, at Loebanr-I, this relationship is positive, albeit a little weaker than at Timargarha 1, 2 and Katelai-I.

At Timargarha 1, a 1% change in the length would cause a positive change of 0.88% and 0.68 % in width and depth respectively. At Timargarha 2, a 1% change in the length would induce a positive change of 0.68% and 0.67% in width and depth respectively. At Katelai-I, a 1% change in the length would bring a 0.71% and 0.48% change in the width and depth respectively. At Loebanr-I, a 1% change in the length will bring a positive change of 0.55% and 0.40% in the width and depth of the lower grave-chamber respectively and that the depth is more interlinked with the length of the lower grave-chamber than with the width. Furthermore, the depth of the lower grave-chamber is also positively related to the length of the upper grave-chamber. Therefore, it may be argued that the depths of the lower grave-chambers, at Loebanr-I, are, to some extent, defined by the lengths of the upper and lower grave-chambers.

There is no robust relationship between the measurements of the lower grave-chambers of Thana and Butkara-II cemeteries. However, the lengths of the lower grave-chambers at Butkara-II are positively related to the lengths of the upper grave-chambers, and hence a 1% change in the upper grave-chambers' length would induce a positive change of 0.55% in the lengths of the lower grave-chambers. At Thana, the lengths and the depths are interdependent but not as robust as at Timargarha 1 and 2. The lengths and widths of the lower grave-chambers at Zarif Karuna are strongly related and interdependent and a 1% change in the length would bring a 0.81% change in the width. However, the lengths and depths or the widths and depths are independent of each other.

Thus, within the upper grave-chamber measurements at Katelai-I and Loebanr-II cemeteries, the lengths and widths enjoy strong interdependency, while the depths are relatively independent of the lengths of the upper grave-chamber. However, there is no interdependency within the lengths and depths at Butkara-II cemeteries. Furthermore, it may also be suggested that in the analysed protohistoric cemeteries in northwestern Pakistan, except Butkara-II and Kherai, the length of the lower grave-chambers was a defining factor in its size and the widths and depths were generally dependent upon the length of the lower grave-chamber. In fact, the widths were almost completely based upon the lengths of the lower grave-chambers, while the depths were relatively independent of the lengths of the lower grave-chambers.

### **6.1.3 Shapes**

There is no direct information available for the shape of the graves, especially the upper grave-chambers, in the excavation reports.

The data for this analysis was deduced mainly from the measurements and drawings of the upper and lower grave-chambers.

Cemetery	Rectangular		Circular		Oval		Square		Irregular	
	U	L	U	L	U	L	U	L	U	L
<b>Timargarha 1</b>	11	85			2	2				
<b>Timargarha 2</b>		30								
<b>Timargarha 3</b>		1		13		1				
<b>Thana</b>		9		1				1		
<b>Katelai-I</b>	63	188	3			1	4		2	5
<b>Loebanr-I</b>	89	172	2				8			1
<b>Butkara-II</b>	37	38	2						5	5
<b>Kherai</b>		12								
<b>Zarif Karuna</b>	2	21		7						
<b>Total</b>	<b>202</b>	<b>556</b>	<b>28</b>	<b>2</b>	<b>4</b>	<b>13</b>	<b>7</b>	<b>11</b>		
	<b>96%</b>	<b>91%</b>	<b>--</b>	<b>5%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	

Table 6.4 Frequency and percentage of the upper (U) and lower (L) grave-chambers' shapes

The information of 211 of 231 graves with upper grave-chambers and 612 of 636 graves with lower grave-chambers could be analysed for the shapes of the upper and lower grave-chambers. Thus, where present, the upper grave-chambers were mostly (202 of 211 or 96%) rectangular in shape. Similarly, most of the lower grave-chambers (556 of 612 or 91%) were rectangular in shape (Table 6.4). The graves at Katelai-I and Loebanr-I cemeteries had the widest range of different shapes for both lower and upper grave-chambers. Of all the protohistoric cemeteries, Timargarha 3 cemetery stands out as most (13 of 15 or 87%) of the distinguishable lower grave-chambers were circular in shape as opposed to the rectangular shapes of the graves in the all other analysed graves and seems to have been misunderstood as graves (see section 4.5.2, Fig. 4.5).

#### **6.1.4 Orientations**

Within both the IsMEO and UoP models, considerable attention was paid to the recording of the orientation of the graves within the published excavation reports, and thus we have a record of orientation for 449 or 71% excavated graves. However, this does not include graves from Timargarha 1 and 2 cemeteries, where, although a lot of emphasis was paid to the recording of the orientation of the graves, it was not backed up by corresponding orientations in the published drawings (see chapter 4 sections 4.4 and 4.6). I have also excluded Zarif Karuna cemetery where the orientation of only two graves was recorded within the published report. No orientations were and could have not been recorded for circular graves at Timargarha 3 cemetery.

Northeast to southwest (NE-SW) was the most widely chosen orientation (in 146 or 33%) for graves within the analysed cemeteries. This was followed by north-south (N-S or S-N) orientations, practiced within 128 or 29% of the graves. East-west (E-W or W-E) orientation was recorded in 123 or 28%, making it the third most widely chosen orientations for the graves (see Fig. 6.11). The choice for the orientation of the graves differed within each of the analysed cemeteries. E-W and N-S orientation were the most prevalent orientations at Katelai-I and Loebanr-I cemeteries respectively. However, no two cemeteries were similar in their choices of orientation of the graves and the majority of graves, except at Kherai cemetery, were oriented along the slope of the mountain (Fig. 6.10).





A

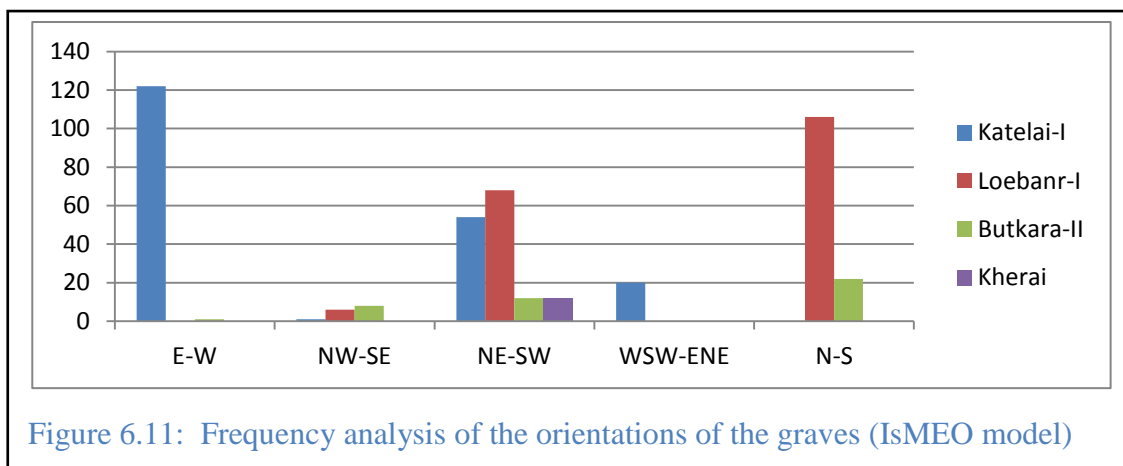


B



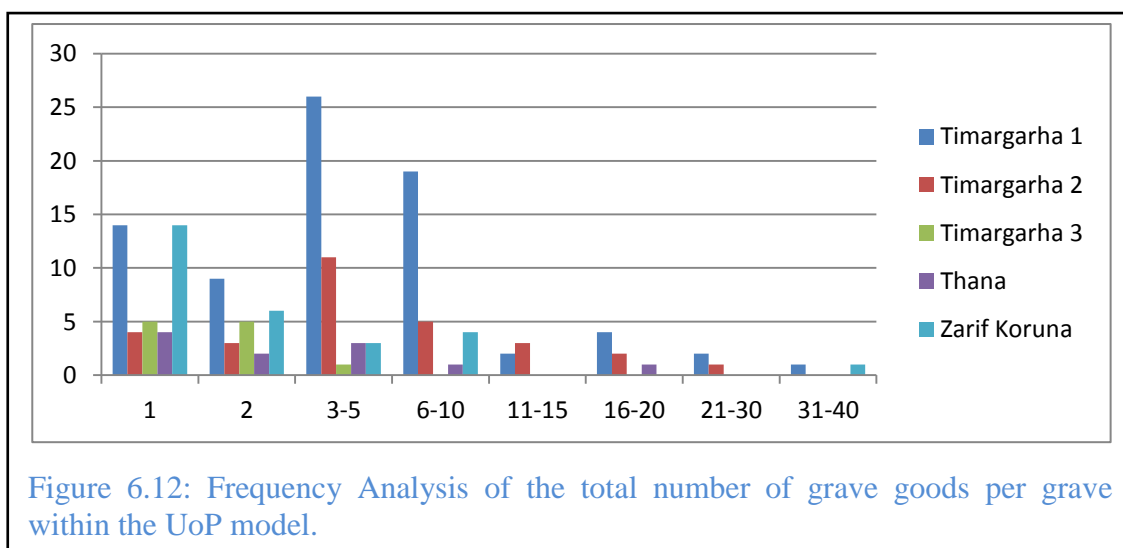
C

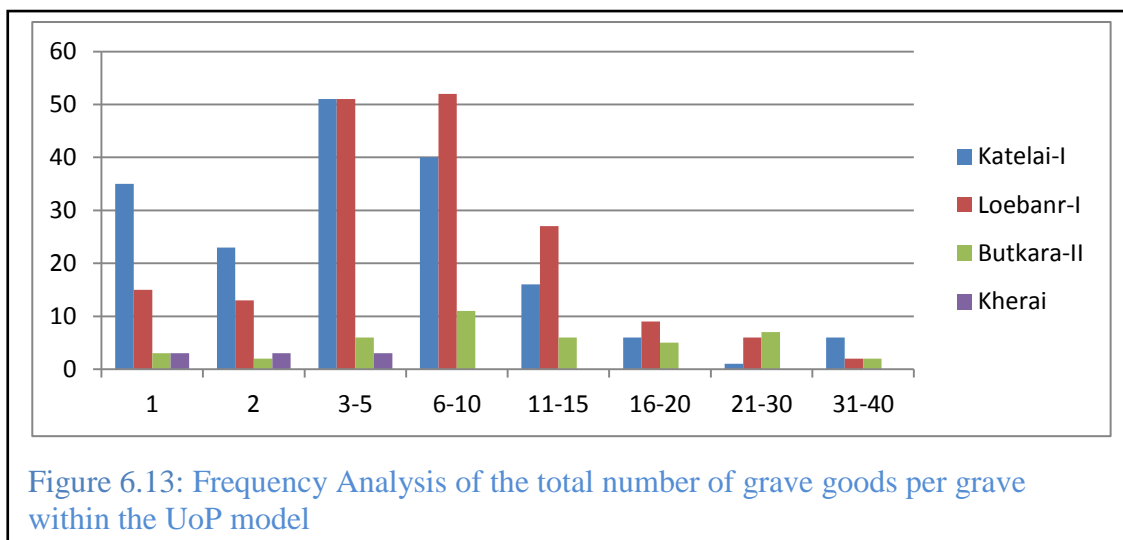
Figure 6.10: Different views (A, B, C) of landscape settings and orientation of the protohistoric graves at Loebanr-I cemetery (Silvi Antonini and Stacul 1972)



## 6.2 Grave Goods

As noted in chapter 5 (section 5.3 Table 5.4), the majority of the graves (560 of 636 or 88%) were provided with grave goods. However, the numbers of goods deposited within a grave were not uniform and there were local patterns within the deposition of grave goods. In the nine protohistoric cemeteries in northwestern Pakistan, the majority (348 or 57%) of the 560 graves contained 1 to 5 grave goods. Timargarha 1 (49 of 77 or 64% of graves with goods), Timargarha 2 (18 of 29 or 62 % of graves with goods) and Katelai-I (109 of 178 or 61% of graves with goods) had the highest percentages of the graves with 1 to 5 goods, while Loebanr-I (79 of 175 or 45% graves with goods) and Butkara-II (11 of 42 or 26% graves with goods) cemeteries had the lowest numbers.





A total of 3914 grave goods were recovered during the excavation of the nine protohistoric cemeteries. Pottery is the most common group of grave goods from protohistoric cemeteries and has been used extensively in the formulation of both the existing models and the ethnic identification of the people buried within the protohistoric cemeteries. Pottery vessels were recorded from 555 of 560 or 99% of the graves with grave goods and consisted of 3124 of 3914 or 80% of the grave goods within the graves (Table 6.5).

	Pottery	Copper/ bronze	Copper/ bronze pin	Terracotta spindle- whorls	Iron	Total
<b>Timargarha 1</b>	357	36	21	4	13	<b>436</b>
<b>Timargarha 2</b>	179	12	10			<b>191</b>
<b>Timargarha 3</b>	10					<b>19</b>
<b>Thana</b>	42					<b>45</b>
<b>Katelai-I</b>	872	97	48	35	29	<b>1105</b>
<b>Loebanr-I</b>	1118	131	81	57	9	<b>1365</b>
<b>Butkara-II</b>	484	49	27	11	13	<b>593</b>
<b>Kherai</b>	16					<b>19</b>
<b>Zarif Koruna</b>	46	1				<b>141</b>
<b>Total Grave Goods</b>	<b>3124</b>	<b>326</b>	<b>187</b>	<b>107</b>	<b>64</b>	<b>3914</b>
	<b>80%</b>	<b>8%</b>	<b>5%</b>	<b>2%</b>	<b>2%</b>	<b>-</b>

Table 6.5: Total number of grave goods within the nine selected protohistoric cemeteries

Copper/bronze artefacts, with 326 or 8% specimens, were the 2<sup>nd</sup> most numerous categories of artefacts from graves. A total 107 or 3% terracotta spindle-whorls account for the 4<sup>th</sup> largest group of artefacts from graves. A total of 64 or 2% Iron artefacts made up the smallest group of the grave goods within the selected categories.

Butkara-II cemetery, with an average 12.4 artefacts per grave (within 48 graves containing goods), had the highest average number of artefacts per grave within the protohistoric cemeteries. Butkara-II is followed by Loebanr-I (with an average of 7.7 artefacts in 178 graves with goods) and Katelai-I (with an average 6.1 goods per grave in 181 graves) cemeteries. Kherai cemetery with 19 artefacts from 9 graves has the lowest average (2.11) of grave goods per grave. Due to my inability to confirm the number of grave goods within individual graves independent of the textual details (e.g. from published drawings), I did not include the Timargarha 1, 2 and 3, Thana cemeteries for the average artefact per grave analysis.

The majority (7 of 19 or 37%) human figurines with grave contexts were discovered from empty graves containing minor human bones and/or grave goods (Table 6.6; Fig. 6.14). Most of these (5 of 7) were female figurines. Five female human figurines were associated with flexed burials in four graves and most of these were placed around the upper body of the deceased. There were four female figurines placed with disarticulated burials within four graves, including grave 183 which contained a disarticulated female and flexed male remains. Possible female human figurines were either placed inside or near the cremation urns (Fig. 6.14).

Grave	No.	Type: Human (H) or Animal (A)	Material	Burial Type	Associated Human remains	Contexts	Figurine gender (Male (M) / Female (F)) or Animal name
LBR_36	4	H	Terracotta	Empty Grave	Minor bones	Bulked together	2 M, 2 F
LBR_66	1	H	Terracotta	Empty Grave		Lower grave	F
LBR_80	1	H	Bone	Flexed and Disarticulated		Inside a vessel	F
LBR_97	1	H	Terracotta	Flexed	Flexed	Near Abdomen	F
LBR_135	1	H	Terracotta	Flexed and Disarticulated	Flexed	Near Face	F
KLI_16	1	H	Terracotta	Flexed	Flexed	Earth fill	F
KLI_110	1	H	Terracotta	Disarticulated	Disarticulated	Grave goods	F
KLI_168	1	H	Terracotta	Cremation	Cremation	Inside urn	F (?)
KLI_187	1	A (?)	Terracotta	Flexed and Disarticulated		Grave goods	?
KLI_203	1	H	Terracotta	Empty Grave	Minor bones	Lower grave	F
KLI_207	2	H	Terracotta	Flexed	Flexed	Near face	F
KLI_242	1	A	Copper	Cremation	Cremation	Inside urn	Horse
BKA_15	1	H	Terracotta	Cremation	Cremation	Near urn	F (?)
BKA_17	1	H	Terracotta	Empty Grave		Upper grave	F
TMG_183	1	H	Terracotta	Flexed and Disarticulated	Disarticulated female burial	With bones	F
TMG	2	H	Terracotta				F
TMG	3	A	Terracotta				1 Ram
ZKA_9B	2	H	Terracotta and Alabaster	Disarticulated	Disarticulated	With bones	F
ZKA_12B	9	A	Terracotta	Flexed	Flexed	Lower grave	8 Bull, 1 Boar
ZKA_24	3	A	Terracotta	Disarticulated	Disarticulated	With bones	3 Bull
<b>Total</b>	<b>38</b>		<b>Animal</b>	<b>17</b>	<b>Human</b>	<b>21</b>	

Table 6.6: Contextual analysis of the human and animal figurines at Loebanr-I (LBR), Katelai-I (KLI), Butkara-II (BKA), Timargarha 1 (TMG) and Zarif Karuna (ZKA) cemeteries (Bernhard 1968; Dani 1968; Khan 1979; Silvi Antonini and Stacul 1972).





A



B

Figure 6.14: Terracotta female figurines (A: Empty (or emptied?) grave; B: Inside an urn) from Katelai-I cemetery (Silvi Antonini and Stacul 1972)

At Zarif Karuna cemetery, 8 bulls' and a single boar figurine were placed inside the lower grave-chamber with flexed burial in grave 12B, while in grave 24, 3 bull figurines were placed with a disarticulated inhumation. A horse figurine was placed inside the cremation urn at grave 242 at Katelai-I cemetery. The contexts of both human and animal figurines suggest to heavily ritual and ideological deposition.

### **6.3 Human Remains**

The availability of information on the burial practices and physical anthropological studies restricted my analysis to eight of the thirty-five excavated protohistoric cemeteries (see chapter 5 section 5.2). At six of these eight cemeteries, inhumation was the dominant burial practice with Butkara-II and Zarif Karuna cemeteries being the exceptions. At Butkara-II cemetery, inhumation and cremation burials were present in almost equal numbers, while at Zarif Karuna, cremation burials were more common (67%) than inhumations. No cremation burials were reported from Kherai cemetery.

#### **6.3.1 Inhumation Practices**

Within the selected eight cemeteries, there existed at least four different styles of inhumation. These included flexed, extended, disarticulated burials and inhumation in urns. A total of 396 graves with inhumations contained the remains of 507 individuals. Single inhumations predominated (304 or 77% individuals), followed by double inhumations of 156 individuals from 78 or 20% of the graves containing inhumations from all cemeteries with the exception of Kherai and Zarif Karuna cemeteries. In terms of range of inhumation practices, Timargarha 2 was the most diverse, as the graves here contained human remains ranging from single individuals to five individuals. No other

cemetery was anywhere near this diversity in terms of multiple inhumations in a single grave (see Table 6.7).

	Single	Double	Triple	Quadruple	Quintuple
<b>Timargarha 1</b>	44	16	6		
<b>Timargarha 2</b>	17	3	1	1	2
<b>Thana</b>	10				
<b>Katelai-I</b>	120	20	2		
<b>Loebanr-I</b>	80	35	1		
<b>Butkara-II</b>	18	1	1		
<b>Kherai</b>	8				
<b>Zarif Karuna</b>	7	3			
Total Skeletons	<b>304</b>	<b>156</b>	<b>33</b>	<b>4</b>	<b>10</b>
	<b>60%</b>	<b>30%</b>	<b>6%</b>	<b>1%</b>	<b>2%</b>

Table 6.7: Frequency analysis of the different types of inhumations

#### 6.3.1.1 Flexed Inhumations

Flexed inhumations were the most common (291 of 507 or 57%) and were reported from all eight protohistoric cemeteries (Table 6.8). In fact, flexed burials and face-urns have been perceived as icons of the protohistoric cemeteries in the northwest in Pakistan archaeology (e.g. Coningham and Manual 2007; Dani 1968, 1988; Parpola 2005) and within museum displays (e.g. SSAQ, Hazara University and Swat museums).

Of the 253 flexed inhumations, 159 or 63% were buried on their right side, while 92 or 36% were buried on their left side (Table 6.9). Thus, body placed on their right side is the main trend within the analysed cemeteries in terms of placement of the flexed burials. This favoured position may be linked to ideological or ritual orientations of the deceased and living. This is perhaps similar to the Muslim burial tradition, where the bodies are positioned on their right side facing *qiblah* (i.e. Mecca), which is an integral part of the Muslim death rituals and beliefs.



	Inhumation	Flexed Inhumation
<b>Timargarha 1</b>	94	41
<b>Timargarha 2</b>	40	20
<b>Thana</b>	10	9
<b>Katelai-I</b>	166	97
<b>Loebanr-I</b>	153	98
<b>Butkara-II</b>	23	15
<b>Kherai</b>	8	3
<b>Zarif Karuna</b>	13	8
<b>Total</b>	<b>507</b>	<b>291</b>
	<b>100%</b>	<b>57%</b>

Table 6.8: Frequency and percentage of flexed burials within graves containing inhumations

Generally, flexed individuals are oriented along the axis of the grave. The frequency and cross-tabulation analysis of the orientation of the flexed inhumations revealed that within the analysed cemeteries of Katelai-I, Loebanr-I and Butkara-II, there are one or two main orientations, usually corresponding to the slope of the mountain, with the head placed toward the top of the mountain and feet towards the lower valley or rivers/perennial water channels (Figs. 6.15 - 6.17).

	Left side	Right side	Prone	Supine
<b>Timargarha 1</b>	11	10		
<b>Timargarha 2</b>	2	5		
<b>Thana</b>	4	4		
<b>Katelai-I</b>	36	58	1	
<b>Loebanr-I</b>	29	64		1
<b>Butkara-II</b>	4	11		
<b>Kherai</b>		3		
<b>Zarif Karuna</b>	6	4		
<b>Total Skeletons</b>	<b>92</b>	<b>159</b>	<b>1</b>	<b>1</b>
	<b>36%</b>	<b>63%</b>	<b>0.5%</b>	<b>0.5%</b>

Table 6.9: Frequency analysis of the placement of individuals within inhumations

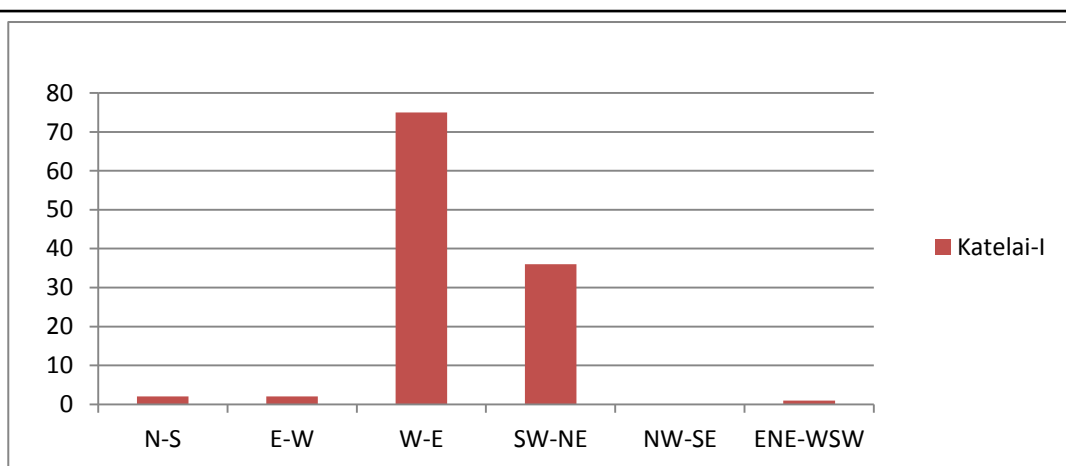


Figure 6.15: Frequency analysis of the orientation of individuals in inhumation-graves at Katelai-I cemetery

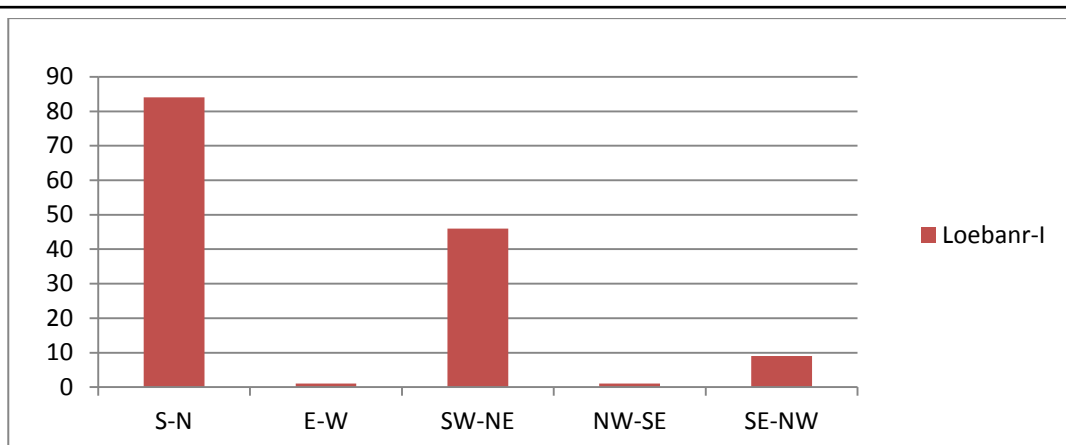


Figure 6.16: Frequency analysis of the orientation of individuals in inhumation-graves at Loebanr-I cemetery



Figure 6.17: Frequency analysis of the orientation of individuals in inhumation-graves at Butkara-II cemetery

In the analysed protohistoric cemeteries, faces of individuals within flexed inhumation were turned to almost every direction. However, within each of the protohistoric cemeteries, there were certain primary directions to which faces were turned and these usually differed from one cemetery to another, corresponding to the slope of the mountain (Fig. 6.18). However, these preferred orientations of the faces were clearly related with the placements of the deceased in relation with the rivers or perennial water channels and/or the valley floor below.

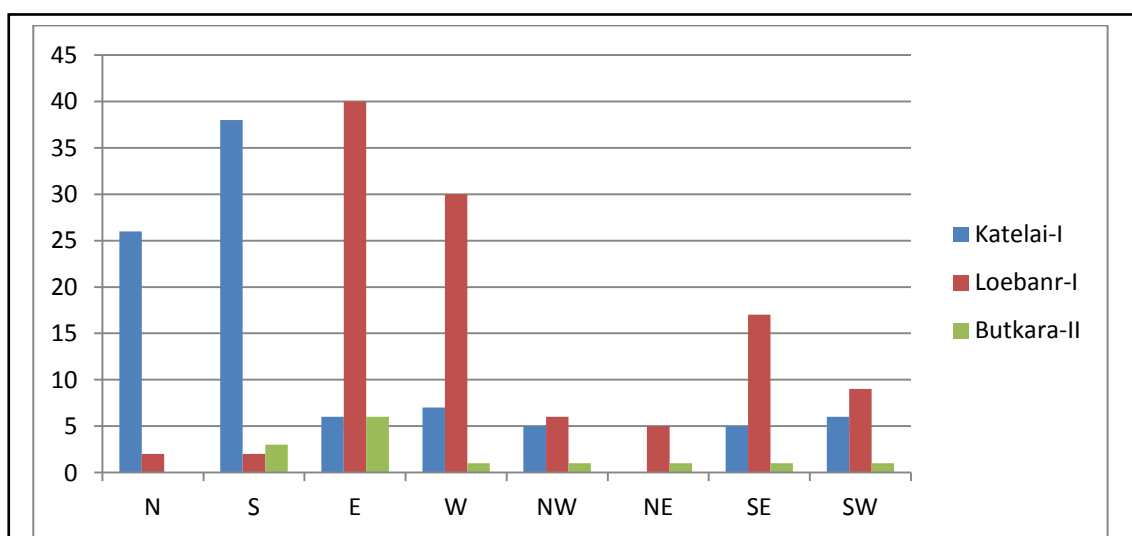


Figure 6.18: Frequency analysis of the direction of the face within the Katelai-I, Loebanr-I and Butkara-II cemeteries.

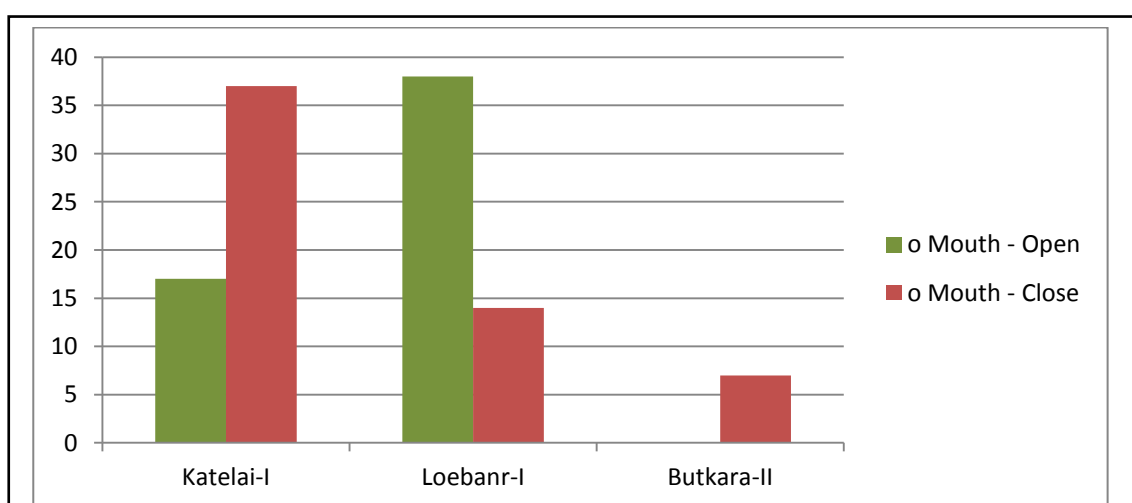
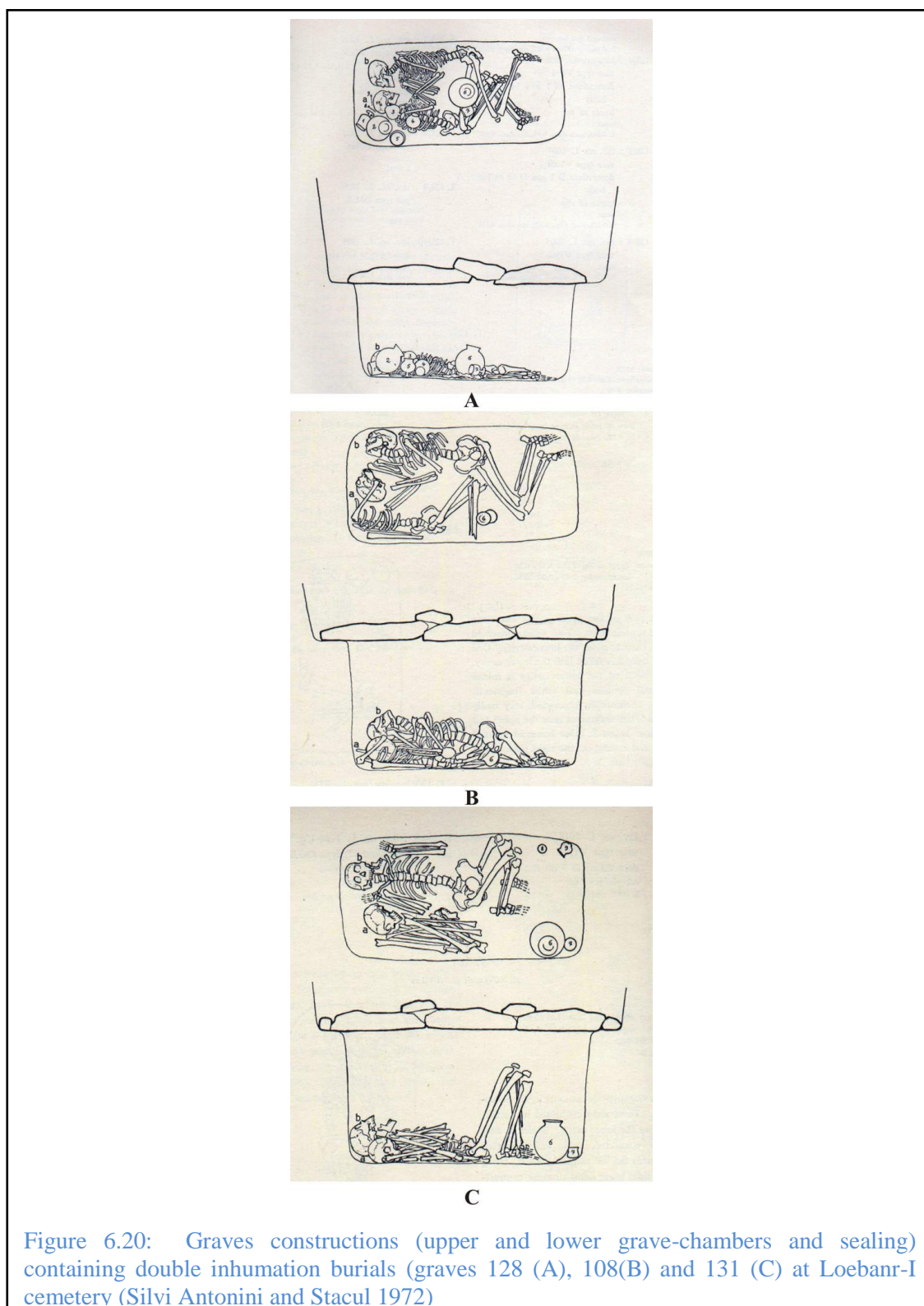


Figure 6.19: Frequency analysis of the position of the mouth/jaw bones at the Katelai-I, Loebanr-I and Butkara-II cemeteries.

The frequency analysis of the treatment of the mouth or rather jaw bones of the buried individuals allows me to argue that there were two positions in which the flexed individuals' mouths were deliberately treated at the time of burial (*contra* Dani 1972:40, 1992:402). These included skeletons with closed (58 of 113 or 51%), open mouths (55 of 113 or 49%) and that there were local variations within these positions of the mouths (Fig. 6.19). Thus, at Katelai-I cemetery, the majority of the distinguishable individuals (37 of 54 or 69%) were buried with their mouths closed, while at Loebanr-I, the majority (38 of 52 or 73%) of the distinguishable individuals were buried with their mouths open. At Butkara-II cemetery, all of the individuals were buried with their mouths closed.

Within the Katelai-I, Loebanr-I and Butkara-II cemeteries, the positions of arms of 151 of 291 or 52% and hands of 79 of 291 or 27% flexed inhumations could be noted. One of the characteristic features of flexed inhumations in the protohistoric cemeteries was that the arms were folded together (140 of 151 or 93%), mostly pointing upward toward faces (119 of 140 or 85%). Most (130 of 140 or 93%) of the arms were joined together (Fig. 6.25). However, nine other skeletons had their arms stretched along their bodies or over the other skeletons (Fig. 6.21). The hands of 71 of 151 or 47% of these buried individuals were brought in front of their faces, with some (34 of 151 or 22%) joined together. The hands of eight individuals were also placed over other individuals in the graves (Fig. 6.20). There were sixteen graves within the three analysed cemeteries where the hands of the flexed individuals were placed over a small pottery vessel, usually a cup, in front of the face (Figs. 6.23 and 6.24 A, E). There were only two flexed individuals with arms stretched along their bodies at Loebanr-I cemetery. With few differences and variations, these patterns of the placement of the hands of the

skeletons are quite consistent within each of the analysed cemeteries (Figs. 6.21 and 6.22).



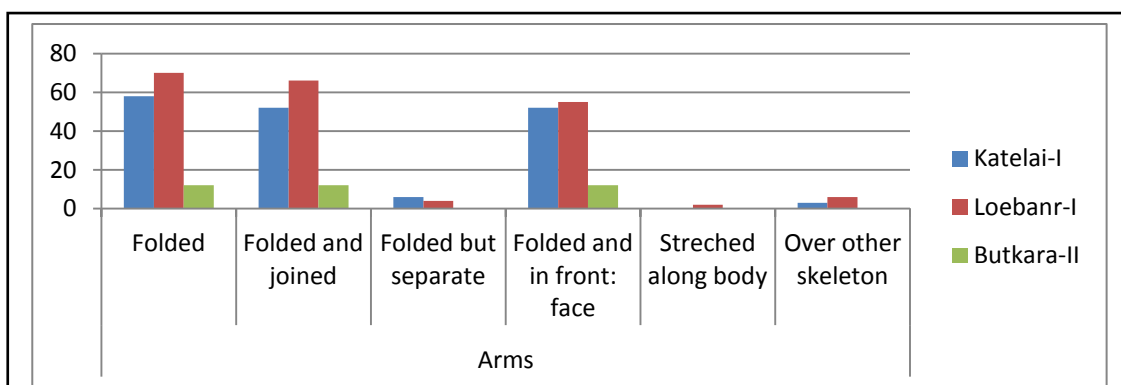


Figure 6.21: Position of flexed individuals' arms at Katelai-I, Loebanr-I and Butkara-II cemeteries

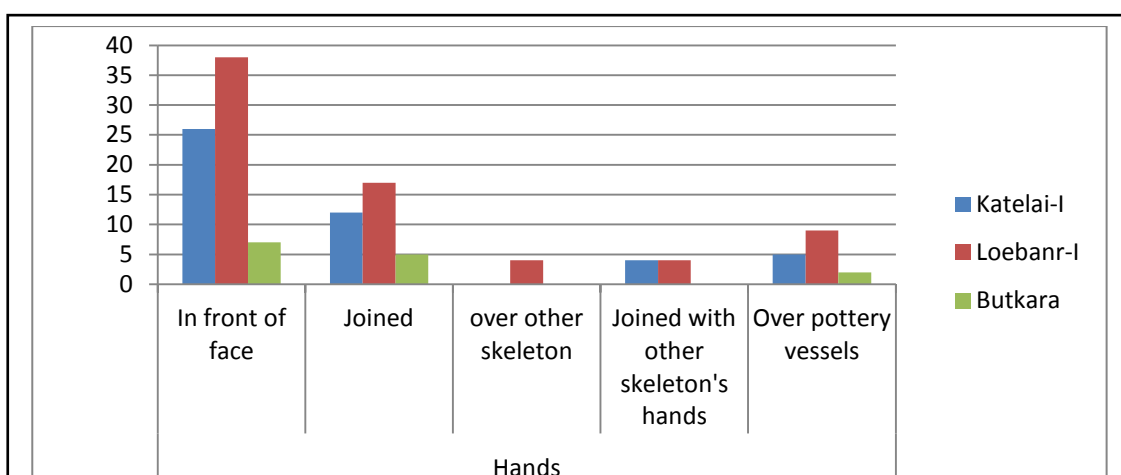


Figure 6.22: Position of flexed individuals' hands at Katelai-I, Loebanr-I and Butkara-II cemeteries

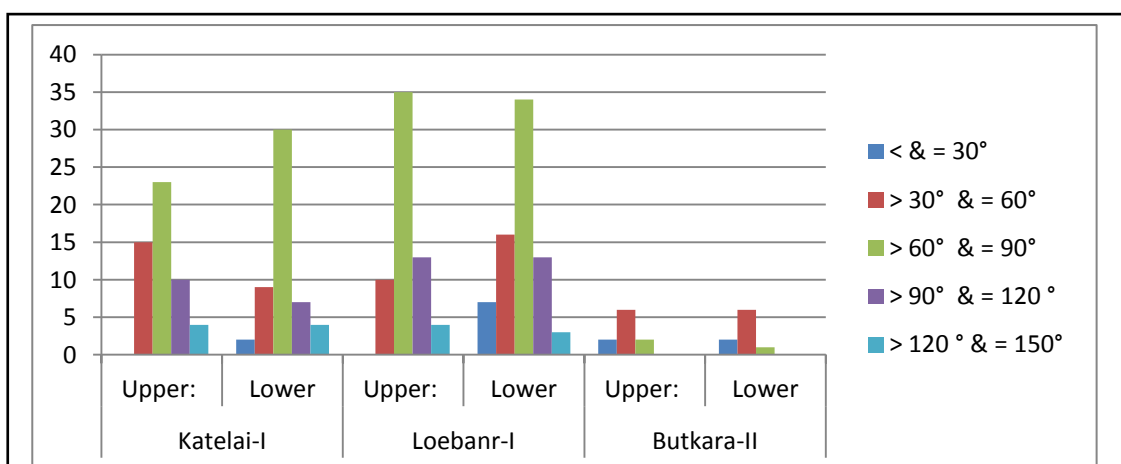


Figure 6.23: Frequency analysis of the degrees of flexing of upper and lower legs' femur bones at Katelai-I, Loebanr-I and Butkara-II cemeteries

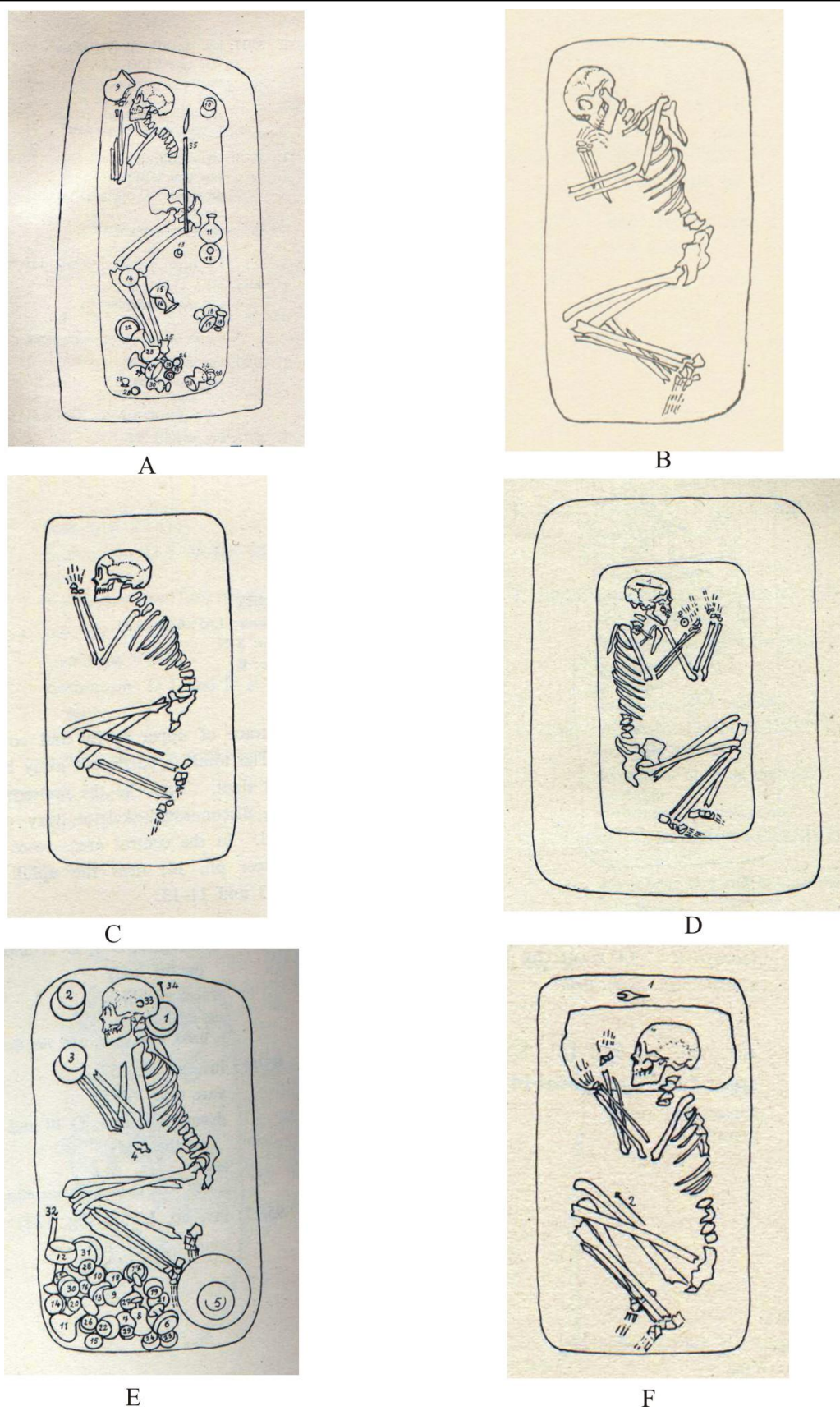
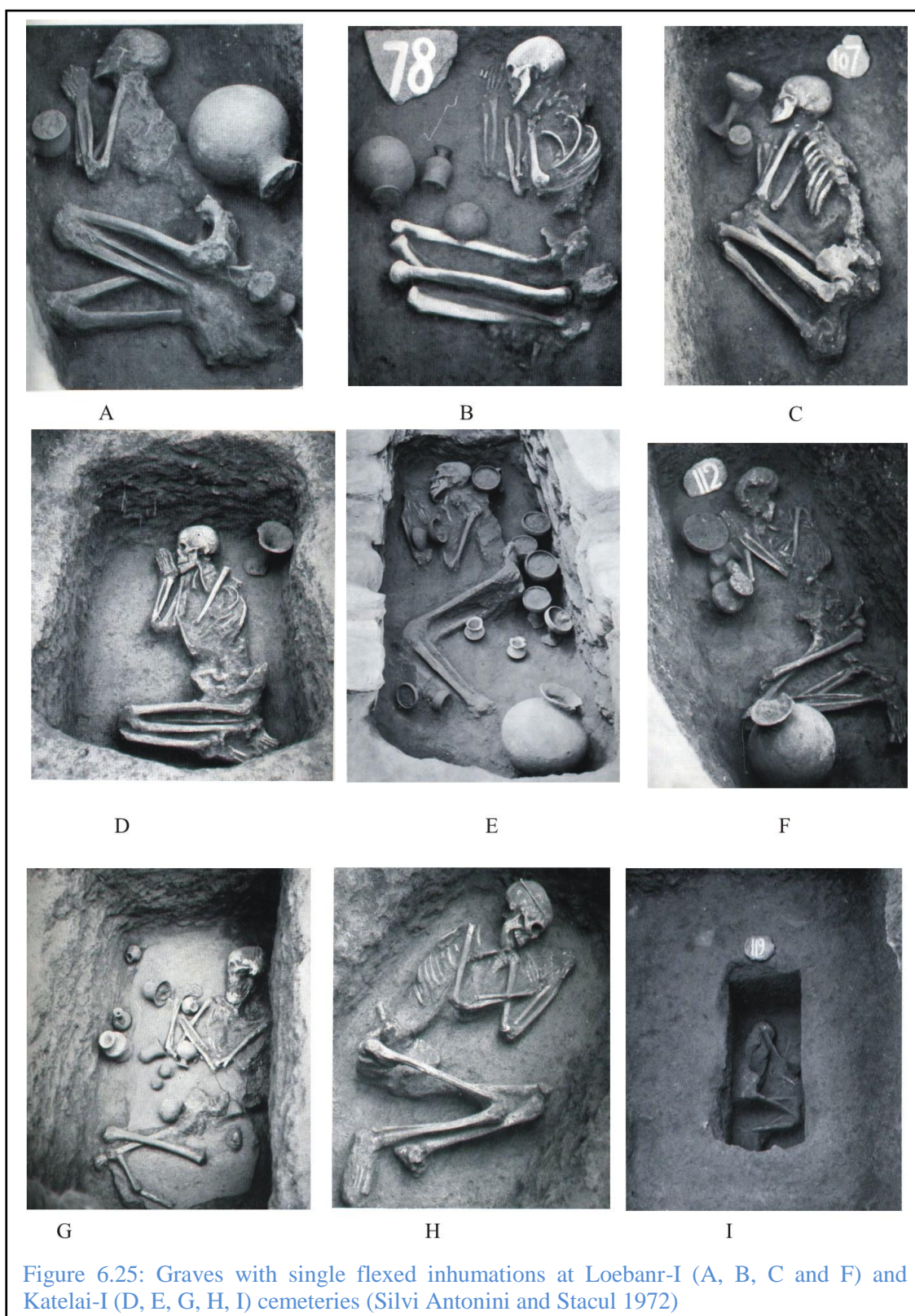


Figure 6.24: Graves with single flexed inhumations at Butkara-II (A), Loebanr-I (C and E) and Katelai-I (B, D and F) cemeteries (Silvi Antonini and Stacul 1972)

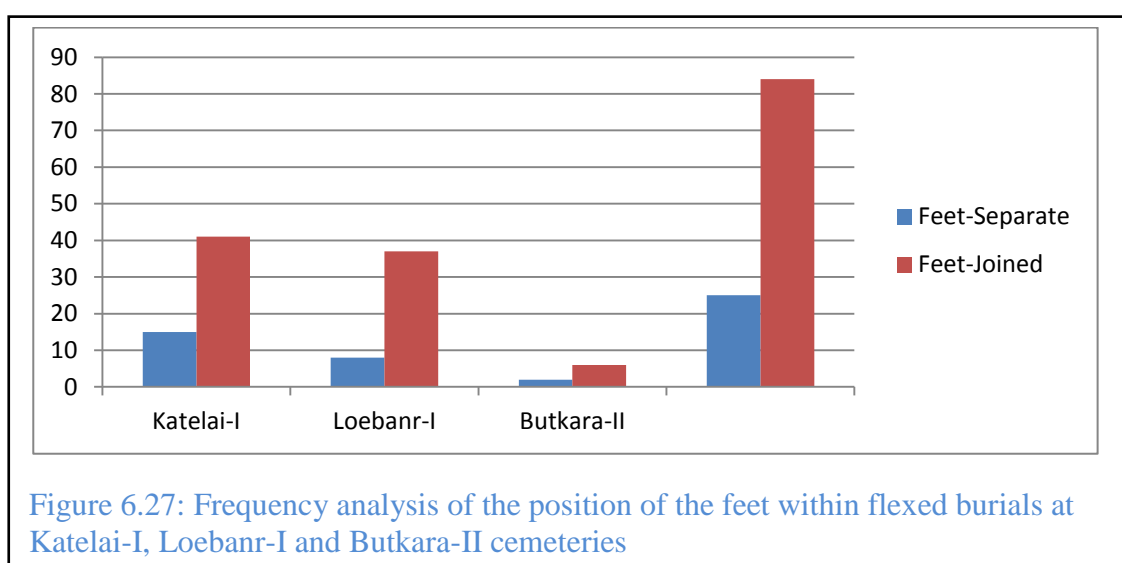
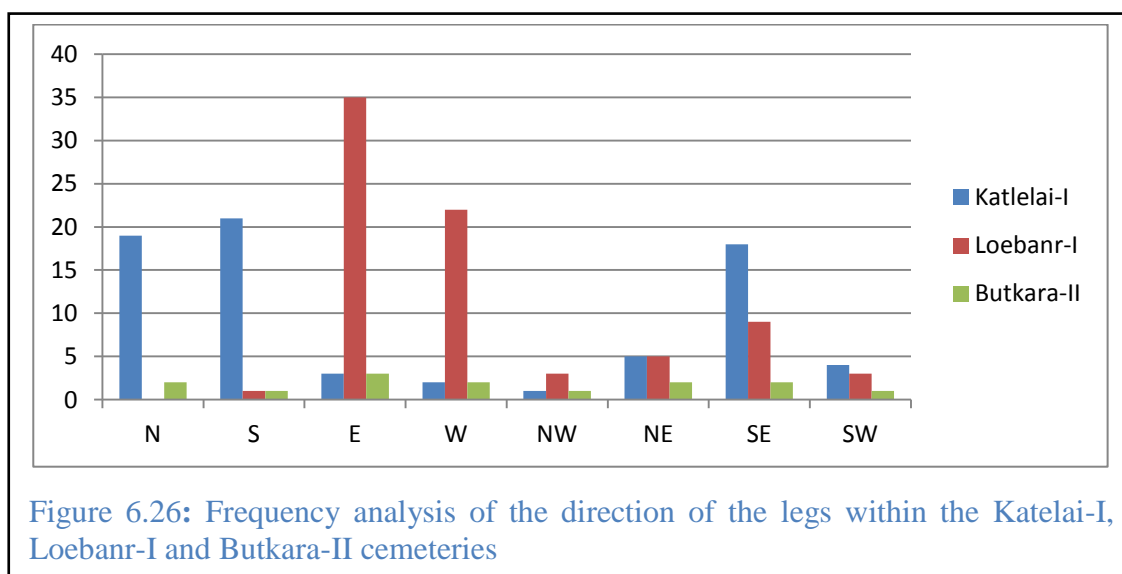




Due to differential preservation and/or recording, the flexing of 124 upper legs and 134 lower legs could be distinguished for this analysis within the flexed inhumations at Katelai-I, Loebanr-I and Butkara-II cemeteries. Most of the upper (93 of 124 or 75%)



and lower (107 of 134 or 80%) legs of the distinguishable skeletons were flexed at less than 90 degrees (Fig. 6.23). The legs within the flexed inhumations were generally oriented along the same direction as the face and most (84 of 109 or 77%) of the feet within distinguishable skeletons were joined together (Figs. 6.26 and 6.27).



### 6.3.1.2 Disarticulated Inhumations

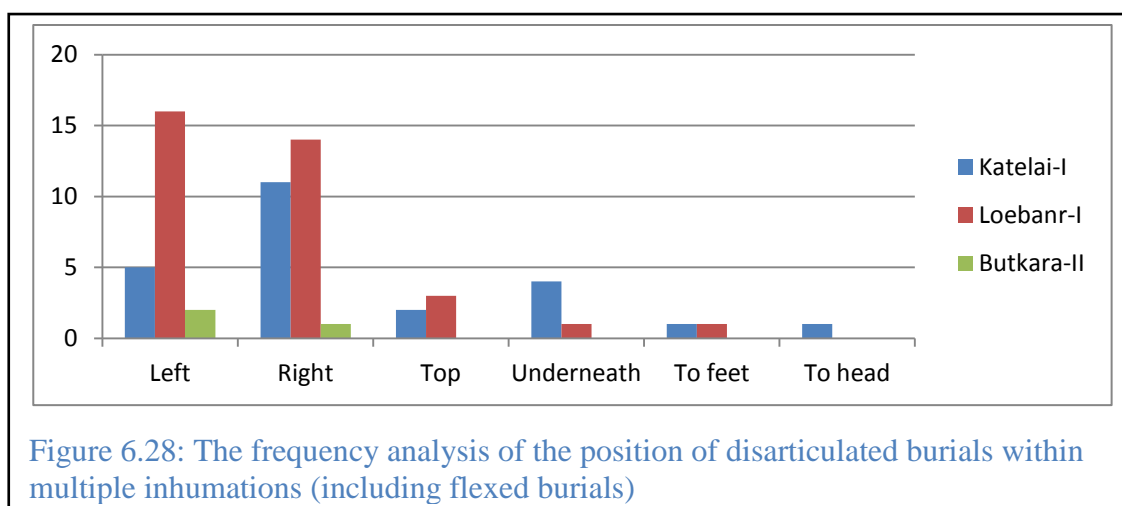
Within the eight analysed cemeteries, a total of 195 or 38% of individuals were treated in the form of disarticulated burials, and of these 64 or 33% had their skulls placed over their respective disarticulated burials (Fig. 6.29). At Loebanr-I cemetery, disarticulated

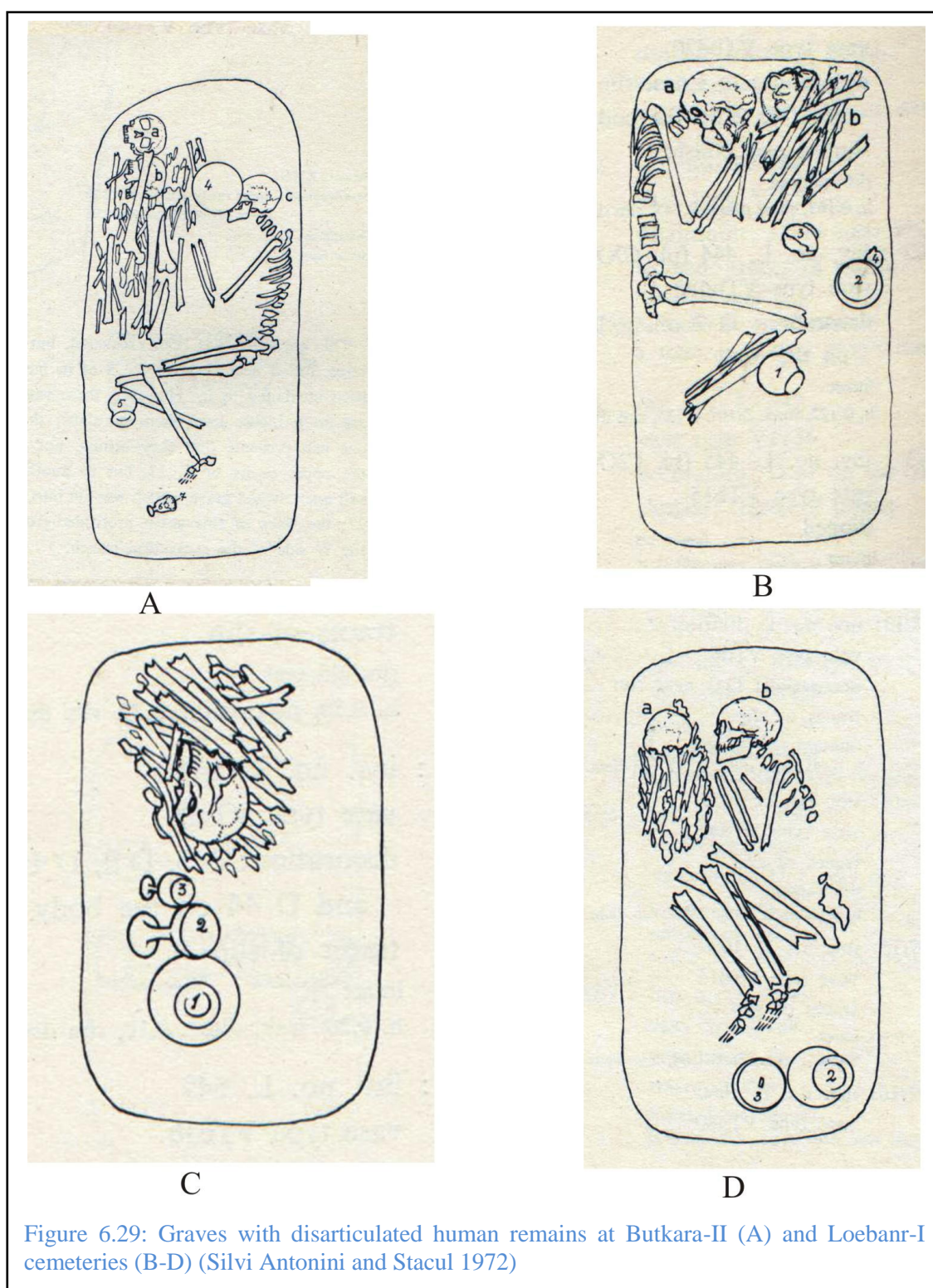
burials with a skull placed on top was the most notable practice and was represented in 41 of 60 or 68% of the graves with disarticulated remains. No disarticulated burials were recorded from Thana and Zarif Karuna cemeteries (Table 6.10).

	Inhumation	Disarticulated-burials	Disarticulated burials – skull on top
<b>Timargarha 1</b>	94	37	3
<b>Timargarha 2</b>	40	15	4
<b>Thana</b>	10	--	--
<b>Katelai-I</b>	166	73	14
<b>Loebanr-I</b>	153	60	41
<b>Butkara-II</b>	23	6	2
<b>Kherai</b>	8	4	--
<b>Zarif Karuna</b>	13	--	--
<b>Total skeletons</b>	<b>507</b>	<b>195</b>	<b>64</b>
	<b>100%</b>	<b>38%</b>	<b>13%</b>

Table 6.10: Frequency analysis of disarticulated burials and disarticulated burials with head on top.

The frequency analysis of the position of the multiple disarticulated burials within a single grave suggests that the disarticulated burials would most probably be placed to right (26 of 62 or 42%) or the left (23 of 62 or 37%) of the other skeletons (mostly flexed) within the grave (Fig. 6.28). Thus, there were deliberate choices involved in the placement of the disarticulated remains and were not the result of “throwing the remains in the pit without care” (*contra* Bernhard 1968:328).





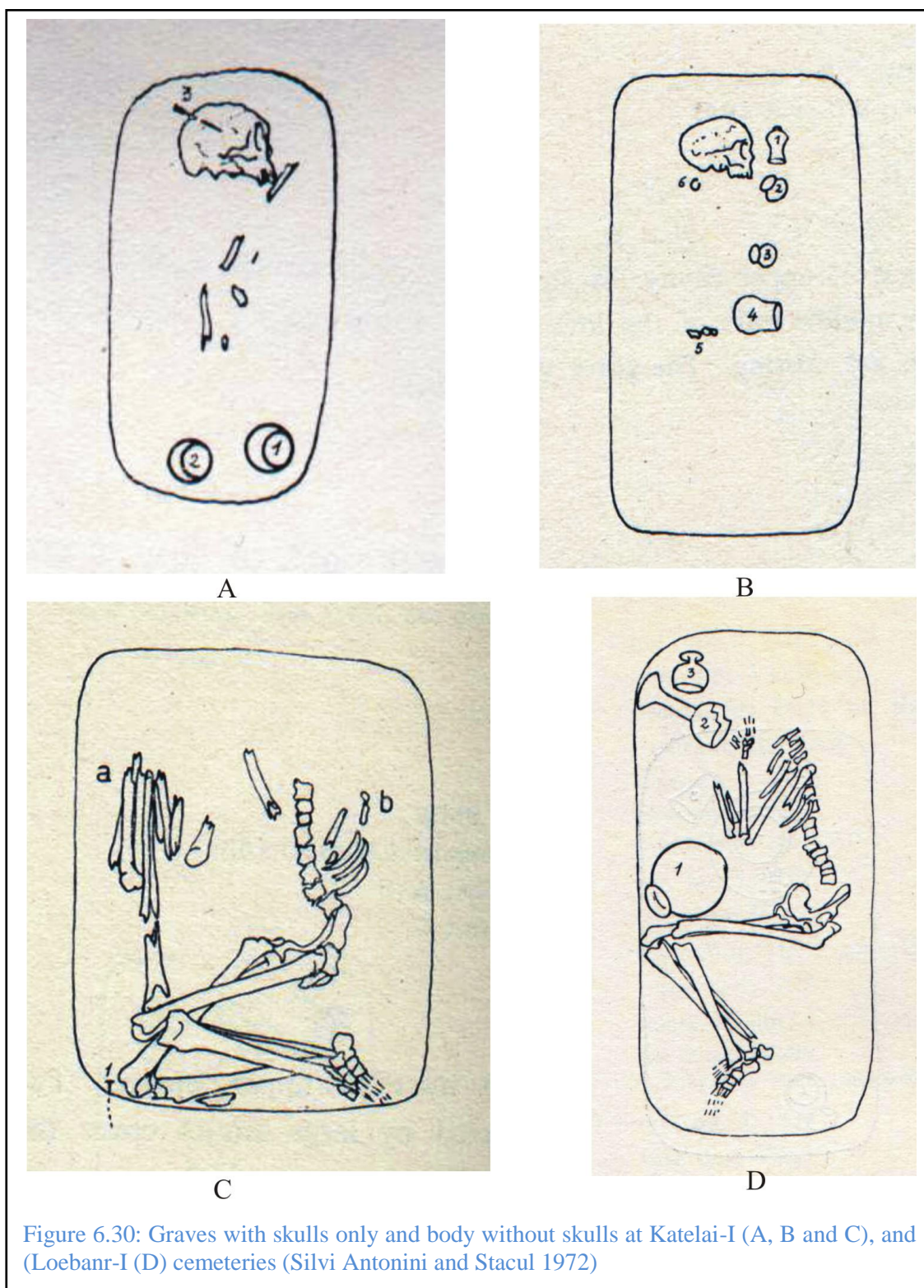
### 6.3.1.3 Deviant Inhumation Practices

Though all the burials within the analysed protohistoric cemeteries are not exactly the same; however, there are few burials which within the ambit of inhumations were treated differently than the majority of the burials and thus could be considered as deviant burials. There were four flexed individuals without their skulls, one each from Timargarha 1 (grave 185), and Loebanr-I (grave 62), and two from Katelai-I (grave 9 and 33) graves (Fig. 6.30 C, D). There were three graves, most probably with articulated burials, where the skull was present in the lower grave-chamber without any evidence of the rest of the body (Fig. 6.30 A, B). These included one grave each at Katelai-I (grave 41), Loebanr-I (grave 3) and Timargarha 2 (grave 208). At Loebanr-I, a double inhumation grave (grave 135) containing flexed and disarticulated burials, had the skull of the disarticulated individual buried in a specially built small cavity within the grave, but separate from the rest of the skeleton. In two graves at Katelai-I cemetery (graves 33 and 107) most of the upper body including the skulls were missing.

A flexed inhumation at Katelai-I (grave 180) cemetery was provided with a stone (or a stone pillow) with the skull of the deceased resting on it (Fig. 6.24 F). In one flexed inhumation at Timargarha 1 (grave 185), the individual, probably a female (Bernhard 1968:314), was buried with her legs crossed. At Loebanr-I cemetery, a single skeleton was found in a supine position (grave 108), and there were four other individuals within graves which were lying on their sides but were looking upward. A grave (grave 188) at Katelai-I contained the remains of two individuals in the form of disarticulated-burials. At Timargarha 1 cemetery, the skull of a deceased was placed over an urn in a grave (grave 185) with the long bones placed over the mouth of the vessel as a support to the skull above. A single flexed burial (grave 33) at Butkara-II has been reported



without the provision of a grave construction and appears to have been left on the edge of the slope of the cemetery (Silvi Antonini and Stacul 1972:473).



The finding of cremation and flexed inhumation burials at the settlements sites of Balambat in Dir (Dani 1968:240-1) and Aligrama in Swat (Stacul and Tusa 1975:306-8)

also requires special mention, as the burials were inside the settlements, and without formal grave structures as found in the cemeteries. The four graves at Balambat contained burnt bones and pottery vessels, which Dani (1968:240-1) attributed to his period II of the graves at Timargarha. Skeletons of five individuals were found at Aligrama, all flexed (with variations within the flexing of the legs) and their burial places were marked with schist slabs and stones on the floors but were without proper graves as recorded elsewhere within the protohistoric cemeteries in the region. Within these graves at Aligrama, there were also variations in the orientation of the bodies, and the positions of the head and face. All but one were provided with pottery vessels, and was associated with both phases II and III of the site, probably corresponding to the Ghalegai sequence period V and VI (Stacul and Tusa 1975:320). These burials at Aligrama were assigned to three adults (two males, one female), two children, who were apparently similar anthropologically to the Butkara-II population (Pardini 1977:207, 224).

At Bir-Kot-Ghundai settlement site in Swat, a “dozen human skulls and some other skeletal” remains were ascribed to the non-occupational layer separating period IV from V of the Ghalegai sequence at the site (Stacul 1989a:250). These skeletal remains were spread in a large area and “at random with no traces of burial” (Stacul 1989a:250). As there was no evidence of violence at the site between the two periods, Stacul (1989a:250) assigned them to the late occupation of his period IV and suggested that these were people who “brought stability and uniformity” to the region and who were responsible for the growth of farming in the region; this seems to have probably been a guarded reference to people buried within the protohistoric cemeteries.

In grave 1, trench D1, at Timargarha 1 a neonate was resting with its head down the thighs of the woman, with the feet of the newborn still enclosed within the woman's pelvic region (Durrani 1968:67, pl. VI a). The articulated feet of the infant within the girdle region of the woman negates the possibility of the infant being put on top of the body after the death of the two. There was no special treatment accorded to the woman within her burial style or associated material culture. The bodies of the pregnant women are known to expel the foetus from their bodies after death and that this expulsion takes place after 48-72 hours, when the decomposition process has already set in (Parikh 1979:159 cf. Crawford 1993:86). This may mean that burial of this pregnant woman might have taken place within the 72 hours after her death. This may also imply that the flexed inhumations of individuals took place within the first 72 hours after their deaths within the protohistoric cemeteries.

Small-sized graves (e.g. graves 151 and 191 at Timargarha 1) contained disarticulated burials of adult human skeletons. The length of grave 191 at Timargarha 1 is a little more than the length of the femur and tibia bones of the buried individual and the femur and tibia bones are placed over each other with a skull on top. (Rahman 1968a:87, 90, Pl. XX c; see Fig. 6.3). No other grave of this size have been reported to have contained the disarticulated remains of an adult.

Bernhard (1968:304) claimed an extended inhumation (grave 136) was unique at Timargarha 1. This happened to be the only grave of its type in all the cemeteries I have analysed, and was not mentioned or classified within Dani's (1968) discussions of the burial practices within the Gandhara Grave Culture.

Inhumations within urns were also present at some cemeteries, and were mainly associated with child-burials, such as at Katelai-I. At Timargarha 1, in grave 184, an urn contained an un-burnt adult human skull (aged 20-25 years) and burnt bone fragments (Bernhard 1968:314; Rahman 1968a:78); in fact, the skull was placed over the urn with the support of long bones placed over the mouth of the urn (Bernhard 1968:314). Furthermore, the published photograph (Bernhard 1968 pl. XXXIVb) suggests that the skull of the individual was much bigger in size than the mouth of the urn. This presence of adult of un-burnt disarticulated bones and burnt bones with an urn in a small-sized cist-grave contradicts Dani's chronological classification of the graves based upon the burial practice (i.e. cremation for period II and disarticulated remains for period III) or age-based (i.e. small graves for children) classification based upon the size of the graves.

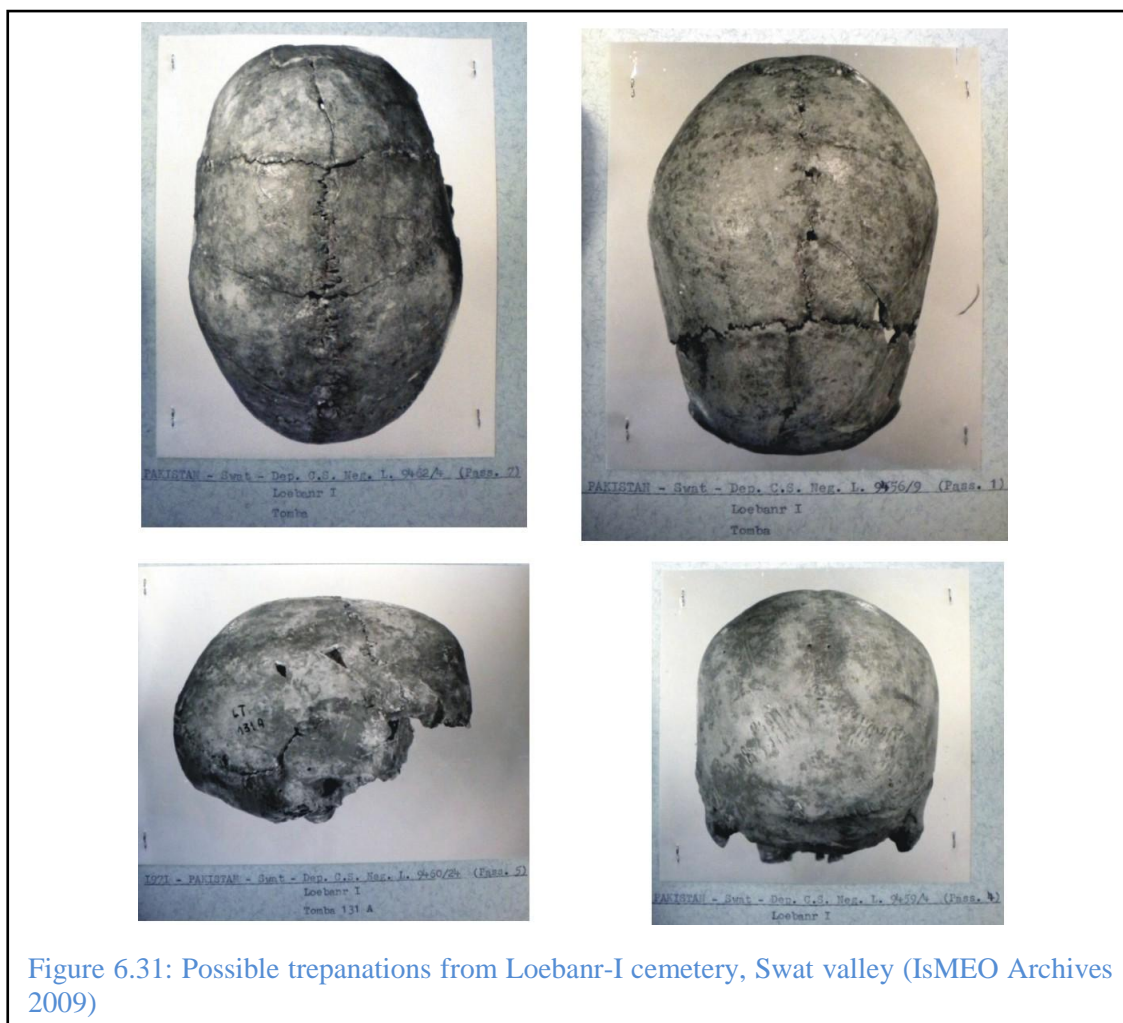
A group of five graves (graves 109, 125, 137, 149 and 183) with disarticulated human remains at Timargarha 1 contained animal remains (Bernhard 1968:300-314; 370). The animal bones were of horse, stag (*cervis* species), goat, sheep, hare and snake; however, sheep and goat were the most common and came from four of these graves. Three graves with animal bones were recorded from Loebanr-I (grave 7) and Butkara-II cemetery (grave 4 and 12), but no information exist on their identification (Silvi Antonini and Stacul 1972). Parpola (2005:75; 2009:151-2) used the presence of copper horse figurine from Katelai (grave 242) and terracotta horse figurine lid handle at Loebanr-I (grave 019) cemeteries as evidence of Aryans presence in northwestern Pakistan. However, the discovery of two horse burials at (graves 40 and 45) Katelai-I cemetery did not invoke specific associations within the IsMEO model, probably due to the fact that as these horses were not buried inside a proper grave with human burials or



they were not related with any grave in the cemetery (Azzaroli 1975: 353-55; Silvi Antonini and Stacul 1972: 288, 291) and that there burials were not similar to elaborate horse burials in central Asia (e.g. Parpola 2005:107).

Three individuals with trepanations have also been identified within the protohistoric cemeteries in northwestern Pakistan. Bernhard (1968:319, Pl. LXXIV a) had identified grave (212) at Timargarha 2, containing a female (aged 30-35 years) buried in flexed position with a single round trepanation. Alciati and Fedeli (1965:171-173) identified a female skull, of unknown age, with a single trepanation. They associated trepanations with a “magic ritual, but also a therapeutic one” (Alciati and Fedeli 1965:171).

Through my study of the IsMEO photographic archives at Rome, Italy, in December 2009, I have identified (in the absence of anthropological information) nine possible cases of trepanations at the Loebanr-I cemetery (Fig. 6.31). Out of these nine skulls, four were traceable to their grave contexts. Thus, skull of individual B from grave 178 (disarticulated burial with another flexed burial) had a rectangular cut to the side of skull, while skull of individual A from grave 131 (flexed with detached head and part of the double flexed burial) had two triangular cuts to the right side of the skull. Skeleton A of grave 127 (flexed and part of double flexed burial) had a small round cut to lower part of the right side of the skull, while skeleton B of grave 85 (dislocated head of disarticulated burial with another disarticulated burial) large rectangular cut to left side of the skull. There are three unidentified skulls from Loebanr-I cemetery (IsMEO archives Neg. No. CS 9459/4, 9456/9 and 9462/4), which had 4, 3 and 2 round cuts right on their upper parts respectively. Two skulls (CS 9462/11 and CS 9461/17) had a single large rectangular cut to the upper and left sides of the skulls respectively.



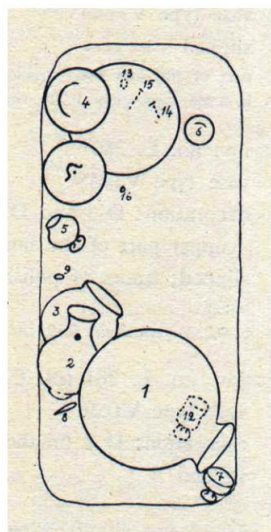
### 6.3.2 Cremation Practices

Cremation burials are the second most common burial practices and there are 151 (27%) graves with cremations in the eight protohistoric cemeteries analysed here. The cremation of the deceased within the protohistoric cemeteries was not a standard process as suggested within both the models (e.g. Dani 1968; Silvi Antonini and Stacul 1972:11) but was rather a vibrant affair with a lot of options that the living have chosen or acted upon for the burning of their loved ones. The physical anthropological study of the cremation burials at Timargarha 1 and 2 cemeteries revealed that some of the human bones were “slightly burnt” (e.g. grave 119) or “equally burnt or calcined” (e.g. grave 122) or “un-equally burnt or semi burnt” (e.g. grave 308) or parts of the bones were

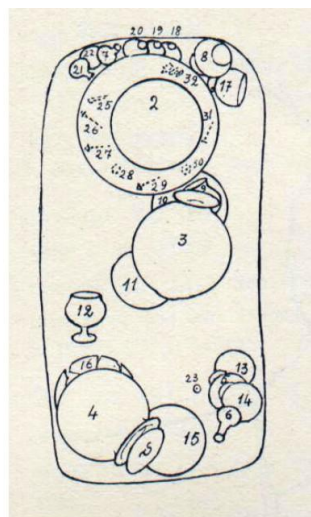
fully burnt while some were slightly burnt (e.g. grave 237) or in one case the face and skull were burnt, while the rest of the bones were not burnt (i.e. grave 184) (Bernhard 1968:301-324).

This suggests that either the living choose the different ways of cremation intentionally and that these were meaningful to them or that the pyre and firing technology was not the same within all the cemeteries within the same or different chronological periods or that this technology was not equally developed across all the two protohistoric cemeteries or that the pyre or firing was affected by adverse environmental factors (e.g. rains in summer or snow in winter). The understandings of the pyre constructions and firing technologies, and human choices of these, are hampered by the non-availability of reliable chronological frameworks. In fact, Bernhard (1968:331) based upon the uneven burning of the skeletal remains, suggested that the “dead were not burnt on a pack of wood but the body was wrapped with a straw mat or reed” and that this was “lighted resulting in an irregular roasting and burning of the body”.

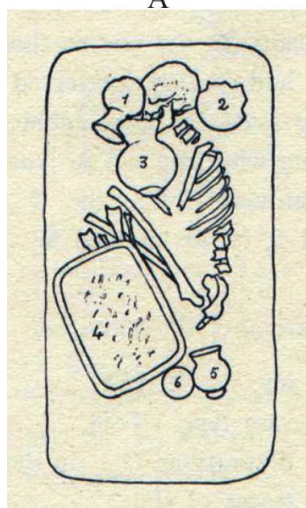
My analysis of the cremation burials is limited to 52 graves (of the total 152 graves with cremations) from Timargarha 1, 2, Butkara-II and Katelai-I cemeteries, primarily due to the presence of limited physical anthropological data from the cremation burials (Alciati 1967; Bernhard 1968; Stacul 1975b:325 footnote). Within these 52 graves, the remains of 77 individuals' cremated remains could be distinguished.



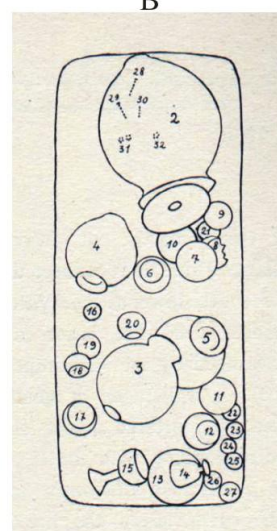
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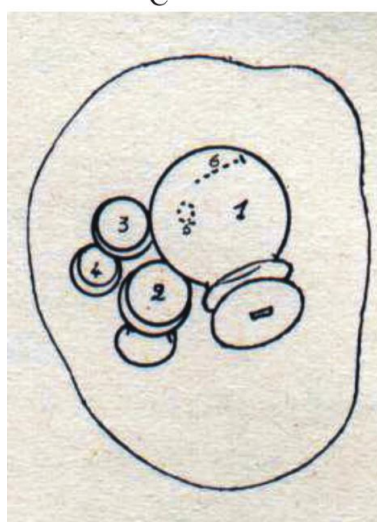
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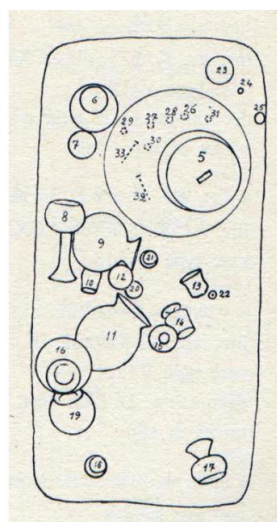
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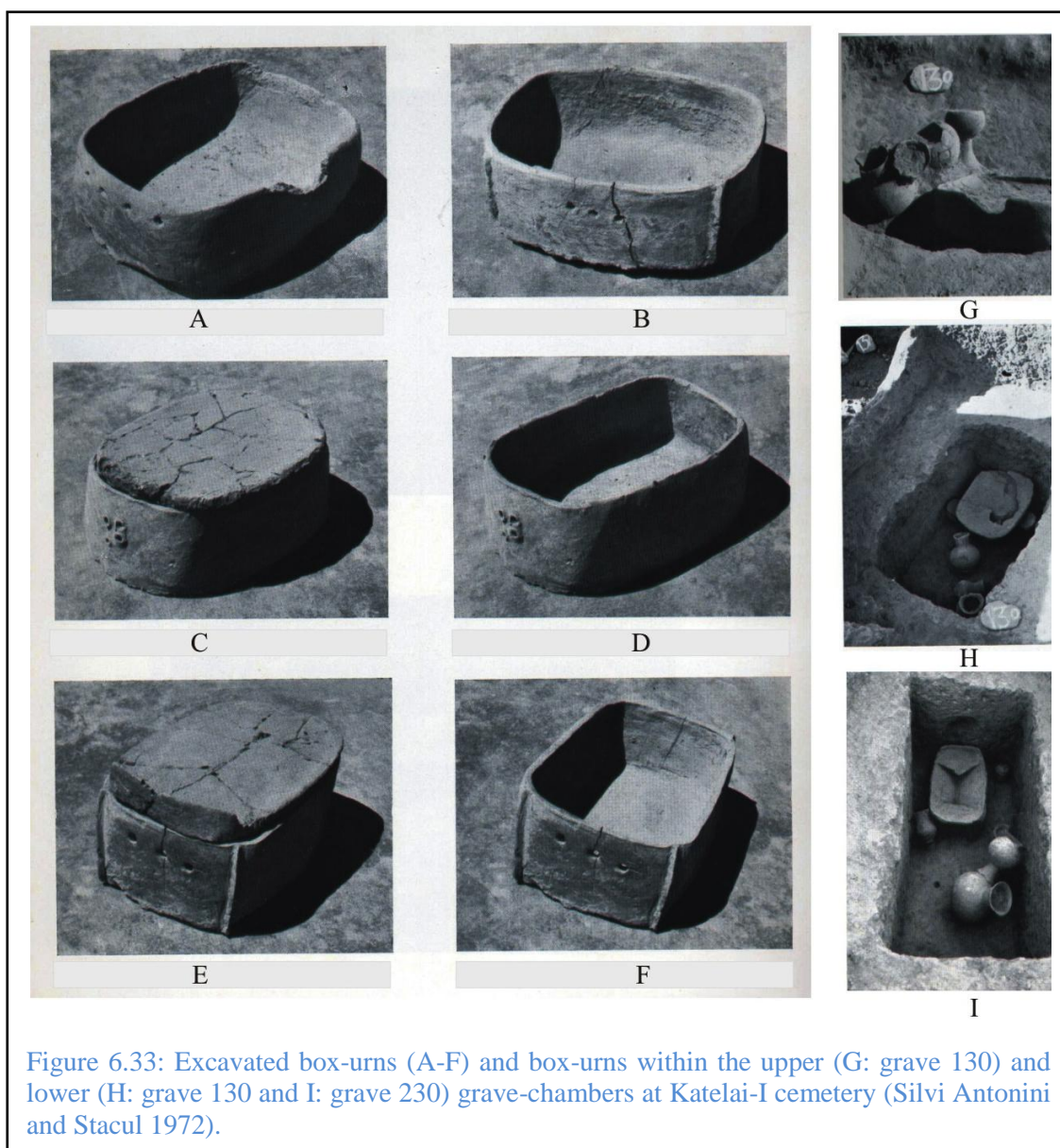
E



F

Figure 6.32: Graves containing cremations in urns burials at Loebanr-I (A), Butkara-II (B) and Katelai-I (C-F) cemeteries (Silvi Antonini and Stacul 1972). Most urns contained copper/bronze pins and some terracotta spindle-whorls.





Generally, within the IsMEO and UoP models, cremation burials are understood as single individual burials (e.g. Silvi Antonini and Stacul 1972). However, the physical anthropological data suggest that the number of cremation burials with single (33 of 52 or 63%) and two (14 of 52 or 27%) individuals within a grave (in an urn) were the most common practice (Figs. 6.32 – 6.33).

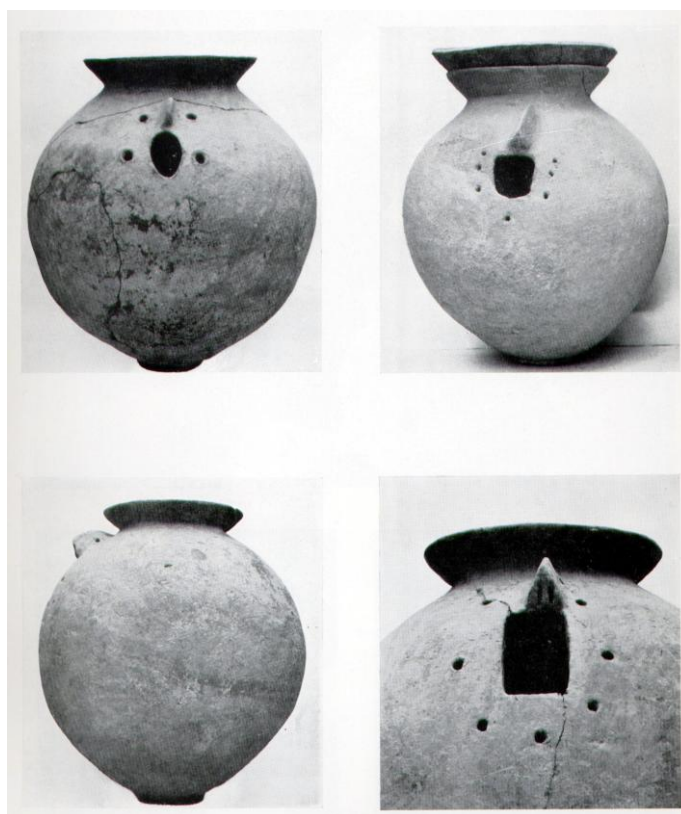
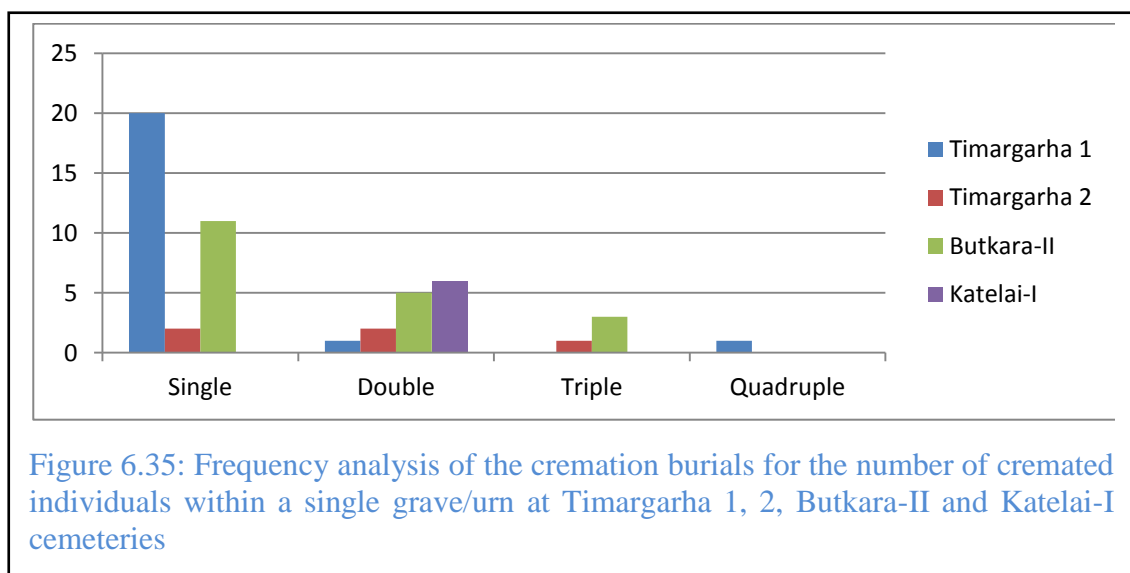
**A****B**

Figure 6.34: Face-urns (VTf 68) from Katelai-I (A) and Loebanr-I (B) cemeteries (Silvi Antonini and Stacul 1972)

Almost equal numbers of individuals were cremated within these two practices, with 33 or 42% individuals in single and 28 or 37% individuals in double cremation burials.

Cremation burials with the remains of three individuals were also reported from the Timargarha 2 and Butkara-II cemeteries, with cremated remains of four individuals coming from a single grave (122) at Timargarha 1 cemetery (Fig. 6.35). Thus, I may suggest that there might have been more individuals buried in cremation burials than accounted for by the excavators, by considering cremation burials as single burials (e.g. Silvi Antonini and Stacul 1972).



Cremation burials were buried in three different ways: simple-cremation burials, cremation burials in urns, and ash-graves. In simple-cremation burials, the cremated bones were found deposited or spread over the floor of the lower grave-chambers. Artefacts within these graves also do not include an urn, negating the possibility of cremated bones as a result of displacement from an urn in the grave.

Cremation burials in urns were the most common cremation practice and it involved the placement of cremated bones within a pottery vessel inside the grave. Urns, as a container for cremated remains, are perhaps the most practical and ritual component of the cremation burials (Williams 2011:243). These urns come in three types: simple pots (e.g. Silvi Antonini and Stacul 1972 variety VTF 68), face-urns (VTf 68 variety with decorations D72-74; Fig. 6.34 A, B) and box urns (VTg 77; Fig. 6.33). Simple, but typical, pottery vessels used as urns (Silvi Antonini and Stacul's vessel type VTf 68 (1972:32)) were consistently present in many inhumations graves in the Swat cemeteries. A total of 82 urns were present in inhumation graves at Katelai-I, Loebanr-I and Butkara-II cemeteries. A total of 17 VTf 68 urns with D72-74 decorations were recorded, including 13 from Katelai-I, 6 from Loebanr-I and a single specimen from Butkara-II. The face-urns, as the name suggest, resemble the structure of human face, with particular emphasis on the representation nose, eyes, eye brows and mouth. The nose and eye brows are applied on the exterior of the vessel, while the mouth and eyes are produced through cuts or holes in the vessel body.

The third cremation category of ash-graves is based upon Dani's (1968:71) report of the presence of 11 graves containing only ashes at the site of Timargarha 1. It seems that within this cremation burial practice, all the ashes, and probably minor bones, were collected from the funeral pyre, and then deposited within these graves or it is equally possible that cremations were simplistically classified as graves with ashes by the excavators. However, there is no evidence to suggest that these ash-graves were used as pyre places. The presence of ash and charcoal is also attested from Katelai-I and Loebanr-I cemeteries, especially within the fill of the upper grave-chambers; which seemed to be deliberate and intentional activities. Examples from Timargarha 1,



however, are different, as they were left within the lower grave-chambers without any other remains, while at Katelai-I and Loebanr-I, the ashes and charcoal were part of the fill of the upper grave-chambers.

The recalibration of the radiocarbon measurements of cremated bones from Loebanr-I and Katelai-I cemeteries suggest a chronological range of 2200 to 30 cal BC for cremation burials (Table 6.11 and chapter 7 section 7.1). The chronological analysis of the individual graves with radiocarbon measurements suggests tremendous chronological continuity within the different aspects of the graves, grave goods and burial practices. Thus, within the chronological range of 2200 to 380 cal BC, the graves were constructed with upper and lower grave-chambers, meaning continuity within the construction styles of the graves (Table 6.11).

The cremation burials were usually placed within the lower grave-chamber in the same type of pottery vessel (i.e. VTf 68) and this practice continued during the entire chronological range of cremation burials. All the lower grave-chambers were sealed with three large slabs of schist stones and the cavities within the sealing stones were filled by small stones within the analysed graves. All the analysed graves were rectangular in shape (both upper and lower grave-chambers) and none of the graves were provided with a wall structure in the lower grave-chamber. Within a chronological range of 1570 to 280 cal BC, all the cremation graves within Loebanr –I cemetery were oriented in the same direction (4 graves in S-N and 2 in SW-NE).

Grave Contexts:	LBR_61	LBR_54	LBR_48	LBR_28	LBR_21	LBR_87	KLI_39
<b>Recalibrated dates (cal BC)</b>	2200 - 1440 & 1420 - 710	1570 - 850	1260 - 900	770 - 410	760 - 280	740 - 380	350 - 30
<b>Upper grave-chamber</b>	✓		✓			✓	
<b>Upper grave-chamber measurements (LxWxD) in metres</b>			2.75 x 1.8 x 0.7			2.6 x 1.6 x 0.9	
<b>Lower grave-chamber measurements (LxWxD) in metres</b>	1.25 x 0.7 x 0.6	1.4 x 0.8 x 0.5	1.7 x 1 x 1.15	1.5 x 0.7 x 0.8	1.5 x 0.75 x 0.7	1.2 x 0.7 x 0.7	1.6 x 1.2 x 1
<b>Sealing presence</b>	✓	✓	✓	✓	✓	✓	✓
<b>No. of sealing stones</b>	3	3	3	3	3	3	3
<b>Wall presence</b>	✗	✗	✗	✗	✗	✗	✗
<b>Flooring presence</b>	✗	✗	✗	✗	✗	✗	✗
<b>Grave orientation</b>	SW-NE	S-N	S-N	S-N	S-N	SW-NE	WSW-ENE
<b>Urn presence</b>	✓	✓	✓	✓	✓	✓	✓
<b>VTf 68 Urn presence</b>	✓	✓	✓	✓	✓	✓	✓
<b>No. of VTf 68 Urns</b>	1	1	1	1	2	2	1
<b>Face-Urn presence</b>	✓ (D 74 I)	✗	✗	✗	✗	✗	✗
<b>Grave goods presence</b>	✓	✓	✓	✓	✓	✓	✓
<b>Total Grave Goods</b>	4	6	23	7	10	7	14
<b>Pottery Presence</b>	✓	✓	✓	✓	✓	✓	✓
<b>No. Pottery Vessels</b>	4	4	21	6	9	7	14
<b>Copper/bronze presence</b>	✗	✓	✓	✓	✗	✗	✗
<b>Copper/bronze pin presence</b>	✗	✓	✗	✓	✗	✗	✗
<b>Terracotta Spindle-whorl presence</b>	✗	✓	✗	✗	✓	✗	✗
<b>Iron presence</b>	✗	✗	✗	✗	✗	✗	✗

Table 6.11: Chronological analysis of the cremation burials with radiocarbon measurements (recalibrated) at Loebanr-I (LBR) and Katelai-I (KLI) cemeteries [✓: Yes, ✗: No]

All of the analysed cremation graves were provided with goods, ranging from four to twenty-three in number and all contained pottery vessels. The highest number of goods

were deposited in grave 48 at Loebanr-I cemetery, dated to 1260 – 900 cal BC. Copper/bronze artefacts were recorded within graves chronologically ranging from 1570 to 410 cal BC, while terracotta spindle-whorls were recorded from graves ranging from 1570 to 280 cal BC. There is some relevance within the deposition of the copper/bronze pins and terracotta spindle-whorls as both were recorded within the same grave dated to 1570 – 850 cal BC. Iron artefacts were missing from all the analysed graves. The Pearson Coefficient analyses reveal no statistically significant relationships within the different measurements of the graves as a singular group.

### 6.3.3 Inhumation and Cremation burials within a single grave

Inhumation and cremation burials within a single grave are recorded from 13 graves in five cemeteries, containing the remains of 26 individuals (Table 6.12). Double inhumation with a single cremation was recorded from two graves, while single inhumation with triple cremation burial was recorded in one grave. Thus, it may be suggested that single inhumation with single cremation burials was the most common practice within the graves with multiple burial practices

	Single inhumation + single cremation	Double inhumation + single cremation	Single inhumation + triple cremation
<b>Timargarha 1</b>	4	1	
<b>Timargarha 2</b>	1		1
<b>Katelai-I*</b>	3		
<b>Loebanr-I*</b>	3		
<b>Butkara-II</b>	1		
<b>Total Graves</b>	13	1	1
<b>Total skeletons</b>	26	3	4
*Based upon excavator's observations rather than anthropological data.			

Table 6.12: Frequency of multiple burial practices within a single grave

## 6.4 Empty graves

Within the IsMEO cemetery reports detailed descriptions of graves and skeletons allowed the identification of 31 empty graves, of which 24 were provided with grave goods. Furthermore, within the IsMEO model, 32 graves were identified as containing minor human bones (Table 6.13). There could be many reasons for these practices, for examples the major bones of the skeletons had been removed in the past or only ‘minor’ bones were ever deposited in the graves in the first place or may be the whole bodies were dealt with elsewhere and a ritual grave dug, then only the minor bones interred. However, within the context of the protohistoric cemeteries, I may argue that most if not all of these single graves seemed to have been intentionally emptied and that this emptying was a significant ritual (as might be suggested by the presence of human figurines) linked with the ideologies of regeneration within the protohistoric cemeteries. The majority of these graves were provided with grave goods.

	Empty graves	Grave goods present		Graves with minor bone fragments	Grave goods present	
		Yes	No		Yes	No
<b>Katelai-I</b>	18	14	4	21	18	3
<b>Loebanr-I</b>	3	3		9	7	2
<b>Butkara-II</b>	6	6		2	2	
<b>Kherai</b>	4	1	3			
<b>Total</b>	<b>31</b>	<b>24</b>	<b>7</b>	<b>32</b>	<b>27</b>	<b>5</b>

Table 6.13: Frequency analysis of the empty graves and graves with minor human bones and grave goods

## 6.5 Age and sex-based burial practices

### 6.5.1 Age-based burial practices

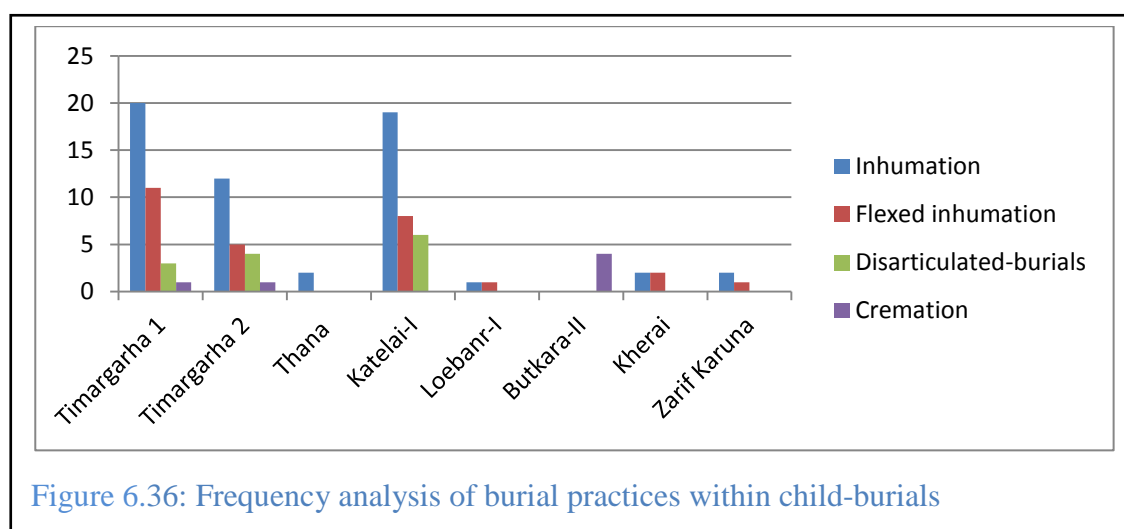
The majority of the buried individuals (433 or 87%) were adults with remains of children recovered from a fraction (64 or 13%) of the total excavated graves within the analysed eight protohistoric cemeteries of northwestern Pakistan (see Fig. 5.3).

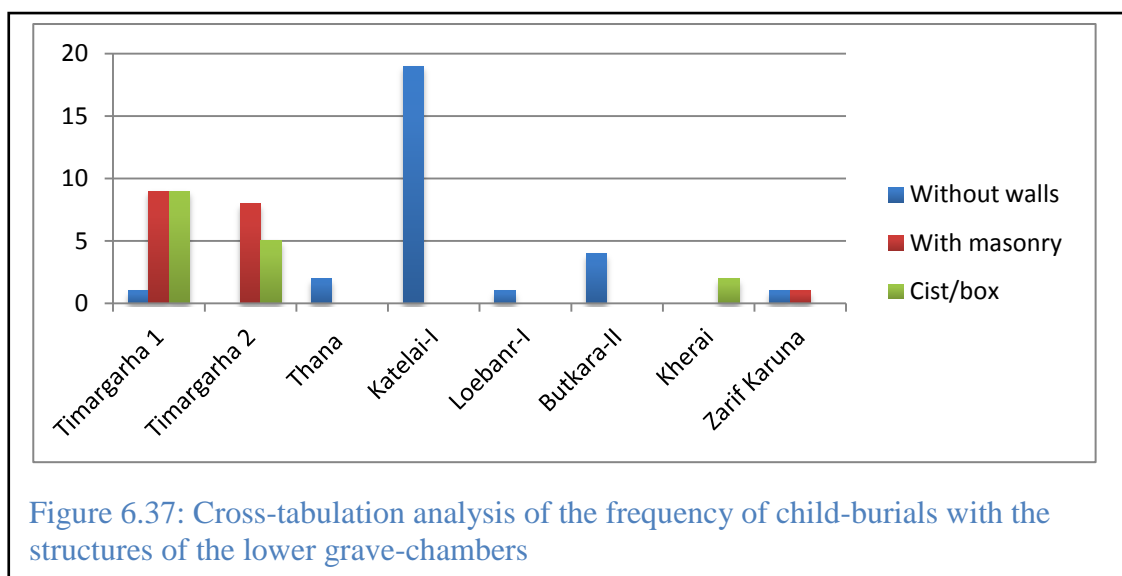
Crawford (1993:85) suggested that 20% or less should be considered as “low numbers of infant burials” or representation within Anglo-Saxon cemeteries. The ancient societies are believed to have a similar demography as modern pre-industrial societies with high infant or less than one year old, mortality (Buckberry 2000:1). If there is less than 30% representation of the sub-adults within the archaeological data, it is considered to be less than their possible demographic situation (Grauer 1991 cf. Buckberry 2000:1). This low representation might have been a result of low preservation of the children bones or due to the recovery biases by the excavators, who primarily concentrate on more easily visible and recoverable adult bones (Grauer 1991 cf. Buckberry 2000:1, 9). However, as children bones are more prone to decay than bones of adults, which make them difficult to be identified and recovered by the excavators (Buckberry 2000: 9).

Thus, I may suggest that within the protohistoric cemeteries in northwestern Pakistan, the excavation and anthropological reports represent a very low number of child burials, probably caused by the inability of the excavators to recognize them within graves, particularly within IsMEO work. As adult-burials are the largest group by far, the patterns within the different aspects of the burial practices of adult individual are almost the same as the general burial practices within the selected cemeteries. However, child-burials may or may not follow the general patterns of the adult burials and hence I only analyse child-burials within the protohistoric cemeteries at Katelai-I and Butkara-II cemeteries. Child-burials come from Katelai-I and Butkara-II cemeteries as part of either inhumation or cremation burials but never as part of the multiple burial practices within the same graves (Fig. 6.36).

The majority (58 of 64 or 91%) of the child-burials come from the graves with inhumations, while remains of only 6 cremated children have been recorded within the excavation reports. Thus, children were both inhumed and cremated within the protohistoric cemeteries. Within the inhumations, the majority (28 of 58 or 48%) are flexed inhumations with the rest coming from disarticulated burials and a few poorly preserved skeletal remains. However, within the selected cemeteries, the number of child-burials differed from each other; thus, the largest number of child-burials is reported from Timargarha 1 (21 of 91 or 23% analysed graves) and Timargarha 2 (13 of 32 or 41 % analysed graves) cemeteries, while the lowest number of child-burials was recorded at Loebanr-I cemetery (1 of the 183 or 0.5% graves).

Most children (41 of 58 or 71%) were buried as single inhumations. Children were also buried as part of the double, triple and quintuple inhumations, particularly at Timargarha 2 and 3. In cremation burials, children were both cremated and buried in graves within an urn, as part of double and triple cremations. At Timargarha 1 a single grave (grave 107) contained the flexed remains of a 5-7 year old child along with the disarticulated remains of two infants. Similarly, at Timargarha 2 cemetery, the flexed remains of two individuals were recorded within a single grave (grave 250).



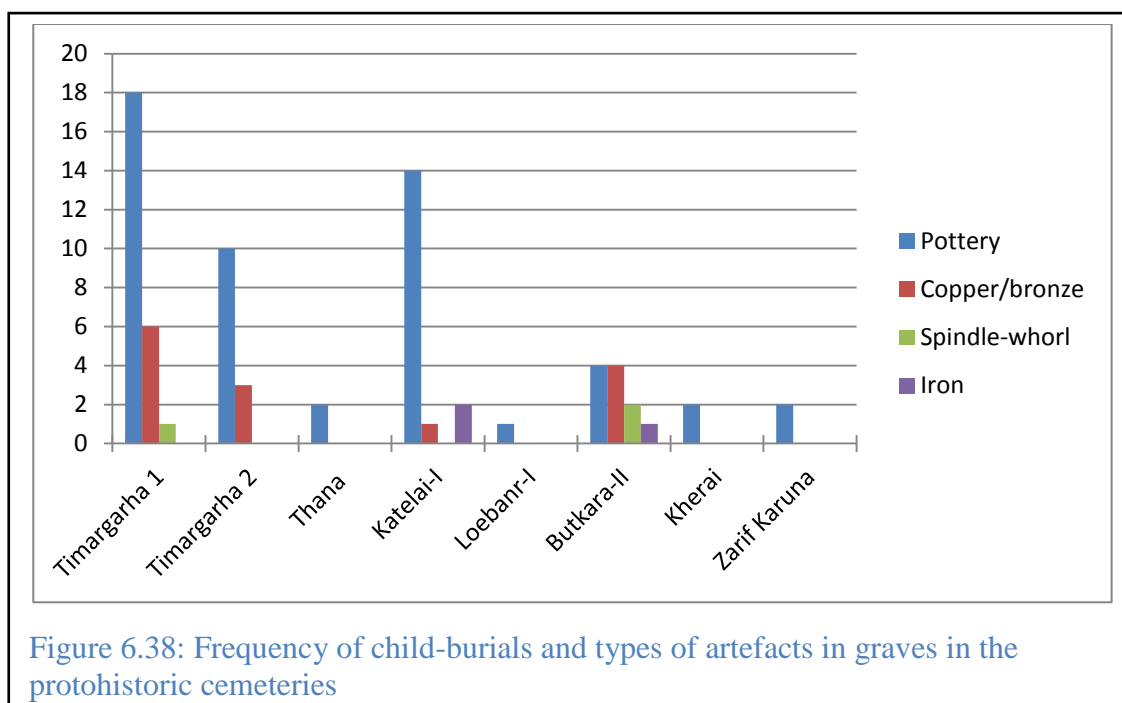


At Timargarha 1, almost all the children were buried either in the lower chamber of graves with dry-stone masonry walls, or in cist-graves (Fig. 6.37). Generally, children are buried in smaller-sized graves, usually measuring less than one metre in dimensions; however, children within large graves, i.e. the same size as for full adult burials, were also present.

Most of the children (53 of 64 or 89%) were buried with grave goods. The majority (17 of 19 or 90%) of the child-burials at Katelai-I cemetery contained pottery, while copper/bronze and iron artefacts were recovered from three graves (copper/bronze from grave 81 and iron from graves 81 and 126). These graves at Katelai-I cemetery (with copper/bronze and iron artefacts) were single child-burials and did not contain the remains of an adult. At Butkara-II cemetery, most of the child-burials with copper/bronze and iron artefacts, and terracotta spindle-whorls, were part of the graves that contained the remains of more than one individual (e.g. graves 10, 15 and 24), including an adult. However, a single child-burial (grave 7) contained a copper/bronze pin and a terracotta spindle-whorl. Almost all the child-burials that contained copper/bronze, iron artefacts and terracotta spindle-whorls at Timargarha 1 cemetery

were independent burials (e.g. graves 107, 140 and 146), however, children with adult human remains (e.g. graves 2-CO and 1-D1) containing these groups of artefacts were also known. None of the children's graves at Timargarha 2 cemetery contained iron and terracotta spindle-whorls, while a single double burial of an adult and a child (grave 250) contained a copper/bronze pin.

Children were generally treated as adults within the burial practices and hence, children were found buried flexed, disarticulated and cremated within the selected protohistoric cemeteries. However, in terms of the grave goods, children were treated differently within the different protohistoric cemeteries and that there was no one way in which the different categories of grave goods were provided within child-burials. In fact, each cemetery differed on how the child-burials were provided with artefacts other than pottery vessels (Fig. 6.38).





The physical anthropological report of the Timargarha 1 and 2 cemeteries had information of the calculated the ages of 104 individuals; 69 and 35 individuals from Timargarha 1 and 2 cemeteries respectively (Bernhard 1968:297-327, 387).

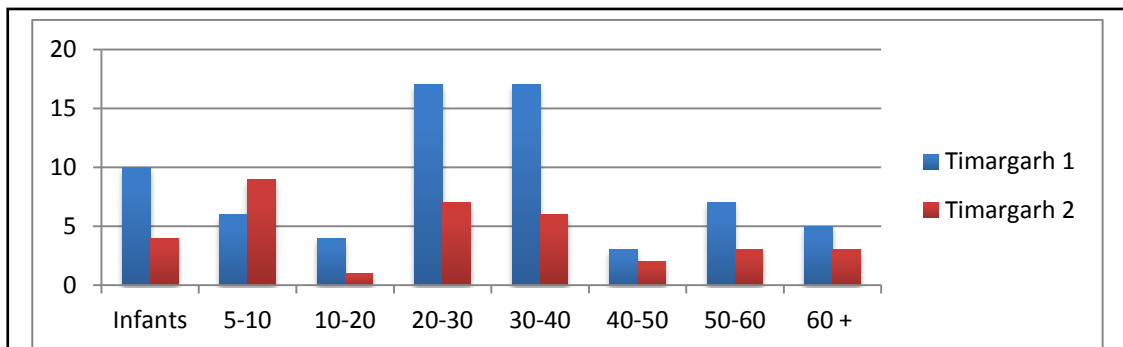


Figure 6.39: Frequency of different age groups at Timargarha 1 and 2 cemeteries

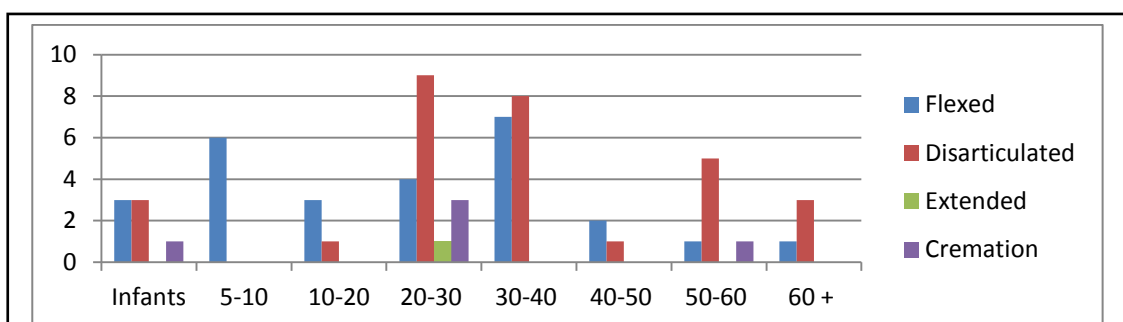


Figure 6.40: Cross-tabulation analysis of buried individuals' age groups and burial practices at Timargarha 1 cemetery

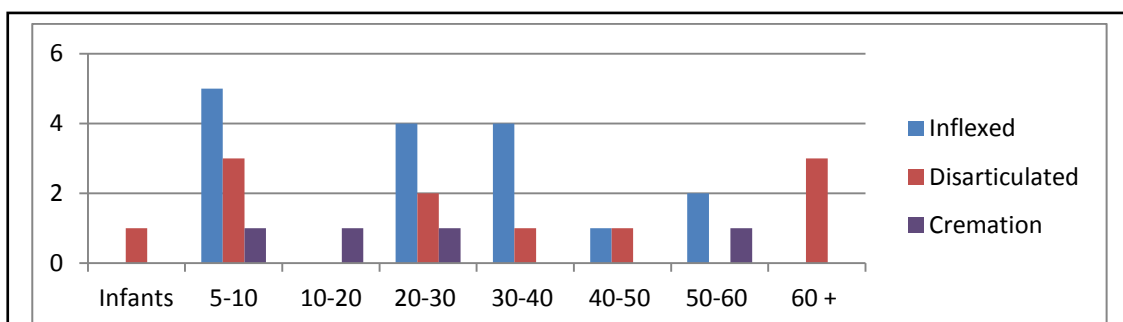
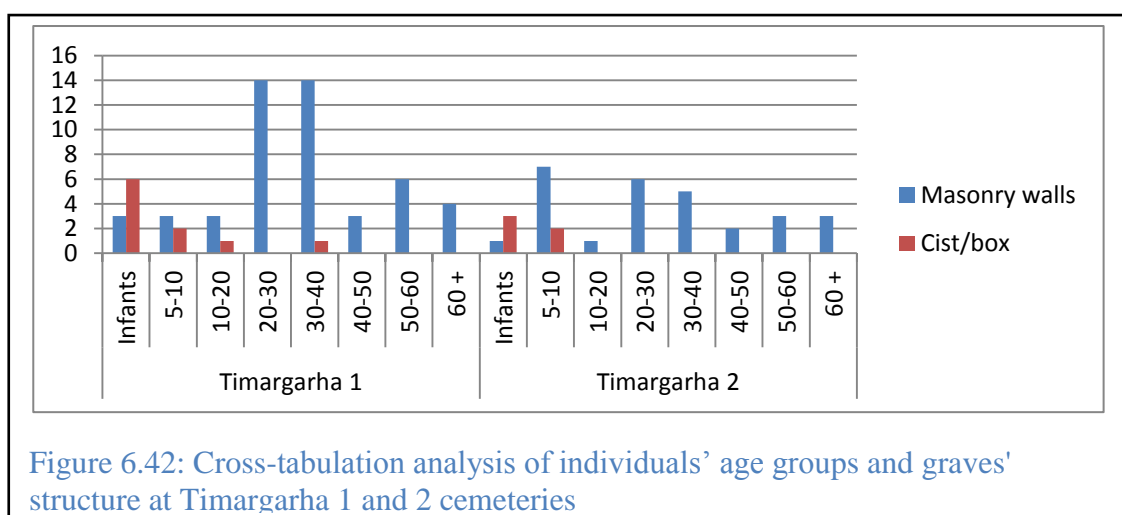


Figure 6.41: Cross-tabulation analysis of buried individuals' age groups and burial practices at Timargarha 2 cemetery



At Timargarha 1, children aged 5 – 10 years, were mostly buried as flexed inhumations (*contra* Dani 1968:34), while adults, aged 20 to 40 years, were mostly found in the form of disarticulated burials (17 of 32 or 53%), followed by flexed inhumations (11 of 32 or 34%). Mature adults, aged 50 to 60 years or older, were predominantly (8 of 11 or 73%) buried in the form of disarticulated-burials. At Timargarha 2, children, aged 5 to 10, were predominantly buried flexed or in the form of disarticulated burials (*contra* Dani 1968:34), while adults, aged 20 to 40 years, were mostly buried in flexed inhumation (8 of 12 or 67%). Mature adults, 50 to 60 or older, were mostly (3 of 6 or 50 %) disarticulate, while 33% (or 2 of 6) were found flexed. Both at Timargarha 1 and 2 cemeteries, the 20-30 years old adults dominated (4 of 9 or 44%) age-based cremation practices. However, after 30, it was highly unlikely (2 of 9 or 22%) to be cremated.

At Timargarha 1 and 2 cemeteries, infants were mostly buried in cist-graves, while children, aged 5 to 10 years, were buried in graves with the lower grave-chamber made of dry-stones masonry walls. In fact, all the distinguishable age groups, with the exception of children and a solitary adult (30 to 40 years) were buried in graves having dry-stones masonry walls. Perhaps the presence of wall structures within the lower

grave-chamber contributed to the preservation of the human skeletal remains within the protohistoric graves (Figs. 6.41 and 6.42).

### **6.5.2 Sex-based burial practices**

The anthropological data suggested the presence of two biological sexes, male and female individuals, within the adult populations of the Butkara-II, Timargarha 1 and 2 cemeteries (Alciati 1967:24-31; Bernhard 1968:297-327, 387). Both sexes were fairly equally represented within the three different burial practices at these sites; inhumation, cremation and multiple burial practices within the same graves.

At Butkara-II, Timargarha 1 and 2, 102 individuals could be assigned to either sex. In addition, I have also included 58 individuals from Katelai-I excavations of 1963 from which relevant data has been published (Castaldi 1968:489-507). From the available dataset of 160 individuals, the number of identifiable male individuals exceeds the female individuals (Fig. 6.43). However, at Timargarha 1 cemetery, both the males and females are recorded in almost equal numbers (24 males to 23 females) within the different types of inhumations, with the largest number of identifiable males and females from double inhumations. At Timargarha 2 cemetery, most females (13 females to 10 males) were buried individually, while at Butkara-II cemetery, males were mainly buried singularly and females as part of the double inhumations.

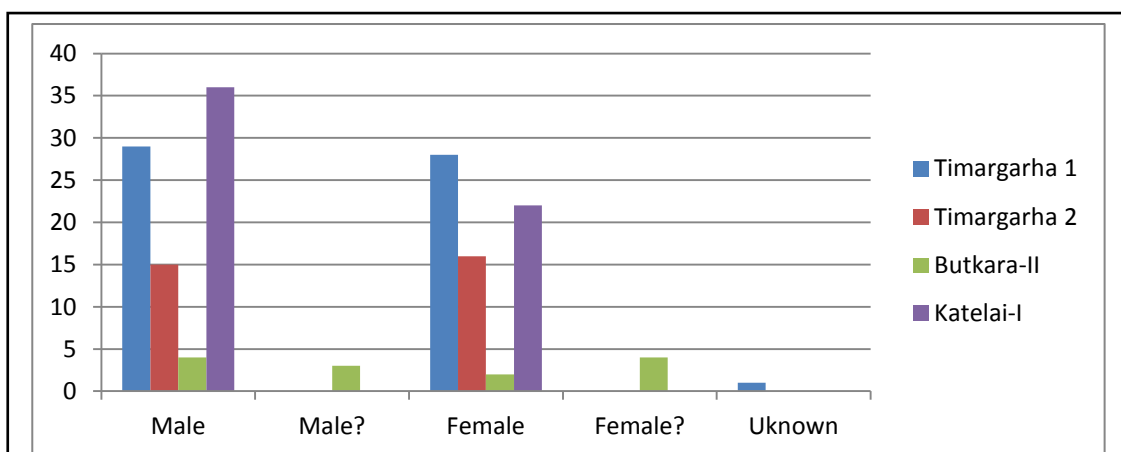


Figure 6.43: Frequency of male and female individuals in adult burials at Timargarha 1, 2, Butkara-II and Katelai-I cemeteries

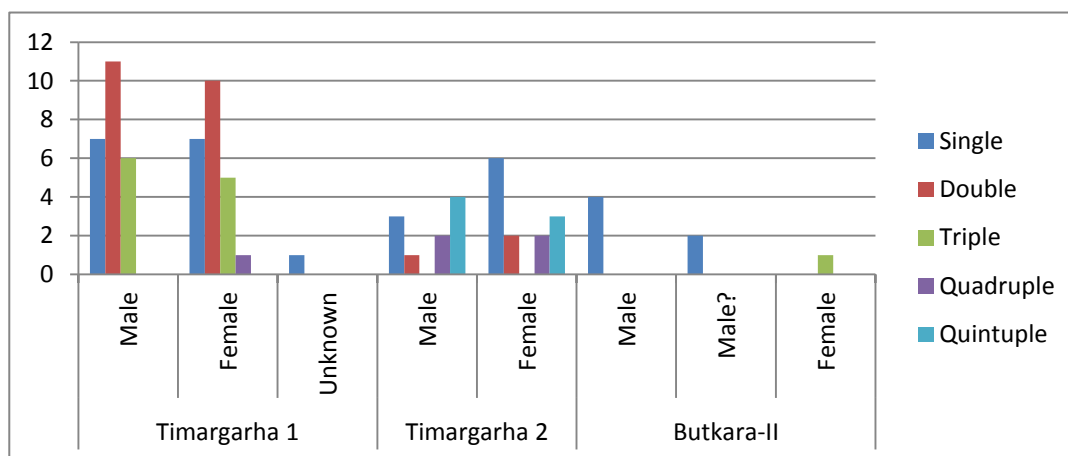
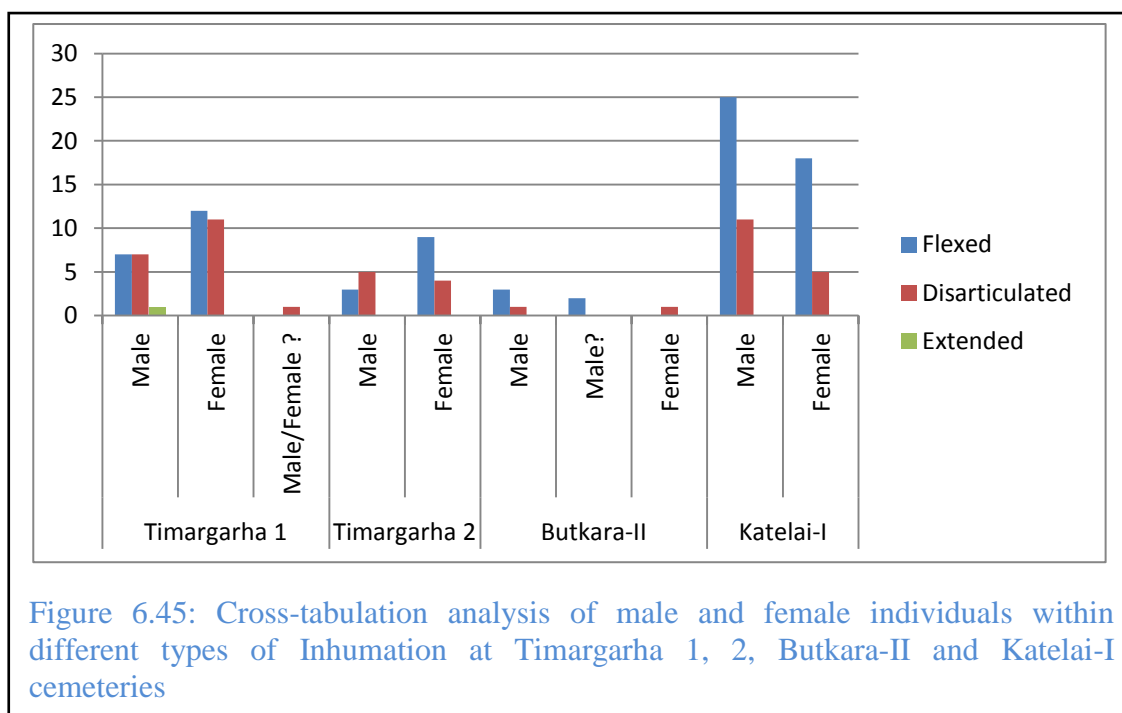
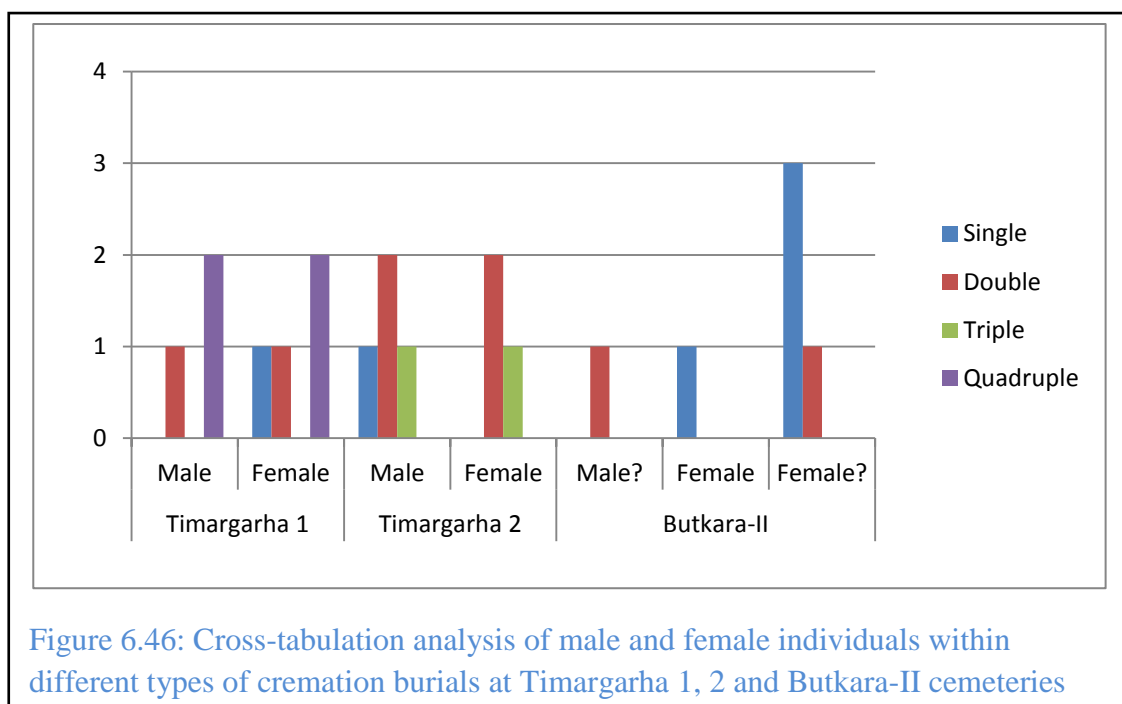


Figure 6.44: Cross-tabulation analysis of male and female individuals within different types of inhumations at Timargarha 1, 2 and Butkara-II cemeteries

Of the 160 individuals, a total of 125 or 78% were inhumed, including 60 or 48% females and 62 or 50% males. Most of the males (38 of 62 or 61%) and females (39 of 60 or 65%) were flexed. The highest ratio of females to males in flexed (12 to 17) and disarticulated burials (11 to 7) was recorded from Timargarha 1 cemetery (Fig. 6.45).



Within the cremation burials, most of the females as compared to males were buried individually within the Timargarha 1, 2 and Butkara-II cemeteries. Males and females were almost equally buried within cremation burials containing double, triple or quadruple individuals within these three cemeteries. At Butkara-II cemetery, females were mostly buried single and only rarely in double cremation burials. Identifiable males exceed the number of identifiable females (3 males to 1 female) within single graves containing both inhumation and cremation burials at Timargarha 1 and 2 cemeteries. At Timargarha 1 and 2 cemeteries, males and females were found together within double and multiple inhumations and cremation burials. Almost all double inhumations and cremation burials contained individuals from both sexes at Timargarha 1 and 2 cemeteries.



At Butkara-II cemetery, the five double cremation burials reveal an interesting phenomenon (Fig. 6.46). In three cremation burials, the urn contained the remains of an adult individual (with no information of the sex of the cremated individual) and an infant. In one of the remaining two double cremation burials the remains of a young adult female and a mature male were found. In triple cremation burials, the remains of a child were always found. At Timargarha 2 cemetery there was at least one triple cremation, which contained the remains of a three year old child. This might indicate a pattern in which graves or urns containing the remains for more than one individual were linked to family burials.

At Timargarha 1 cemetery, males and females were almost buried in equal numbers, either flexed or in the form of disarticulated burials, and hence there was no difference in the burial of the individuals of the two sexes. At Timargarha 2 cemetery, females were mostly flexed, while male individuals were mainly disarticulated burials. At Butkara-II cemetery males were mostly flexed, while the remains of a single identifiable

female were found in the form of disarticulated-burials. This suggests that probably no distinctions on the basis of sex were made during the burials of the males or females within the protohistoric cemeteries and that both the sexes were open to any of the prevalent traditions at the time and that these traditions varied from one cemetery to another.

## **6.6 Summary**

The analyses of the grave constructions, grave goods and human remains within the selected protohistoric cemeteries revealed important information and major trends within these datasets. Thus, the analysis showed that there were at least five different types of grave construction with variations in constructions and frequencies in different cemeteries. However, most of the graves were constructed in a widely accepted fashion (with upper and lower grave-chambers and sealing stones) and shapes (rectangular). The construction methods and provision (e.g. Timargarha 1 and 2 and Zarif Karuna) and non-provision (e.g. at Katelai-I and Loebanr-I) of the walls within majority of the lower grave-chambers suggested a link between the cemeteries. Though the orientation of the graves differed within each of the analysed cemeteries, the majority of the graves were oriented along the slopes of the mountain, probably corresponding to the ideas of ritualized landscapes and cosmos. The measurements of the graves did not correspond to formulaic standards although the measurements of the lower grave-chambers were related and depended upon each other, particularly upon their lengths.

The construction, measurements and orientations of the graves were not linked with the age (except cist-graves at Timargarha 1) and biological sex. Grave goods were deposited within the most of the graves and almost all contained pottery vessels.

Copper/bronze artefacts and terracotta spindle-whorls were the second and third most widely reported categories of material culture from the graves respectively. Most of the graves contained ten or less than ten artefacts. The majority of the terracotta figurines from the graves were females that were mostly associated with empty and disarticulated inhumations or cremation urns.

Flexed and disarticulated inhumations were the most common of the five inhumation types within the protohistoric cemeteries. The flexed bodies were mostly oriented along the slope of the mountains and were manipulated in relation to the mountain top above and river or valley floor below, possibly as a result of their or living ideologies. However, the position of the flexed bodies inside the graves was not related with the age or sex of the buried individuals. The arms and hands were meaningfully constituted and were brought in front of the faces in the majority of the flexed inhumations. Skeletons with open or closed mouths were reported from the analysed cemeteries in Swat. The disarticulated inhumations were carefully located within the graves and in relations to other human remains.

Bodies without head, stand alone skulls within graves and settlements and skulls with trepanations were part of the important, but deviant, inhumation practices within the protohistoric graves. Inhumation and cremation burials were practiced throughout the existence of the protohistoric cemeteries. Cremation was not undertaken with the help of standardized pyre constructions or firing technologies. Most of the cremation remains were buried in an urn, VTf 68, throughout the existence of the Loebanr-I cemetery. Face-urns and box-urns were also utilized for the burial of cremated remains, although these were not very common. Inhumations and cremation burials sometime



contained the remains of more than one individual, which had at least one or more identifiable female or male adults. Age or sex did not seem to have restricted the buried individuals to different types of grave constructions or burial practices or grave goods. Females were treated at par with males and in some cases, for example the placement of female figurines or females with children or female skulls with trepanations, were treated differently, probably reflecting on their power and status in their society.

## Chapter 7: **Discussion**

The purpose of this chapter is to discuss the results of my deconstruction and analyses of the protohistoric cemeteries in northwestern Pakistan in order to come up with new interpretations and understandings. My deconstruction of the chronological frameworks of both the IsMEO and UoP models has clearly established that these cannot be utilized for the study of the protohistoric cemeteries in their current form and this chapter sets out with the discussion of new chronological understandings in the contexts of my recalibration of the radiocarbon measurements from the protohistoric settlements and cemeteries in northwestern Pakistan. In chapter 6, I analysed the grave constructions, grave goods and human remains within the protohistoric cemeteries and their results are discussed here for their interpretations within the context of current theoretical understandings in archaeology and broader cemetery studies.

The interpretation of the archaeological datasets are then explained through analogies with Muslim burial traditions, Buddhist cremation practices as evident from Gandhara Art and non-Muslim burial practices in northwestern Pakistan. The new understandings accessed through the interpretation of archaeological datasets and multiple analogies are then discussed in terms of the agency, choices and options available to the living for the deceased within the protohistoric cemeteries. The presence of material culture related with yarn and wool manufacturing and animal bones (particularly of goats and sheep) within the protohistoric settlement and cemeteries are discussed in terms of subsistence strategies, possibly employing transhumance and as an explanation of the presence of protohistoric cemeteries in the plains of northwestern Pakistan. The roles of regional politics of the Swat and Dir states and the relationships of the archaeologists working

within these two regions with the elites and bureaucracy is discussed in order to understand their influence in the formation of the existing IsMEO and UoP models of the protohistoric cemeteries in northwestern Pakistan.

### **7.1 New chronological understandings**

The IsMEO and UoP models have two superficially different, but structurally similar, dating regimes and both are a generalization of a single site with all other settlements and cemeteries related to these frameworks. Within both these models, the chronological patterns were explained within the ‘Three Period’ system and these are still considered valid and precise (Bagnera et al. 2011:54; Dani 1968:37; Salvatori 1975:340; Stacul 1969:82-85). Within this system, the first period is considered the initial (early) phase, while the second (middle) and third (late) represent the flourishing and the decline respectively of these protohistoric cemeteries in northwestern Pakistan. This narrative is in line with the classical archaeological practice of classifying archaeological phenomena in the Early, Middle and Late (or Formative, Classic and Post-Classic) periodization system, which usually fails to represent the complexities within the cultural sequences of archaeological phenomena and that is why three period classifications should be viewed with scepticism (Hodder 1995:164).

The availability of universally agreed correction systems to the raw radiocarbon measurements provided me with an opportunity to have the latest calibration dates (by recalibrating the existing radiocarbon measurements) for the protohistoric settlements and graves within northwestern Pakistan. Through the recalibration of the radiocarbon measurements from the protohistoric settlements in the Swat valley, I can now assign new date ranges to the chronological periods within the IsMEO model (see Table 7.1

and Fig. 7.1). Thus, period I at Ghalegai rock shelter can now be dated between 3280 – 2560 cal BC instead of 2970 and 2920 BC dates as suggested by Stacul (1987:33). This pushes out the date range of the period I at Ghalegai by almost four hundred years in its upper and lower limits. Periods II and III at Ghalegai can now be dated between of 2400 – 2020 cal BC and 1910 – 1640 cal BC as opposed to the assigned dates of 2180 BC and 1950-1920 BC respectively (Stacul 1987:39, 167).

The four recalibrated radiocarbon measurements for period IV suggest a range of 1860 – 1260 cal BC at Loebanr-III settlement site. At Aligrama settlement site, the radiocarbon measurements for period IV fall within the range of 1740 – 1050 cal BC. Four recalibrated radiocarbon measurements from period V at Aligrama settlement suggest a range of 1910 – 480 cal BC. Stacul (1987:63) considered the earliest levels of Kalako-deray and Barama settlements to period IV of the Ghalegai sequence.

Thus, the recalibrated dates of different periods, especially periods IV and V, are overlapping within single and multiple settlement sites, making it almost impossible to come up with clear chronological distinctions (based upon radiocarbon measurements) for each of the period. This argument contradicts the generally accepted principle within the IsMEO model of using radiocarbon dates for assigning time tags to the different chronological periods within the protohistoric settlements in the Swat valley.

Site	Lab. ID	Context	Assigned period (IsMEO)	Radiocarbon age (in BP)	Calibrated date (95% confidence) (cal BC)
Ghalegai	R-380	Layer 23	I	4200 ± 140	3280 - 2410
Ghalegai	R-379	Layer 21	I	4245 ± 55	3000 - 2640
Ghalegai	R-379 $\alpha$	Layer 21	I	4180 ± 70	2910 - 2560
Ghalegai	R-378 $\alpha$	Layer 18	II	3760 ± 55	2400 - 2020
Ghalegai	R-377 $\alpha$	Layer 17	III	3455 ± 50	1910 - 1640
Aligrama	PRL-186	Layer 5b / trench E	V	3070 ± 230	1910 - 820
Loebanr-III	P-2586	Layer 5 / pit 2	IV	3360 ± 60	1860 - 1510
Loebanr-III	P-2583	Layer 5 / pit 1	IV	3280 ± 90	1810 - 1390
Aligrama	PRL-246	Layer 7 / trench F	V	3080 ± 170	1750 - 910
Aligrama	P-2151 $\alpha$	Layer 13	IV	3350 ± 40	1740 - 1520
Kalako-deray	BM-2913	Pit B7	--	3300 ± 55	1740 - 1450
Loebanr-III	P-2585	Layer 7 / pit 1	IV	3250 ± 60	1680 - 1420
Aligrama	BM-2461	Layer 8	--	3090 ± 120	1630 - 1010
Loebanr-III	P-2584	Layer 6 / pit 1	IV	3140 ± 60	1540 - 1260
Aligrama	BM-2460	Layer 7	--	3060 ± 70	1470 - 1090
Aligrama	P-2150	Layer 10	V	3090 ± 40	1440 - 1250
Aligrama	BM-2459	Layer 6	--	3030 ± 50	1410 - 1120
Aligrama	P-2151	Layer 13	IV	3010 ± 60	1410 - 1050
Aligrama	PRL-243	Layer 9 / trench E	V	2900 ± 110	1390 - 850
Aligrama	BM-2457	Layer 3 / room 3	--	2950 ± 60	1370 - 980
Aligrama	PRL-244	Layer 4 / trench F	V	2660 ± 103	1090 - 480
Aligrama	BM-2458	Layer 3 / room 3	--	2640 ± 70	970 - 550
Barama	R-196	Layer 8 / trench I	--	2585±80	900 - 430
Barama	R-195	Layer 5 / trench I	--	2320 ± 45	540 - 220

Table 7.1: OxCal (version 4.1) calibrated radiocarbon measurements (from charcoal samples) of the protohistoric settlement sites in the Swat valley (after Agrawal et al. 1978:234; Alessio et al. 1966:408-9, 1969:492-3; Ambers and Browman 1999:193; Possehl 1989:2; Stacul 1979:661, 1987:167)

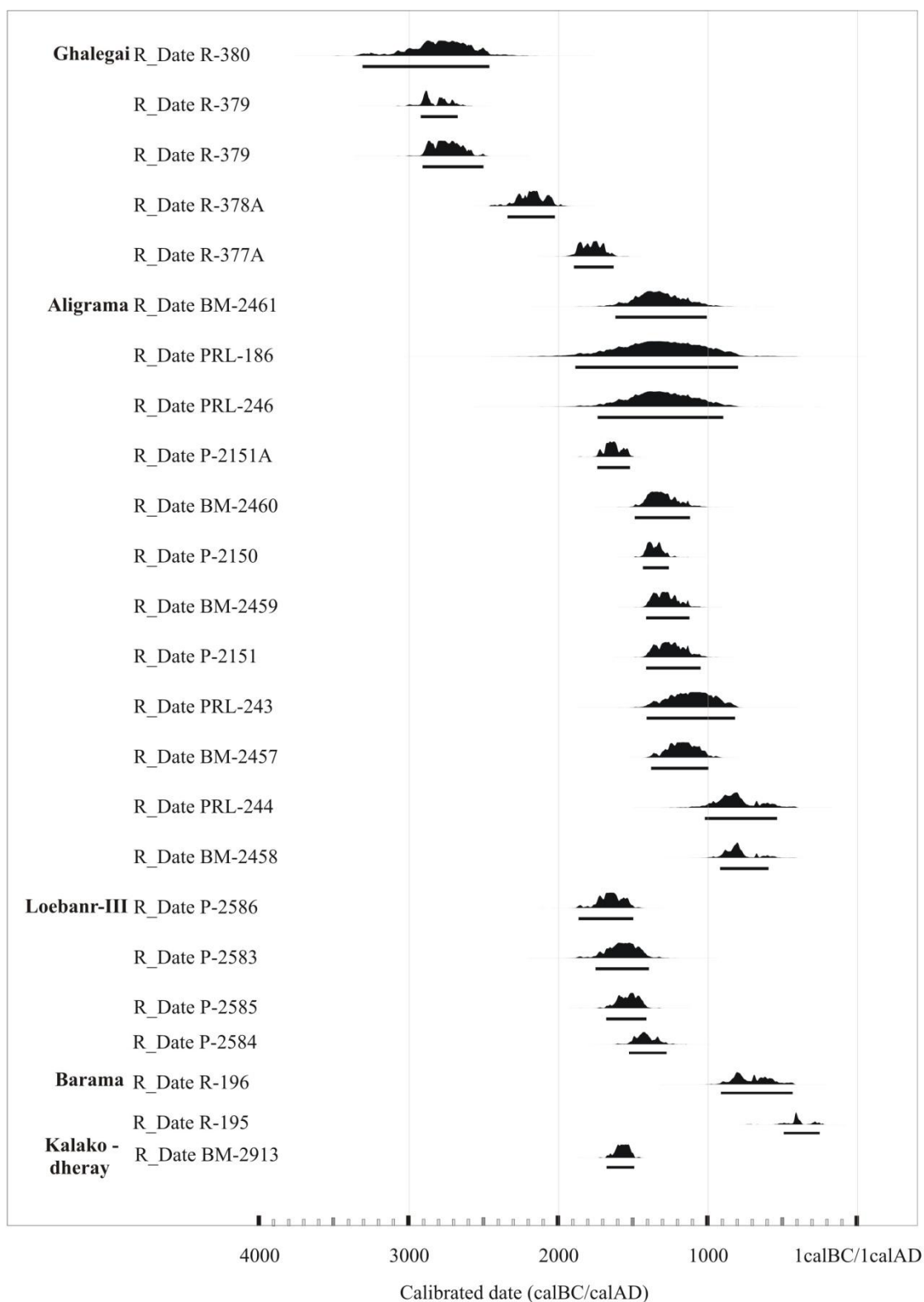


Figure 7.1: Radiocarbon measurement probability distributions from radiocarbon ages presented in Table 7.1 of the Swat Settlement sites.

Site	Lab. ID	Grave context/ assigned period	Material	Radiocarbon age (BP)	Calibrated date (95% confidence) (cal BC)
Loebanr-I	BM_?	G. 61/ IB <sup>∞</sup>	Burnt human bones	3470 ± 150	2200 - 1440
Timargarha 1	H?	G. 101/ I <sup>†</sup>	Human bones	3380 ± 60	1870 - 1520
Katelai-I	R. 476	G. 64	Burnt human bones	3150 ± 150	1800 - 1010
Loebanr-I	BM_19 5	G. 54/ IB <sup>‡,∞</sup>	Burnt human bones	2980 ± 151	1570 - 850
Loebanr-I	BM_19 6	G. 61/ IB <sup>∞</sup>	Burnt human bones	2850±150	1420 - 710
Loebanr-I	R. 477	G. 48/ IIB <sup>∞</sup>	Burnt human bones	2870 ± 60	1260 - 900
Timargarha 1	H?	G. 101/ III <sup>†</sup>	Human bones	2805 ± 60	1160 - 830
Katelai-I	R. 477A	G. 48	Burnt human bones	2750 ± 50	1020 - 810
Loebanr-I	R. 276	G. 28/ VI*, IIA <sup>∞</sup>	Burnt human bones	2460 ± 50	770 - 410
Loebanr-I	R. 474	G. 21/ IB <sup>‡</sup> , IA <sup>∞</sup>	Burnt human bones	2390 ± 70	760 - 280
Butkara-II	R. 194	from different graves/ VI*	Burnt human bones	2425 ± 40	750 - 400
Loebanr-I	R. 278	G. 87/ VI*, IIA <sup>‡,∞</sup>	Burnt human bones	2380 ± 50	740 - 380
Katelai-I	R. 479	G. 39/ VI*, Intermediate (II-III) <sup>‡</sup> , IIB <sup>∞</sup>	Burnt human bones	2250 ± 50	400 – 190
Katelai-I	R. 279	G. 39/ VI*, Intermediate (II-III) <sup>‡</sup> , IIB <sup>∞</sup>	Burnt human bones	2120 ± 45	350 – 30

\* Stacul 1970b:102 (Ghalegai sequence), †Dani 1968:37, ‡Salvatori 1975, ∞ Vinogradova 2001:28

Table 7.2: OxCal (v. 4.1) calibrated radiocarbon measurements of the Swat and Dir protohistoric cemeteries (after Alessio et al. 1966:408, 1969:491-493, 1970:610; Barker et al. 1969:292; Dani 1968:37; Silvi Antonini and Stacul 1987:4, Stacul 1970b:102, Vinogradova 2001:28, 35)

Within the IsMEO chronological frameworks, radiocarbon measurements were never considered for the dating of the protohistoric cemeteries or their periodization (see

chapter 3 section 3.3). The protohistoric cemeteries were classified based upon their presumed relationship with the protohistoric settlement periodization rather than the radiocarbon dates from the graves and thus the earliest periods of the Katelai-I, Loebanr-I cemeteries were considered to have corresponded with the period V of the Ghalegai sequence (Stacul 1969:84, 1987). The recalibration of the 14 radiocarbon measurements from protohistoric cemeteries renders this hypothesis untenable, as the dates are much older than the period V dates of the protohistoric settlements in the Swat valley. The recalibrated radiocarbon measurements suggest a range of 2200 – 1440 cal BC and 350 – 30 cal BC as the earliest and latest dates respectively for the protohistoric cemeteries in the Swat and Dir valleys (see Table 7.2).

Thus, if we are to accept Stacul's primary (and still considered valid researchers around the world) chronological sequence of the protohistoric cultures within the Swat valley of 1969, my recalibrated radiocarbon measurements suggests that the earliest protohistoric graves (with cremation burials) probably existed within the earliest period (i.e. period I) of the Ghalegai sequence (*contra* Stacul 1969:82-85, 1978:149). Even if Stacul's 1987 MASCA-calibrated dates are considered as accurate, then my earliest recalibrated measurement (2200 – 1440 cal. BC) suggests period II of the Ghalegai sequence as the earliest period for the protohistoric graves in the Swat valley (*contra* Stacul 1969:82-85, 1987:167). Thus, Stacul's assertions of the beginning of the protohistoric graves within period V or even within period IV (for un-dated Kherai graves) of the Ghalegai sequence are not accurate, which means that the Ghalegai sequence is unworkable for the periodization of the protohistoric cemeteries within northwestern Pakistan.



In fact, the whole periodization of Ghalegai rock shelter is untenable as there are no solid reasons for the classification of the seven distinct chronological periods. This is perhaps most evident within the self-contradictory stratigraphic and typological classifications of periods I and III (with Neolithic material culture) and period II and IV (with Harappan material culture) as different chronological periods, although immense similarities were noted within their respective material cultures (Stacul 1969, 1984, 1987).

Grave Context	Recalibrated radiocarbon dates (cal BC)	Stacul's (1970b:102) periodization	Salvatori's (1975) periodization	Vinogradova's (2001:28) periodization	Ghalegai periods (Salvatori 1975:340)
LBR_61	2200 - 1440			IB	
LBR_54	1570 - 850		IB	IB	V
LBR_61	1420 - 710			IB	
LBR_48	1260 - 900			IIB	
LBR_28	770 - 410	VI	IIA	IIA	VI
LBR_21	760 - 280		IB	IA	V
BKA*	750 - 400	VI			
LBR_87	740 - 380	VI	IIA	IIA	VI
KLI_39	400 - 190	VI	Intermediate	IIB	VII
KLI_39	350 - 30	VI	Intermediate	IIB	VII
*sample collected from 7 unknown graves					

Table 7.3: Contextual analysis of the different chronological frameworks within IsMEO model and their relationships with the recalibrated radiocarbon measurements from Loebanr-I (LBR), Katelai-I (KLI) and Butkara-II (BKA) cemeteries.

Furthermore, the recalibration of the radiocarbon measurements from the protohistoric cemeteries (Tables 7.2 and 7.3) also reveals contradictions within and between Stacul (1969), Salvatori (1975) and Vinogradova (2001) dating frameworks within the IsMEO model, even though all these specific ascriptions of these particular graves with different chronological periods were based upon the active knowledge of the radiocarbon measurements by all the respective researchers and were not just based upon typological associations. For example, Vinogradova (2001:28) associated grave

21 at Loebanr-I with period IA of the protohistoric cemeteries. Salvatori (1975) also included this grave in period IB. If we are to believe both Salvatori (1975) and Vinogradova (2001), we will take (based upon the statistical analysis of the typologies of the pottery vessels) this grave as one of the earliest graves within the protohistoric cemeteries in the Swat valley. However, the recalibrated radiocarbon dates from this grave (760 – 280 cal BC) do not support this and that some of the considered later graves in period IB (grave 54 and 61) and period IIB (grave 48) at Loebanr-I are much earlier in date than grave 21 of period IA (see Table 7.1). Thus, it may be suggested that grave 21 at Loebanr-I could be considered as among the league of the latest rather than earlier graves within the protohistoric cemetery at Loebanr-I.

Site	Lab. ID	Grave/Burial Context	Material	Radiocarbon age (BP)	Calibrated date (95% confidence)
<b>Gankorinotek</b>	WK-22036	1	Cremated human bones	2494 ± 30	790 – 420 cal BC
<b>Singoor</b>	WK-22040	22	Human bones	2167 ± 30	360 – 110 cal BC
<b>Singoor</b>	WK-22038	1	Human bones	1975 ± 30	50 cal BC – cal AD 90
<b>Singoor</b>	WK-22039	21	Human bones	1499 ± 30	cal AD 440 – 640
<b>Parwak</b>	WK-22759	31 / Burial 2	Human bones	1157 ± 37	cal AD 770 - 980
<b>Parwak</b>	WK-22758	31 / Burial 1	Human bones	1148 ± 36	cal AD 770 - 980
<b>Parwak</b>	WK-22760	51	Human bones	1138 ± 37	cal AD 770 - 980

Table 7.4: Radiocarbon measurements from protohistoric cemeteries in Chitral (Ali et al. 2008)

Furthermore, graves assigned to period IB at Loebanr-I cemetery (grave 54 and 61) within the Salvatori (1975) and Vinogradova (2001) chronological frameworks fall within a date range of 1570 to 710 cal BC, which does not help in assigning a working time span to this period. In addition graves (48 at Loebanr-I and 39 at Katelai-I

cemeteries) assigned to period IIB by Vinogradova (2001) are dated to 1260 – 900 cal BC and 350 – 30 cal BC, which shows the extent of disparity within the Vinogradova (2001) chronological framework.

Dani's (1968:37) period I date from grave 101 at Timargarha 1 (1870 – 1520 cal BC) is in league with the earliest graves within the protohistoric cemeteries. However, the recalibration of the second radiocarbon measurement from the same grave (1160 – 830 cal BC) and assigned to period III is not supported as it does not fall within the group of the latest graves within the protohistoric cemeteries in northwestern Pakistan. Thus, I may argue that the graves considered as representing the latest period within the existing models are of much earlier dates and the evidence do not support the end of the protohistoric cemeteries in the suggested date ranges within the two models. This argument is further supported by the latest radiocarbon measurements from three (Singoor, Gankoreneotek and Parwak) protohistoric cemeteries from Chitral (Ali et al. 2008). The protohistoric graves within Chitral range from 790 – 420 cal BC to cal AD 770 – 980 (see Table 7.4). This potentially shows the continuity of the protohistoric cemeteries within northwestern Pakistan right up to the advent of Islam in the 10<sup>th</sup> century AD.

Thus, with the help of 45 radiocarbon measurements from the protohistoric settlements and cemeteries in northwestern Pakistan, I may suggest that the protohistoric human activities in settlements in the Swat valley commenced in the last quarter of the fourth millennium BC and continued till the beginning of 3<sup>rd</sup> century BC (see Table 7.1 and Figs. 7.1 and 7.2). Furthermore, the protohistoric cemeteries were already in existence by the end of the 3<sup>rd</sup> millennium BC and that these protohistoric cemeteries continued

till the end 1<sup>st</sup> century BC in Swat valley and to the end of the 10<sup>th</sup> century AD in Chitral (see Table 7.2, 7.4, Fig. 7.2).

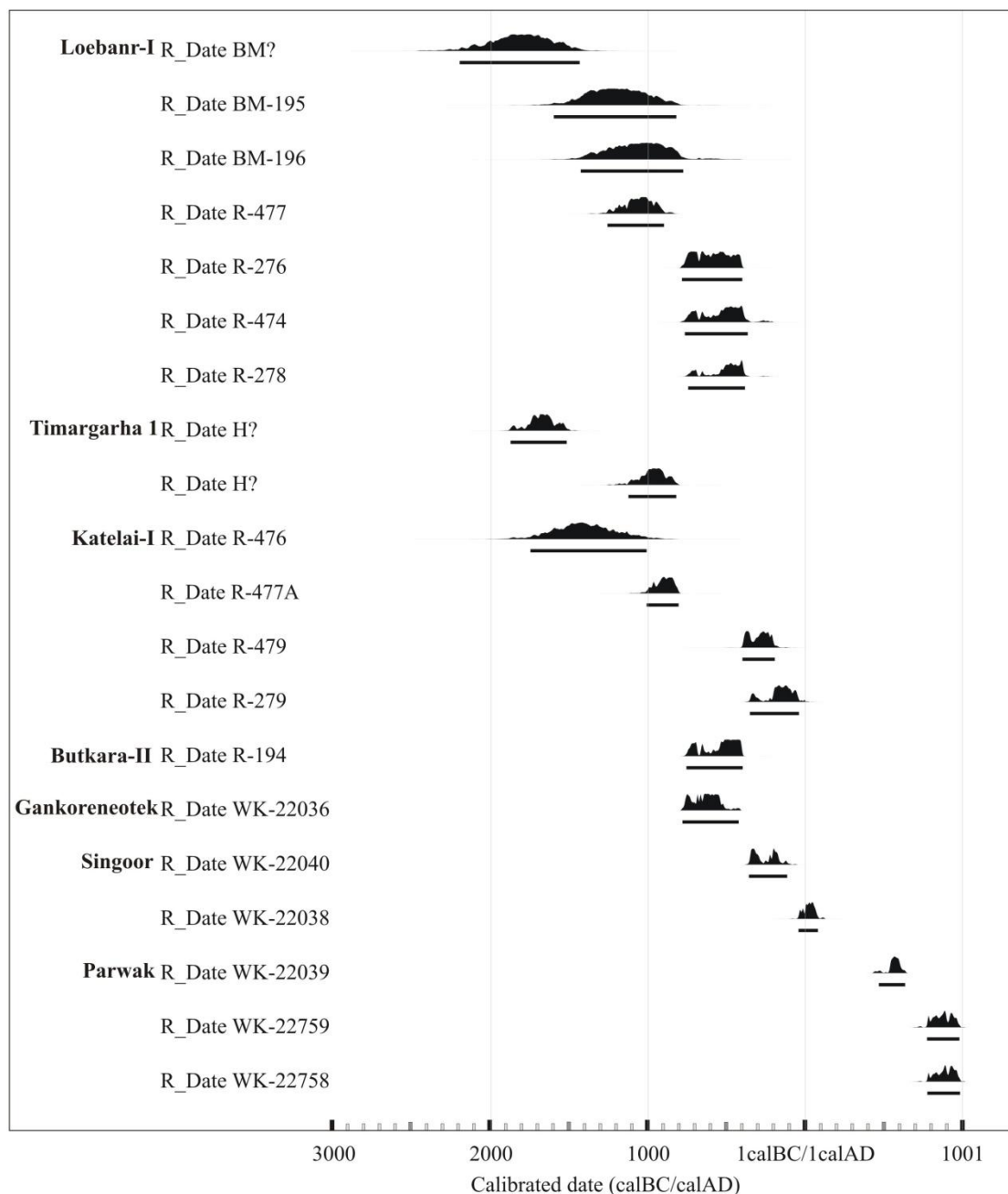


Figure 7.2: Radiocarbon measurement probability distribution from radiocarbon ages presented in Tables 7.2 and 7.4 of the protohistoric cemeteries from Swat, Dir and Chitral

This argument contradicts the assumption of later introduction of the protohistoric cemeteries in northwestern Pakistan within both the IsMEO and UoP models. Stacul (1969:82-85) envisaged a window of 1100 years (1500 – 400 BC) for the existence of

the protohistoric cemeteries, while Dani (1968:37, 48) and Vinogradova (2001:35) dated the protohistoric cemeteries from 15<sup>th</sup> to 6<sup>th</sup> century BC and 13<sup>th</sup> to 3<sup>rd</sup> century BC respectively.

Recently, almost all the currently active members of the IsMEO/IsIAO in archaeological team in Swat valley lent their support (in a co-authored paper) to the dating of the period I (early period) to 14<sup>th</sup> – 11<sup>th</sup> century BC, period II (middle period) to 10<sup>th</sup> – 8<sup>th</sup> century BC and period III (late period) to 7<sup>th</sup> – 4<sup>th</sup> century BC of the protohistoric cemeteries (Bagnera et al. 2011:54). This is simply untenable in the face of the large body of recalibrated radiocarbon dates from the protohistoric cemeteries. In fact, this also shows that the sub-division of Stacul's (1969) three period system for the graves by Salvatori (1975), Fritsch (1997) and Vinogradova (2001) are not favoured within the current IsMEO/IsIAO archaeologists working in Swat valley and Stacul's chronological framework has acquired the status of a revered institutional tradition.

From the recalibration of the radiocarbon measurements of the protohistoric cemeteries in Dir and Swat valleys, we now know that both the cremation burials and inhumations were present right from the beginning to the end of the protohistoric cemeteries (see Table 7.2 and 7.4). This continuity of the protohistoric burial practices and cemeteries is not catered for within both the IsMEO and UoP models, which have fixed ideas of time, burial practices and geographical distribution. Thus, it may be suggested that both the IsMEO and UoP chronological frameworks are inadequate in the study of the protohistoric cemeteries within northwestern Pakistan and that a new chronological framework (based upon the radiocarbon measurements) is needed for the protohistoric settlements and cemeteries in northwestern Pakistan. Furthermore, the chronological

continuity of burial practices and the continuous use of cemetery locations suggest that these protohistoric cemeteries in northwestern Pakistan were part of a burial tradition or traditions rather than a discrete culture, as suggested within both the IsMEO and UoP models.

## **7.2 Graves**

The construction of the graves was a key aspect of the protohistoric cemeteries in northwestern Pakistan. There is tremendous continuity within the different aspects of the construction of the graves (e.g. orientation); however, a great deal of diversity also exists within the grave structures. Most of the graves within the protohistoric cemeteries in northwestern Pakistan were not simple pits, but were elaborate constructions. My analyses of the graves have identified five major types of the grave constructions within the protohistoric cemeteries, ranging from elaborate structured multi-plan graves to irregular pits or holes in the ground. Generally the protohistoric graves would have consisted of an upper and lower grave-chamber, with the lower grave-chamber usually sealed and sometimes with dry-stone masonry walls and floor. All the inhumed (except grave 33 at Butkara-II) and cremated individuals were buried in the graves.

There are variations within the styles of grave constructions in the protohistoric cemeteries. Thus, it was perhaps important for people at Timargarha 1 and 2 cemeteries in Dir valley to construct a visible stone monument over the grave; however, no such evidence exists in the protohistoric cemeteries in Swat valley, where the upper structure might have been wooden. The latest excavations of Gogdara IV in Swat valley by the IsMEO team have produced several postholes around the graves, which the excavators

think might have been used for wooden structures (M. Vidale and L. M. Olivieri 2011 pers. comm.). However, even within the cemeteries of the Timargarha 1 and 2, the stone monument was provided to some and not all (33% of the analysed) graves and the majority of the graves, particularly the cist-graves did not have a stone monument.

The majority of the lower grave-chambers (73 of 123 or 59% of the analysed graves) at Timargarha 1 and 2 cemeteries had elaborate walls, constructed of dry-stone masonry, mostly of river rolled stones. However, at Loebanr-I and Katelai-I cemeteries, only a fraction (23 of 389 or 6%) of the analysed graves were provided with walls and then they were mostly constructed of irregular shaped schist stone pieces. Some of these walls at Katelai-I and Loebanr-I cemeteries had inbuilt niches containing grave goods, that were not recorded from Timargarha 1 or 2 cemeteries. In fact, at Loebanr-I and Katelai-I cemeteries, walls within the lower grave-chambers were actively manipulated for the division of the lower grave-chambers into two parts or as a boundary wall from the other graves in the vicinity and were not always constructed on the four sides of the lower grave-chambers. None of the lower grave-chambers at Thana cemetery in Swat valley were provided with walls. Thus, the absence of stone walls in the lower grave-chamber within the protohistoric cemeteries, primarily in the Swat valley, might have been the result of the people using perishable (e.g. wood) or archaeologically difficult to identify (e.g. sun-dried bricks or slabs) materials to construct the lower grave-chambers. Ethnographic studies have recorded the presence of wooden constructions of the lower grave-chambers within Muslim graves in Swat valley (IsMEO photographic archives negative no.: C.S. 13841/5 by Umberto Sinatti; Fig. 7.3) and non-Muslim graves in Gilgit-Baltistan region (Biddulph 1971 [1880]:113) in northwestern Pakistan. The

lower grave-chambers within the Muslim graves in the Vale of Peshawar (e.g. in my village Abazai, district Charsadda) are mainly constructed of sun-dried bricks/slabs.

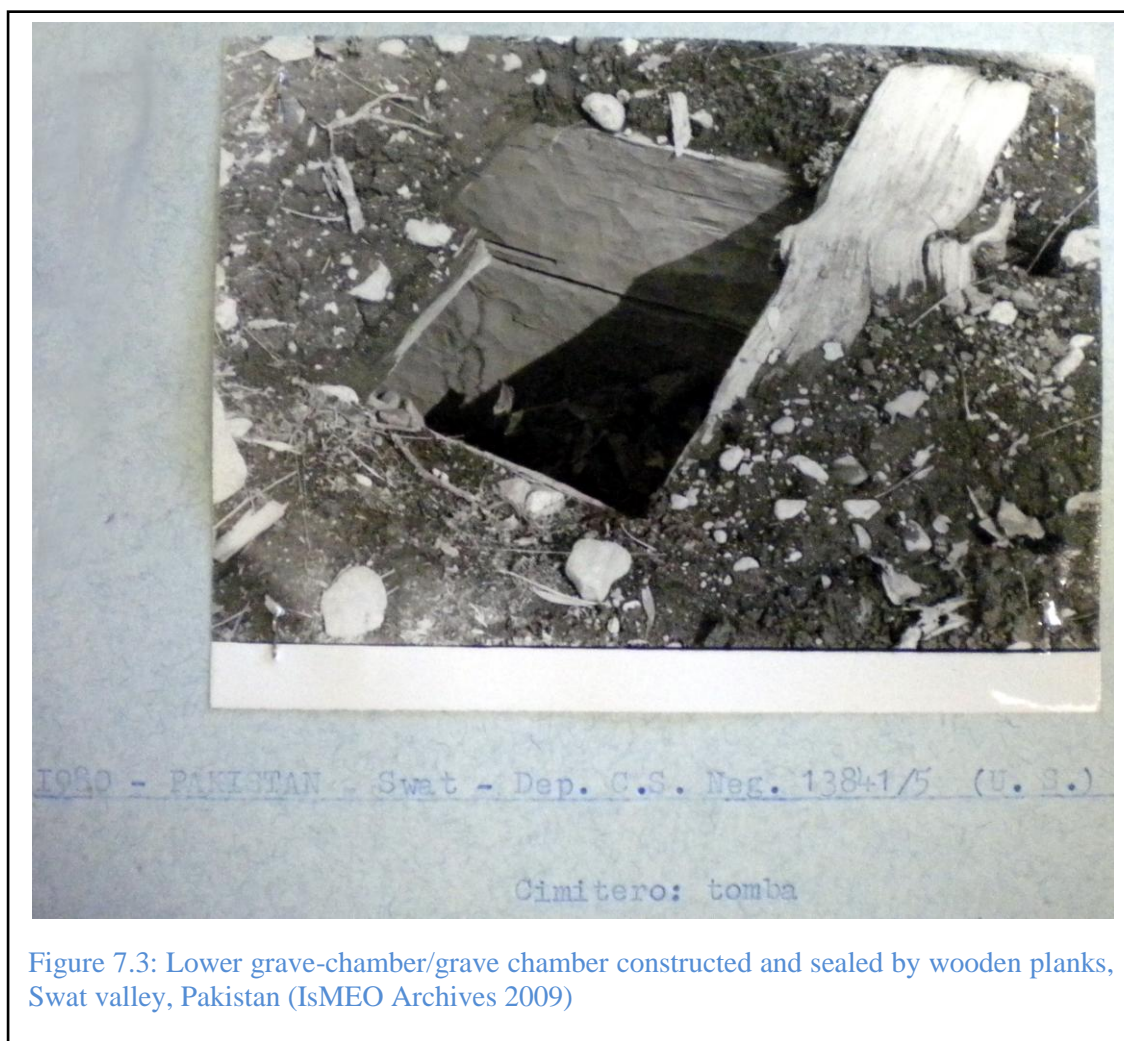


Figure 7.3: Lower grave-chamber/grave chamber constructed and sealed by wooden planks, Swat valley, Pakistan (IsMEO Archives 2009)

Most of (10 of 12 or 83 %) of the analysed graves at Thana cemetery had flooring, primarily constructed of a single large schist slab, covering the whole of the lower grave-chamber. Although, specimens of this flooring have been recorded from graves at Katelai-I and Loebanr-I cemeteries, however, it was not a commonplace practice within either the protohistoric cemeteries. The existence of similarities between Kherai in Swat valley and Dhok Malot in the Punjab plains and Timargarha 1 and 2 cemeteries in Dir valley and Zarif Karuna in the Vale of Peshawar might have been related with the subsistence strategies, probably involving transhumant groups in the past. Young (2003:64-65), through her ethnographic work in northwestern Pakistan, has suggested



that the transhumant groups tend to go to the same place and this movement and linkage to the same place is part of the group memory of the people practicing transhumance with their past generations.

Furthermore, the elaborate nature of the grave construction within the protohistoric cemeteries suggests that it was an important social event for the mourners and the deceased and that the continuation of almost similar grave construction methods and structures throughout the existence of the protohistoric cemeteries suggests that this knowledge was carefully transmitted. Through the continuation of these methods and structures, a strong link and memory from and with the past was maintained (Lucy 1998:74-75).

Fritsch (1997:54) suggested “significant relationships” within the measurements of the lower and upper grave-chambers at Butkara-II cemetery and she argued that this signified that the people constructing them had “some form of measurements employed in the construction of the graves”. By this she meant that these people had some sort of a measuring formula or template for deciding the lengths, widths and depths of the upper and lower grave-chambers.

My Pearson’s coefficient analysis of Butkara-II cemetery indicated a strong relationship between the lengths and widths of the upper grave-chambers, while it also indicated a relatively weak relationship between lengths and depths of the upper grave-chambers. Furthermore, there were no significant relationships between the lengths, widths and depths of the lower grave-chambers. Thus, there is a relationship within the dimensions of the upper grave-chambers, which is not as strong as Fritsch (1997:54) has argued, but

the existence of any correlations within the dimensions of the lower grave-chambers at Butkara-II cemetery could not be verified. In fact, these correlations at Butkara-II cemetery were the lowest correlations within the major analysed protohistoric cemeteries in northwestern Pakistan (*contra* Fritsch 1997:54). This lack of correlations within the Butkara-II graves might have been linked to chronological differences within the construction of the graves than accounted for in the existing IsMEO model. My Pearson's coefficient suggested no correlation between the different measurements of the radiocarbon dated cremation graves at Loebanr-I cemetery that belong to different time periods over the course of two millennia.

However, through my Pearson coefficient analysis, I can argue for the existence of some interdependency within the different measurements (lengths, widths and depths) of the graves, especially within the lower grave-chambers (e.g. at Timargarha 1, 2, Katelai-I and Loebanr-I cemeteries), however, there does not seem to be any form of measurements, or formula, evident in the construction of the graves as suggested by Fritsch (1997:55). Even if there was any form of measurement involved within the construction of the graves in the protohistoric cemeteries of northwestern Pakistan, Butkara-II cemetery was not among those cemeteries (*contra* Fritsch 1997:55).

There is significant correlation between the length of the upper grave-chambers and lower grave-chambers length and widths, but the strength of this correlation differed within each of the analysed cemeteries (excluding Kherai, Butkara-II and Thana cemeteries). While the depth of the upper grave-chamber was independent of its length and width (probably due to erosion of the upper parts), the depth of the lower grave-chambers was dependent upon its length. Furthermore, I may suggest that there was no

relationship between the nature of the burial practices (i.e. inhumation or cremation), age or sex based groups and the measurements of the graves within the analysed cemeteries (excluding the cist-graves at Timargarha 1). With few exceptions, graves were generally constructed in the same size and shape (optimum for an adult burial) irrespective of the burial practice (inhumation, disarticulated inhumation or cremation). These ideas of the grave constructions are very persistent and continued throughout the existence of the analysed protohistoric cemeteries (excluding Butkara-II, Kherai and Thana), however, no specific measurements configuration existed.

The chronological analysis of the graves with cremation burials and radiocarbon measurements at Loebanr-I cemetery (ranging from 2200 to 30 cal BC) suggests that the orientation of the graves remained the same (with some minor deviations) during the entire span of the cemetery. Likewise, the lower grave-chambers of all the dated graves from Loebanr-I cemetery were constructed in the same style and with the same number of stones used for the construction of the sealing of the lower grave-chamber. There does not seem to be any change within the orientation and construction of the graves at Loebanr-I cemetery during its existence, and there is certainly no evidence to suggest a sudden departure in these aspects of the graves. All these graves were oriented in the direction of the slope throughout the existence of the cemetery.

The location of the graves within the slope has also been related with the marginalization of the deceased from the living (Lucy 1998:99; Parker Pearson 1993:206). Williams (1999:81) suggested that the location and use of the cemetery locations over a long period of time might suggest the ritual or even religious nature of the landscape associated with the graves that might have invoked religious or ritual

behaviours from the living. In fact, the chronological consistency within the location of the graves within a particular context has been linked with the continuation of the memory from the past and the past ways of doing things (e.g. Lucy 1998:74-75).

Almost all the protohistoric cemeteries in northwestern Pakistan, particularly cemeteries analysed for this study (e.g. Katelai-I, Loebanr-I, Butkara-II, Timargarha 1 and 2 cemeteries) are placed along the slopes of the mountains, fans and terraces of the valley bottoms and on perennial and seasonal rivers and torrents' banks (Ali et al. 2002:651; Khan 1979:5; Jawad 2006:17; Stacul 1967b:222, 1969a:92, 1970a:87-8; see chapter 1 Maps 1.4 – 1.10 and chapter 6 Fig. 6.9). Dani (1978:43-4, 1980:122) claimed that all the protohistoric cemeteries (known to him) were located along the main route that was followed by Alexander the Great and that one particular (northern Bajaur) route, leading from northwestern South Asia to Afghanistan, Iran and Central Asia, was the “natural” choice for the placement of the graves. Though, protohistoric cemeteries are mostly related with routes, Dani's observation should be viewed within his theoretical bias of linking the protohistoric cemeteries in northwestern Pakistan with the Aryan invasions from the west (Iran and Central Asia). In fact, my maps (chapter 1 Maps 1.4-1 - 1.10) clearly show that the locations of the protohistoric cemeteries in northwestern Pakistan are strongly linked with mountains, slopes and rivers, with some possible links to ancient routes. However, the findings of archaeological sites along the major roads or ancient routes in northwestern Pakistan are primarily due to biases within archaeological projects and excavators understandings of the past movements.

The location of the cemeteries within the landscapes represents intensively social, ritual and political actions on the part of the living in the legitimization, memory and

ownership of the landscape (Lucy 1998: 76; Williams 1999:80-81). The location of cemeteries within grazing areas for animals has been interpreted as the projection of the property ownership of the living over the area (Olivieri 2011:127-8; Williams 1999:81). The locations along the routes might have also been connected with the deliberate strategies of the living for forgetting or commemorating the events of the death or the dead. The prominent locations of the graves within the landscape might also have been meant for political purposes “to construct and legitimize the ritual discourses” of the living (Williams 1999:81).

Thus, I may suggest that the placement of the protohistoric cemeteries at certain chosen locations (e.g. slopes) was deliberate and meaningful and perhaps related with family and group politics, rituals and ideologies of the living. The consistency within the orientation of the graves along the slope in all the analysed protohistoric cemeteries (except Kherai), suggests that perhaps the particular placement grave (irrespective of the burial practice) is indicative of the ritual significance of the mountain above and valley floor and running water below. The continuation of this particular action on the part of the mourners for thousands of years (e.g. at Loebanr-I cemetery) suggest that within the protohistoric cemeteries in northern Pakistan we are dealing with ideological landscapes where the dead were actively engaged within the lives of the living and the cosmos. Furthermore, this repetitiveness and continuity within the grave construction methods, styles and locations through a long period of time is an evidence of the protohistoric cemeteries as part of burial traditions rather than a culture or belonging to a particular geographical region or ethnicity.

### 7.3 Grave Goods

Within both the IsMEO and UoP, the grave goods are primarily understood as personal belongings and direct reflection of the deceased social status (Faccenna 1964:159; Olivieri 2003:18; Silvi Antonini and Stacul 1972:12; Rahman 1968a:72-83). However, I am arguing that grave goods could essentially be interpreted in a variety of ways other than the simplistic ideas of personal belongings present within both the IsMEO and UoP model.

This direct equation of artefacts and the direct relationship with the deceased presumed past is akin to the culture-historical interpretations of the graves (e.g. Childe 1945:17). Furthermore, the direct relevance of the grave goods with social status or ranking of the buried individual is derived from New Archaeology concepts (e.g. Binford 1972:233; O'Shea 1984:35-36). Both of these concepts (e.g. Binford 1972 and O'Shea 1984) are law-based approaches that suppose the equation and representation of the social ranking of the buried individuals with the number or quality of grave goods in all societies and in all times as true. These interpretations are devoid of context and are not usable within the current social based interpretations that are not based upon the assumptions of grave goods as direct reflections or belongings of the buried individuals. In fact, O'Shea's (1984) study is considered as the culmination of these direct correlation based approaches (Parker Pearson 1986:551).

Grave goods as personal possessions or a direct reflection of the social status of the buried person may be true in certain contexts; however, this concept need not be the only explanation for the presence of grave goods with buried individuals. In societies with a strong belief in the afterlife (e.g. Ancient Egyptian society), grave goods might

have been gifts by the living or the deceased to the gods or equipment for the afterlife (King 2004; Parker Pearson 1999:7). Grave goods might have also been meant as reminders of the buried individual deeds or character or they might have acted as containers of food or they might have been meant to prevent the dead from coming back to the world of the living (Parker Pearson 1999:7).

Some of the grave goods might have been used in the preparation of the body for burial (e.g. flexing of the body or during the cremation process) and hence might have become unclean for the living to use and could have been deposited with the deceased themselves (Williams 2003:108). The non-Muslim Kalasha people in northwestern Pakistan leave the bier (usually the bed of the deceased or the last bed to have had the deceased for the burial ceremonies) in the cemeteries and consider it unfit and unclean to be used by the living (Sayed Gul Kalash pers. comm.). The Muslim, living in the same village and coming from the same families, or coming from the outside, will take these beds from the graves of the Kalasha back to their homes if these are in good condition. Grave goods might also have been the remains of the feasting or social gatherings at the process of death or burial (Williams 2003:108).

Grave goods might have been deposited within the graves to reflect (directly or indirectly) upon the social identities of the buried individuals or mourners, such as age, sex, status, household affiliations or ethnic identities (Williams 1998:96). Thus, for example, the presence of terracotta spindle-whorls were probably linked with the subsistence patterns of the deceased or mourners and related with yarn or wool or cloth manufacturing within the protohistoric cemeteries. The number of grave goods might give an idea of the social network of the dead person (Millet 1993:276) and/or the

living, showcasing their influence within society. Grave goods, for example terracotta spindle-whorls placements within cremation urns within the protohistoric cemeteries (see chapter 6 Fig. 6.32), might have been employed by the living in their strategies of remembering and forgetting the deceased and deceased relationships “to personal and group histories and myths” (Williams 2003:105).

The provision, non-provision or little provision of grave goods might have also been as a result of religious beliefs of the deceased and/or the living. Thus, believers of the Kalasha faith are provided with grave goods while the Muslims are not, even though both are living in the same villages. Furthermore, this provision and non-provision could be linked to spiritualism and worldly lives. For example, Bodhisattva Siddhartha (Buddha before his enlightenment or supreme knowledge) and other Bodhisattva (future Buddha) figures are shown wearing heavy jewellery as a sign of worldly life within the 1<sup>st</sup> - 5<sup>th</sup> century AD Buddhist Art of Gandhara region, while Buddha (after enlightenment) does not wear any jewellery due to his spiritual supremacy and his disinterest in the worldly life (Ali and Qazi 2008; P. Williams 2009:220).

As the grave goods are carefully selected, their meanings may change with time or geographical regions even within the same societies and their differences may hold no value or logic to the people practicing them as a way of doing things (Lucy 1998:65; Parker Pearson 1999:11; Williams 2006:38). However, I argue that the continuity of the provision of the grave goods and chronological continuity of particular patterns within the grave goods may be due to the continuity of traditions by the people practicing the protohistoric burial practices. This is perhaps vividly attested in the continuation of a



singular type of a pottery vessel (VTf 68) within all the radiocarbon dated graves from Loebanr-I and Katelai-I cemeteries for the retention of the cremation remains, ranging from 2200 to 30 cal BC (see chapter 6 Table 6.11). This particular pottery vessel was also provided with face decoration at grave 61 at Loebanr-I cemetery, dated between 2200 to 710 cal BC. Thus, I may argue that this particular pot shape was part of a larger body of traditions and it was linked with the continuation and transmission of the concept of how the cremation remains should be buried within the protohistoric graves. This also suggests that there was no break within this tradition, at least at Loebanr-I cemetery, during its entire existence. This essentially contradicts views of the existence of cremation burials within particular periods or population breaks or sudden changes brought from the outside through the media of migration or invasions within northwestern Pakistan (e.g. *contra* Dani 1968).

Contextualizing the continuous presence of the VTf 68 vessels within the pottery classification strategies of the IsMEO and UoP model suggests possible inconsistencies within these two typological regimes. Both the current frameworks were primarily constructed through the study of the pottery assemblages, especially the typological studies. Within these models pottery is understood primarily through culture evolution typologies, from simple to complex forms, and these are then linked to chronological frameworks and different burial practices. However, this is contradicted by the presence of VTf 68 vessel type, which does not seem to have experienced any change at all within the cremated graves in more than two thousand years. This continuation of the form of this particular vessel type does not seem to have been just functional or technological, but was probably linked with the ideological concerns and selections of the people buried within the graves and the living cremating and burying them. Thus, I

may argue that in their current forms, the typological utilization of the pottery assemblage (80% of the total grave goods) within both the models is not workable.

Given its clear visibility within the grave contexts and the excavators' special interests in the pottery assemblages, the number of recorded pottery vessels within individual graves may be considered to have been relatively accurate, particularly within the IsMEO model. The frequency of the pottery assemblages within in the graves follows the general combined pattern of the grave goods. There does not seem to be particular chronological patterns within the frequency of grave goods in cremation burials at Loebanr-I cemetery. At Loebanr-I cemetery, the radiocarbon dated graves contained within a range of 4 to 23 in a single grave. Generally, within all the analysed cemeteries, graves were mostly provided with five or less artefacts and graves with more than twenty artefacts were very low. However, within the radiocarbon dated cremation burials at Loebanr-I cemetery, there does seem to be some chronological patterning within the number of pottery vessels. Thus, graves with even number of pottery vessels are in majority in the early graves (ranging from 2200 to 710 cal BC), while graves with odd pottery vessels are mostly found in later graves (ranging from 770 to 289 cal BC) (see chapter 6 Table 6.11). In fact the majority of the graves at Katelai-I (112 of 169 or 66%) and Butkara-II (32 of 48 or 67%) cemeteries were provided odd pottery vessels. While at Katelai-I cemetery, both the graves with odd (88 of 175 or 50%) and even (87 of 175 or 50%) pottery assemblages are present in equal numbers. Thus, there is no single pattern and the number of the choice of pottery vessels within the different protohistoric cemeteries differed from each other. Furthermore, within the given datasets, it is very difficult to establish if the choice of the number of pottery vessels within a grave by the living changed through time or if the

number of the pottery vessels was just a chance with high statistical footprint or a result of excavation project or excavators' biases or if this was an indication of ideological shifts within the protohistoric cemeteries.

The number of pottery vessels is not matched by any other category of grave goods within protohistoric cemeteries, however, bronze/copper artefacts and terracotta spindle-whorls constitute the second and third most regular finds from the graves. There is a strong contextual link between copper/bronze artefacts (particularly copper/bronze pins) and terracotta spindle-whorls within Loebanr-I, Katelai-I and Butkara-II cemeteries. Thus, the majority of the spindle-whorls (within 54 of the 74 or 73% graves) are found in combination with the copper/bronze artefacts, with 51 of these 74 (69%) graves also included copper/bronze pins. In fact, copper/bronze pins and spindle-whorls are the most recurrent objects within the cremation urns (see chapter 6 Fig. 6.32). The relationship of the presence of spindle-whorls and iron artefacts is not very strong. Thus, only 11 of the 74 (15%) graves with spindle-whorls contained iron artefacts. Some (12 of 149 or 8%) of the graves with copper/bronze artefacts also contained iron goods. Iron is found in only 18 and 20 graves without copper/bronze objects and spindle-whorls respectively within these three cemeteries.

The strong contextual link between copper/bronze artefacts, particularly pins, and terracotta spindle-whorls, probably suggest to these two groups of artefacts were used to suggest breaking of the links with the social lives of the living. I may argue that copper/bronze pins and spindle-whorls are probably linked with the subsistence strategies and ideologies of the people (i.e. the existences of yarn/cloth manufacturing and the importance of goat and its probable relationship with the ideology – discussed

below) within the protohistoric graves. In case of iron, I argue that their occurrence within the graves does not correspond with the archaeologists' emphasis as the heralding of new era or time period and that the association of the iron with the last period within the three cemeteries (which may be due to the timings of the development of iron in the region) were linked more with the preconceptions of the main researchers who considered iron as a late introduction.

The human figurines from the protohistoric cemeteries present a symbolic depiction of a human with flat or two-dimensional body, stubs for arms and legs. Most of these figurines have rounded or flat bases for legs. The representation of the head, pubes, hips and the breasts received special attention, with the head-part of the figurine squeezed to produce a protruding face. The most important feature of the face is perhaps the representation of the nose, interpreted generally as "pinched" or "beak-like" nose (der Meulen 2000:740; Satcul 2005: 304). Breasts of female figurines are usually applied, while eyes, ears or pubic areas are marked by incisions or circle of dots or lines (der Meulen 2000:739). Thus, the symbolism within human figurines was primarily focused on the representation of the nose and sexuality. Müller-Karpe (1983:96-113 cf. der Meulen 2000: 743) associated these human figurines with the *Vedic* religion. These human figurines have been considered as "objects of a cult", which had lost their "symbolic religious meaning" (der Meulen 2000:743-4). Khan (1979:60) suggested that the female figurines could be "Mother Goddess" and that the face of these figurines "bears close resemblance with goat face". Tucci (1977:29-30) associated these terracotta figurines with "fertility goddesses".

The identification of female figurines with “Mother Goddess” within South Asia are loaded with hidden assumptions and are derived from analogy with modern Hindu practices, which are not supported by the majority of archaeological evidence (Clark 2005:61). The purpose of the figurines may be to represent “a single deity or deities, human beings, or some abstract notion” and it is the analysis of the contexts of the figurines that can lead to better understandings of the figurines (Clark 2005:63). Uncritical ascription of the figurines as “cultic or religious objects” should be avoided as it may predetermine the course of their discussions and functions (Clark 2005:74-75).

The contexts of the figurines within the protohistoric cemeteries are very interesting. The majority of figurines, both human and animal, are placed individually within the graves; however, those at grave 36 at Loebanr-I (4 human) and grave 12B at Zarif Karuna (9 animal) were buried collectively. Within four empty graves, 7 human (5 female and 2 male) figurines were found in association with minor bones (see Table 6.6). Stacul (1975b:324) associated the presence of empty graves as evidence of the two part (initial and final) burial practice to explain the disarticulated human remains or fractional burial practice within the graves. I may argue that the removal of the bones from the graves and emptied graves themselves probably received a lot of ritual and ideological attention of the mourners and figurines were part of these rituals.

Within three graves containing disarticulated inhumation of single individuals, 6 figurines, including 3 female human and 3 bull figurines, were found with human bones. Within four graves containing flexed and disarticulated human remains, 3 female human and one possible animal figurine were recovered. In fact, the only identified human skeleton within these graves (grave 183 at Timargarha 1) happens to

be that of a woman. This association of female disarticulated remains which (I argue below to be probably related with the concepts and/or beliefs of regeneration) and female figurine is quite significant and might have been related with the ritualized regeneration concepts and/or beliefs of the deceased or the living. When related with flexed inhumations, the 5 female human figurines (from four graves) were always placed near the upper body of the deceased and in fact, 3 of these were placed near or in front of the face of the buried individuals. The two other female figurines were either placed on or near the lower abdominal region (or womb?) of the deceased. Within cremation burials, the human and animal figurines were either placed inside or nearby the urn.

Thus, the association of the human and animal figurines with cremation, flexed and disarticulated burials suggest to a strong symbolic relationship between the human remains and the figurines. None of these figurines were burnt, or in fact, none of the artefacts within the urns are reported to have been burnt or have marks from burning within the IsMEO and UoP reports and these were deposited with the cremated remains after their collection or at the time of burial or reopening of the graves. The almost exclusive presence of female figurines (with the exception of two male figurines) within the different burial contexts suggests that the focus of this deposition and/or ideology was probably heavily influenced by female regenerative abilities and/or divinity or divinities related with the regeneration or life after death. The resemblance of the human figurine face with goat might also have been linked with the regeneration concepts as suggested by ethnographic studies from northwestern Pakistan (discussed below).

#### **7.4 Burial Practices**

Within the protohistoric cemeteries in northwestern Pakistan, human remains have been treated in multiple ways to either conform to a certain physical position (e.g. flexed inhumation) or condition (e.g. disarticulated inhumation) or to transform them from one physical state into another (i.e. cremation). These actions of conformation and transformation are repeated within the context of protohistoric cemeteries, which renders these repetitive actions of the mourners as rituals of death and burials (Hicks 2010:xiii; Parker Pearson 1982:100). Thus, the study of the burial practices within the protohistoric cemeteries is primarily concerned with the ritual contexts of the burials. The meanings of these actions may or may not have been known to all the participants or observers, but these rituals ensures their passage to the participants and observers (Barrett 2005 [1996]:396; Hicks 2010:xiii). I may argue that within the context of the protohistoric cemeteries in northwestern Pakistan, the continuation of these actions by the living through a long period of time (more than two thousand years) make them burial traditions that were passed down from one generation to another as their link with the past.

These actions of mourners differed within each of the analysed cemeteries in terms of their frequencies and proportions though within the same general criterion (i.e. inhumation or cremation burials). Inhumation was the predominant mode of burial within all the analysed cemeteries, with the exception of Zarif Karuna cemetery, where cremation burials clearly dominate inhumations (20 cremation graves to 10 graves with inhumations). Thus, within each of the analysed cemeteries, the priorities and choices of burial rituals differed, probably corresponding to circumstances of death (e.g.

response to unusual deaths) or ideologies of the particular people. If the burial rituals were not just responses to certain circumstances of death (which may be the case) and were linked with the ideologies of the people either buried or alive (which is probably the case), then within the protohistoric cemeteries we are dealing with multiple, and often competing, ideologies with broad similarities in themes.

My analysis has shown that at least four different styles of inhumation were practiced within the protohistoric cemeteries with flexed and disarticulated as the most prominent inhumations practices. However, there were further variations within these favoured inhumation practices with no two cemeteries experiencing the same frequency or proportion of these burials. Silvi Antonini and Stacul (1972:11) believed that flexed bodies within the Swat protohistoric cemeteries were placed on either left or right side indiscriminately. However, through my analysis, I can suggest that it was not an indiscriminate action but represented a special consideration on the part of the mourners/living while laying the bodies of the deceased within graves. Thus, within the protohistoric cemeteries, bodies placed on their right side dominated bodies over on their left side and this practice remained generally popular within many analysed protohistoric cemeteries with the exception Timargarha 1, Thana and Zarif Karuna cemeteries. At Timargarha 1 and Zarif Karuna cemeteries, flexed bodies in the majority of graves were placed on their left side, while at Thana both the bodies placed on left and right were found in equal numbers. Parpola (2009:151) suggested that bodies on their left sides were those of the women while the men were placed on their right sides. However, the presence of men on their left and right sides, for example at Butkara-II cemetery, invalidate his statement (*contra* Parpola 2009:151). Thus, I may argue that



the position of the flexed bodies on their sides was not linked with their biological sexes within the protohistoric cemeteries.

Although a lot of emphasis was placed on the identification of the flexed inhumations and their chronological periodization within both the IsMEO and UoP models, however, the character of this flexing of the legs has never been investigated. Within both these models, for example Silvi Antonini and Stacul (1972:11), we encounter the general statements that legs of the flexed individuals were bent, which are, owing to the nature of the flexed burials, correct. However, through my analysis, I am able to demonstrate that within this flexing of the legs there is a lot of variation within the degrees of flexing within each of the protohistoric cemeteries and in comparisons with other sites. Furthermore, the directions of the flexing of the legs, and relationship of the upper and lower legs, were also extremely varied. However, generally the legs were not flexed either in the direction of the mountain top or river flowing below and were mostly linked with the body position vis-à-vis the slope of the mountain.

The feet of the flexed individuals were also either left separate or joined together, possibly through post-death wrapping or tying in, and that the choices within these two positions vary within different protohistoric cemeteries. My analysis also contradicts Silvi Antonini and Stacul (1972:11) assessment that the feet of the deceased within graves were “towards the direction of the valley” and I can suggest that the orientations of the feet were quite varied within each cemetery and that each cemetery differed from other protohistoric cemeteries. However, it seems that in many cases care was observed to ensure that the feet of the deceased did not directly point to the direction of the slope

or river/perennial water source below. There was no one direction for the feet of the deceased within the protohistoric cemeteries.

Silvi Antonini and Stacul (1972:11) noted that the arms were bent and that the hands were placed near the head. However my analysis has shown that this statement does not reflect the actual positions of arms and hands within the protohistoric cemeteries. Although most of the arms are folded, some of the individuals have their arms stretched or placed over the remains of the second individuals in the grave. Furthermore, there is no one way in which the arms were folded, but there existed many variations. Similarly not all the hands are drawn and placed near the heads of the deceased, but in some cases the hands were joined with the hands of the accompanying individuals or were placed over pottery vessels. Even if brought near the head, some of the hands were placed in front of the face, some were joined and others were not. However, what is clear from the evidence that the hands were carefully manipulated and meaningfully constituted.

Graves with more than one inhumation have been normally taken to represent family burials (e.g. Bernhard 1968:331; Dani 1968:33; Salvatori 1975:351; Silvi Antonini 1963:15). In fact, Silvi Antonini (1963:15) suggested that these might have been the result of human sacrifice. Dani (1968:33) went a step further and suggested that these male and female buried together “face to face” and “clasping each other” could be of husband and wife and that the presence of wife in the grave might represent her sacrificial death. Tucci (1977:31) suggested that this type of burial represented “(unburned) *sati* of the Hindus, or that the couple died at the same time, or that the fact of their facing one another embraced suggests a self-immolation”. However, no evidence of this sacrifice was recorded by physical anthropological studies of the

Timargarha 1 and 2 cemeteries. Stoodley (2002:115) suggested that the presence of adults of opposite sexes of roughly the same age within the same grave might represent a relationship by marriage. However, the difference of more than ten years in the ages of males and females may weaken the marriage arguments and may suggest to other possible relationships, such as the burials of siblings (Stoodley 2002:116). The burial of children with adults may suggest to parental relationships but children buried with unrelated women may indicate relationships other than parenthood, such as the roles of the adults as carers or supervisors or instructors (Stoodley 2002:114, 119).

Thus, following Stoodley (2002), I may suggest that the burials with males and females of the same age groups within the protohistoric cemeteries may be related by marriage or social partnership. Similarly, graves with females and children may be linked with mother-child relationships. However, graves with older males or females and other young adults and/or children may represent family or sibling or lineage groups' burials within the protohistoric cemeteries. None of the graves containing more than two adults were of the same biological sex based groups. Children were buried together as independent adults and there were no difference in their burials and the adult burials. Children buried with their mothers might have been the result of deaths during child births or afterwards. Thus, the gestures of hands as joined together within double burials (at Katelai-I and Loebanr-I) might have signified the relationships or social bonds of the buried individuals (most probably males and females) in their lives (see chapter 6 Fig. 6.20 A).

Through my analysis of the position of the mouths of the buried individuals within protohistoric cemeteries, I can suggest that Dani's (1972:40; 1992:402) identification of

the Gomal Grave Culture based upon the existence of open mouth skeletons is not a valid enough distinction for the existence of another grave culture in northwestern Pakistan. Hence, within the protohistoric cemeteries in the Swat valley, skeletons with open and closed mouths were present in all the protohistoric cemeteries (except Butkara-II). In fact, there were variations within the positions of the mouths within these cemeteries. Their presence or absence might have been a result of deliberate traditions of the living or mourners of either tying the jaws of the deceased with perishable materials (e.g. cloth or rope – e.g. see Fig. 7.17 showing the deceased Kalasha woman jaws tied with a woollen belt) or burying them with open mouths. Thus, I consider these graves, for example at Gumla, with flexed inhumations and cremation burials as related with the protohistoric cemeteries in Swat and Dir valleys and their suggested earlier radiocarbon dates might have been the result of the missing context, as I suggested in the case of grave 101 at Timargarha 1. These graves in the plains might have been linked to transhumant groups. Seasonal, modern, transhumant groups have been recorded by archaeologist working in the nearby region of Bannu (Khan 1994:90-93; Knox et al. 2010:213).

Generally, within the protohistoric cemeteries, all burial practices, grave constructions and grave goods were accessible to males, females and children and there were no segregation based upon the biological sexes and ages of the buried individuals. However, the frequency and relative percentages of these different groups varied within different cemeteries and certain peculiarities did exist within the burial practices (e.g. Timargarha 1 and Butkara-II cemeteries differed from each other in flexed burial choices for women and men). There does not seem to have been any set range of ages for any particular burial practice. Thus, children from less than one year old to 11 years

old were buried alone flexed or disarticulated or buried and cremated with adults. However, the frequencies and percentages of the child-burials within different cemeteries varied within sites, with the majority of the child-burials coming from Timargarha 1 and 2 cemeteries. Loebanr-I cemetery with a single child-burial is perhaps the most unusual of all the analysed cemeteries. As this single child burial does not represent the possible demographic settings of the Loebanr-I cemetery, I may suggest that children may have not been deliberately buried at Loebanr-I or buried at different cemetery location or part of the cemetery that was not excavated. In addition, the absence of anthropological study may also be responsible for the low presentation of the child-burials at Loebanr-I, as most of the child-burials at Timargarha 1 and 2 were recognized through the physical anthropological study. However, the low representation at Loebanr-I cemetery is relatively consistent with the low representation of children at Katelai-I and Butkara-II cemeteries and might be linked with excavators' or excavation biases.

Some of the identifiable female remains have been treated differently from their male counterparts. Thus, the only two identified skulls with trepanation from protohistoric cemeteries were of women (Alciati and Fideli 1965:171-173; Bernhard 1968:319). I also identified nine possible cases of trepanations from Loebanr-I cemetery, but due to the absence of anthropological evidence these could not assigned to any biological sex groups. Even if the large cuts, in my identified skulls, are due to some violence, the smaller round holes are trepanations and there is certainly a pattern to them; all of them are coming from double burials with some evidence of the heads being tempered with after the initial burials (e.g. dislocated heads or detached heads).

At the site of Burzahom (Jammu and Kashmir, India) disarticulated and flexed burials were reported from its Neolithic period II and Megalithic periods, dated to mid-3<sup>rd</sup> to end of 2<sup>nd</sup> millennium BC (Bandey 2009:82, 100-101; Ghosh 1964: 16-21, 1996[1961]:11-13; Gupta 1972:87). A female (aged 26-30 years (burial 3)) ascribed to Neolithic period II was buried in flexed position and her grave included grave goods and animal remains (Bandey 2009:96). However, the most important aspect of this burial was that this lady had 7 complete and 4 incomplete trepanations, which have been associated with “medico-ritual ceremonial procedures” and this (along with the application of red-ochre to the bones after exposure) suggested that it was a “rite based upon ancestor worship” (Bandey 2009:96, 239). The woman from Timargarha 1 cemetery with trepanation is of the same age (30-35 years) group (Bernhard 1968:319). Stacul (1992, 1994) has argued for strong relationships within the site of Burzahom and the Neolithic sites of Swat, particularly Ghalegai, and suggested that they are part of the “Inner Asia Complex”. Thus, I may suggest that the flexed and disarticulated burials at Burzahom could be the earliest evidence and precursor of the protohistoric cemeteries in northwestern Pakistan. I may suggest that these trepanations of the women suggest the existence of cultic or ideological behaviours that were probably linked with women ancestral worship or shamanism, within the protohistoric society where women were equal if not powerful than men.

The finding of flexed individuals without their skulls and skulls without other skeletal remains within protohistoric cemeteries and settlements in northwestern Pakistan are very important. These may be related with the “concepts of ancestor veneration and worship, as well as property, ownership and residence”, as suggested in the case of similar practices within the Neolithic cultures of southern Levant to eastern Anatolian

region (Joffe et al. 2001:11; see chapter 6 Fig. 6.30). The removal of the skulls and the burials of headless bodies have been related with the “skull cult” within the Neolithic site of Çatalhöyük, Turkey (Hodder and Meskell 2010:42, 55). It is suggested that the caching of the skulls and the reburial of the bones might be linked with memory and emotional experiences of the living at Çatalhöyük (van Huyssteen 2010:117). The findings of the skulls within the foundation of the buildings are linked with the concepts of ancestors as the base of the house (Wasan 2010:275). The body without head and the skulls removed from the body have been suggested to have been linked with religiosity and the individuals with the religious leaders or priests at Çatalhöyük (van Huyssteen 2010:115). Thus, the finding of the skulls within settlement contexts, headless bodies within the graves and removal of the skeletal remains except the heads from graves, might be linked with the religious beliefs of the people and some of these skull and/or bodies may be related with the ancestors. Furthermore, the finding of skeletal remains and skulls within the domestic contexts may also be related with continuity of the relationship from the ancestors. However, ethnographic studies in northwestern South Asia also suggest to other possibilities, such as the severing of the enemy head as a trophy to be kept at house and fallen war heroes and their transportation as a gesture of goodness and kindness to the family of the deceased (Robertson 1985 [1896]:630-651). In fact, straw bodies were constructed for the heads of the fallen heroes and were treated and considered as the actual manifestation of their bodies and were given proper respect and burial rites, with the heads left in the open in the wooden family receptacle and straw bodies burnt at the coffin (Robertson 1985:632-633). Further ethnographic studies in northwestern Pakistan have identified a special symbolic relationship between the wild goats’ head and human head. Thus, every non-Muslim hunter, who hunts wild goats, would have a protective fairy that would come into his dreams before the hunt

and present a human head as a sign of good hunt and wild goat head for human enemy hunt (Jettmar 1961:87-89, 2002:20).

My analysis of the disarticulated human remains within the protohistoric cemeteries suggested that these burials were very carefully constructed (particularly with the head on top practice) and were not, as envisaged in the existing models, a simple dumping of bones in the graves. Furthermore, the existences of the empty graves or graves with little human remains (emptied graves) suggest that some of the bodies were exhumed from the graves after their initial burials, which might have been buried with other flexed burials or disarticulated burials (see chapter 6 Fig. 6.29). Furthermore, disarticulated inhumation was practiced by all age and sex-based groups within the protohistoric cemeteries. Bernhard (1968:328) suggested (probably based upon his presumption of underground burials as the only choice and ignoring the possibility of graves being left open or bodies left in the open) that the body (flesh) takes 2 to 10 years to decompose, depending upon the soil composition and climate. Thus, if this was the case and the graves were not opened within the minimum time periods, it means that the living were actively maintaining the memory of the deceased and that their memory was part of their lives.

I argue that these disarticulated inhumations were meaningful practices and their meanings could be accessed through an analogy with the beliefs and practices of the non-Muslim populations in northwestern Pakistan. Thus, no hunter can kill an ibex or wild goat, unless it has already been hunted and consumed by the chief female deity and other female deities, who then collect the bones in the skin to resurrect the ibex or wild goat for human consumption, but without their souls (Jettmar 1961:88, 2002:20). Thus,



the collection of the wild goat's bones were part of the regeneration process and employing this analogy, I may suggest that the collection of the disarticulated human remains were part of the ideology of the regeneration and these burials were the expression of this ideology. The presence of disarticulated goats' bones with flexed and disarticulated human remains at Timargarha 1 and Burzahom (Bandey 2009:82, 100-101; Bernhard 1968:300-314; Gupta 1972:87), the presence of female figurines with disarticulated identifiable female remains and female figurines in emptied graves, are suggestive of close relationship between goat, disarticulation and female regeneration concepts. In fact, the identification of storage pits linked with the ideas of regeneration (Coningham and Sutherland 1998), the burial of probably the earliest flexed burial in northern South Asia within storage pits at Burzahom (Saar 1992) and misinterpretation of the storage pits at Timargarha 3 as graves (Dani 1968) and disarticulated inhumation practices are pointing to the presence of the concepts of regeneration within protohistoric cultures of northwestern and northern South Asia. I may argue that the construction of the graves and burial practices within the protohistoric cemeteries were the manifestation of this ideology of regeneration.

My analysis of the cremation burials have clearly shown that within the protohistoric cemeteries, cremation was not a simple or singular process, but cremation burials involved many variations within the disposal of the human bodies through cremation and their burial within graves and varied from cemetery to cemetery. Furthermore, my chronological analysis of the radiocarbon dated cremation graves from Loebanr-I cemetery suggested the continuation of a particular form and style of pottery vessel (Silvi Antonini and Stacul 1972's vessel type VTf 68) used as urn. This continuation of form and style may suggest that the urns were specifically manufactured for the disposal

or safekeeping of the cremated remains within graves (Richards 1987:39). This continuation of the form and style also mean that the significance and meaning of the form and style of urns was actively transmitted and understood by the manufacturers and users (Richards 1987:39).

This may mean that the passing down of this particular form and style for cremation burials was an important part of the cremation burial traditions that were passed down from one generation to another. The face-urns (VTf 68 with decoration D72-74) along with box-urns have received special attention within the existing IsMEO and UoP models (Dani 1968; Stacul 1971; see chapter Fig. 6.34 A, B) and other scholars (e.g. Parpola 2005, 2009). The face-urns and box urns are provided with holes, probably meant for the release of the soul of the deceased or the fragmentation of the ties with the living (Williams 2011:245). The urns, particularly the face-urns, were possibly meant to provide new skin or body to the cremated individual who has been transformed/destroyed by fire (Aasbøe 2008:111; Williams 2003:99). Although anatomically different, the face-urns could be directly associated with the human body (Aasbøe 2008:110). Aasbøe (2008:111) associated these new bodies (face-urns) with the idolization of the ancestors' self or authority. Parpola (2005:78; 2009:157) suggested that the face-urns from the protohistoric cemeteries are related with the *Rigvedic* hero cult of Aśvin twins and that the prominent nose of the pot signified the “nose-birth” of these twins. Stacul (1971:12) identified the box-urns with “huts” of the living (see chapter 6 Fig. 6.33).

I argue that the box urns, are possibly an imitation of the underground granaries often reported within the Swat and Kashmir valleys within the Neolithic and protohistoric

contexts (e.g. at Loebanr-III or Burzahom). The box urns were perhaps meant to be a storage place for the cremated person in order to be regenerated again (Bradley 2002). The existence of a tradition of the removal of the skulls from the graves and their presence in settlement may suggest that perhaps the face-urn within the protohistoric cemeteries was a symbolic representation and manipulation of the human skull. Human skulls have been reported to have been modified, for example through plastering and painting, within the Neolithic context of Anatolian region (Joffe et al. 2001:11). Thus, both the face-urns and box-urns could have been symbolically linked with concepts of ancestors' veneration, birth and regeneration. The multiple cremation burials within single urns probably suggest strong links and memory of the people (probably of family lineage or ancestors) cremated before. However, the multiplicity of cremation burials within a single urn may also mean that the cremated remains were not immediately buried or not covered with soil, but remained with the living and were buried at a socially and/or ideologically/religiously acceptable occasion.

The reopening or reuse of the earlier graves represents a continuation of the memory of the dead by the living. It was perhaps this memory of the dead that made them open or collect the bones, to help the dead in their regeneration. Within both the models, there is a general belief that the graves were covered and were opened later on for the burial of the other individuals. However, there were more than one possibility for keeping open or closing the grave, depending upon the different contexts; perhaps some of the graves were left open with no covering at all, or with partial covering or after the final rituals (e.g. related with the regeneration), the graves were fully covered. It is not clear if all were provided with monuments (or wooden memorials), but perhaps the upper stone circles at Timargarha 1 and 2 cemeteries in Dir were part of the visible

monuments to rekindle the memories of the deceased (see chapter 4 Fig. 4.3 and chapter 6 Figs. 6.1 - 6.2). Perhaps, the image of the flexed burials within graves, either left open or covered, were part of the display that were carefully choreographed by the living.

Although, the acting spheres of the males and females might have been different, however, it is possible that women enjoyed equal rights with men or perhaps women were more powerful than men in religious and shamanic rituals. The regenerative power of the women perhaps allowed them greater connectivity with the gods and the deceased ancestors, and it was perhaps the women who acted as the keeper of these burial traditions and ideologies. Perhaps their positions as the keepers of the house and granaries allowed them special privileges in enacting the dead ancestors. Thus, the continuous emphasis within the protohistoric graves on regeneration, rebirth, communal or family disposal and burials were perhaps due to the role of women. The sensitivity and tendering of the young within graves is perhaps also linked with the roles of the women. Perhaps the continuity within certain forms of the material culture, e.g. pottery assemblages, was linked with women's craftsmanship.

Silvi Antonini and Stacul (1972:11) commented that the orientations of the skeletons were determined by the slope of the hill and that the head pointed towards the hill top. Although, in general this assessment reflects the predominant positions of the bodies within the protohistoric cemeteries, however, it is not an accurate description of the orientations of all the bodies within these cemeteries. My analysis shows that there were many variations within the placement of the body in the graves and its orientations were not always in the same direction as the slope of the hills. This means that perhaps

the direction of the face was linked with the concepts of the landscape and their facing of the valley below or river was a sign of their connections or transfer to the land of the dead, where the river/seasonal torrent below was flowing.

The discussion of the protohistoric burial practices suggests that there are a lot of variations within the burial practices and the underlying concepts, and that these much variations have never been recorded within any of the recorded archaeological cultures or traditions of the major religions (e.g. Islam or Christianity or Judaism or all combined). Thus, these burial practices could not be specifically linked with a particular archaeological culture or people or an ideology. However, my study suggest that, although there are a lot of variations, there are some broad themes (e.g. ideas of ancestors, regeneration, female power, goat's sacredness and cosmos), working in conjunction or in competition, that bind and perhaps shape and link the conformation and transformation of the human bodies with the past within the protohistoric cemeteries in northwestern Pakistan.

### **7.5 Protohistoric Cemeteries and Muslim Burial Practices**

Some of the protohistoric cemeteries in northwestern Pakistan have later been utilized by Muslims for their burials (Dani and Durrani 1964:164). This association within the same landscape allows us a window to understand the protohistoric cemeteries through an analogy with the Muslim burial traditions. The religion of Islam controls death, its conceptualization and understandings, along with the practicalities of burial practices and monuments, and the ideas of resurrection and rebirth (Abdul-Hameed 1984; Abdul-Haye 1982; Insoll 1999:167). Within the Muslim world, there is a relatively uniform burial tradition, controlled and manipulated through the rigorous application of religious

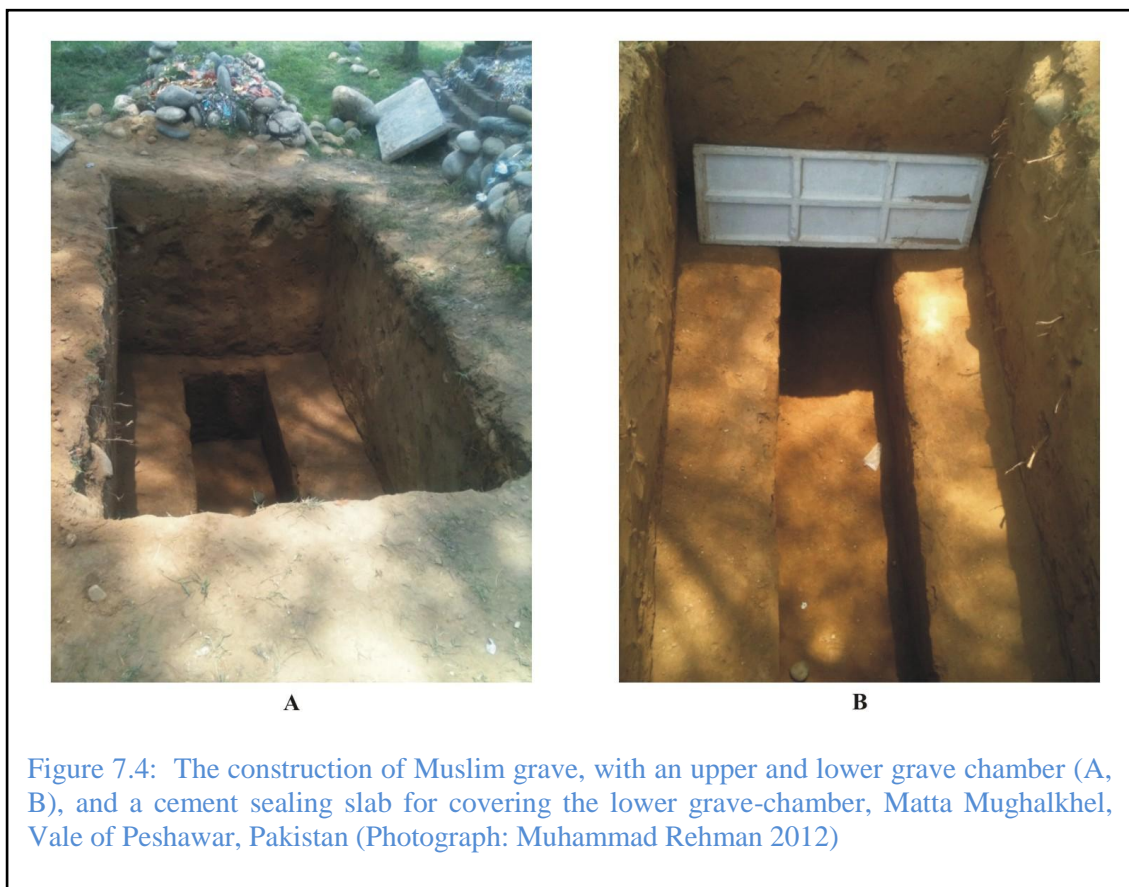
texts, which envisages “the treatment of the corpse prior to burial, the procedures for its actual interment and its position within the grave” (Insoll 1999:166-169).

The detailed study of Muslim burial traditions in northwestern Pakistan is not part of my PhD research; however, I am briefly outlining some of the issues that are relevant to the protohistoric cemeteries in northwestern Pakistan. The uniformity of Muslim burial practices (particularly within the underground grave construction and burial orientations) in different parts of the world and its continuous existence since 6<sup>th</sup> century AD shows that burial practices can transcend different cultures, societies and ethnic groups. Thus, IsMEO and UoP models are essentially based upon wrong premises to have associated the protohistoric cemeteries in northwestern Pakistan that existed for more than two millennia with a single culture, region or ethnic group.

The body of a Muslim (male, female and children) is placed on right-hand side with the face turned to *qiblah* (Insoll 1999:172). While the direction of the body and face remain the same throughout the world, the orientation of the grave will change, as it is dependent upon the direction of the location of the deceased from *qiblah*. This means that Muslim graves in Pakistan (roughly to the east of *qiblah*) will be oriented north-south with the head of the deceased to the north, while graves in Sudan (roughly to the west of *qiblah*) will be south-north orientation with the head of the deceased to south. The Muslim graves in England (roughly in the northwest of *qiblah*) should be roughly to the northwest with the head of deceased to the southwest facing southeast.

Keeping this in view, I may suggest that the variations in the orientations of the graves within different protohistoric cemeteries in northwestern Pakistan were perhaps due to a

desired orientation for the bodies. Perhaps the orientations of the graves were dependent upon the orientations of the bodies and their relationships with the landscape. This may imply that perhaps the orientation of the graves is based upon a desired relationship between the landscape (mountains, slopes and rivers) and body of deceased that might have had some ideological or religious meanings.



**A****B**

Figure 7.5: The preparation of mud for covering minor openings within sealing blocks (A) and the covering of the lower grave-chamber (B), Matta Mughalkhel, Vale of Peshawar, Pakistan (Photograph: Muhammad Rehman 2012)

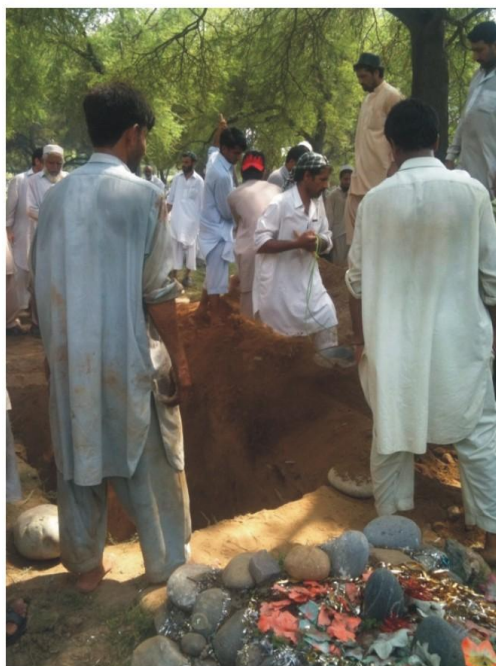
**A****B**

Figure 7.6: The filling of the upper grave-chamber (A, B) with the earth excavated from the grave, Matta Mughalkhel, Vale of Peshawar, Pakistan (Photograph: Muhammad Rehman 2012)



**A****B**

Figure 7.7: A selection of river-rolled stones (A) from Swat River (c. 12 kilometres) and the construction of stone monuments (B), Matta Mughalkhel, Vale of Peshawar, Pakistan (Photograph: Muhammad Rehman 2012)

**A****B**

Figure 7.8: The stone monument are either white washed (A) and/or decorated with plastic flowers, Matta Mughalkhel, Vale of Peshawar, Pakistan (Photograph: Muhammad Rehman 2012)



burials are discouraged within a non-Muslim burial area (Abdul-Hameed 1984:24). Thus, the location of the Muslim graves over or near the protohistoric graves, although within the Muslim burial tradition, violated some of the guidelines for the Muslim burials. This may be due to the fact that it was important for the Muslims (either new comers to the area or new converts) to lay claim to the sanctity of the cemetery or were simply not aware of the fine arguments of the Muslim faith or chose to override those procedures.

Within the Vale of Peshawar, the construction of modern Muslim graves with upper and lower grave-chambers, sealing and a stone circle/rectangle at the top mimics the structure of some of the protohistoric graves (see Figs. 7.4 to 7.8). Even the structure of the modern Christian graves within the Vale of Peshawar follows this scheme; except that it usually does not have stone structures at the top (see Fig. 7.9). Thus, even as the basic structures of the protohistoric, Muslim and Christian graves are the same within the Vale of Peshawar, there are still minor differences that effectively separate one from the other. However, if the above ground structures are destroyed and the orientation of the body and the grave are not considered, it would be very difficult to differentiate the Christian graves from the Muslim graves. I may argue that it is perhaps the minor variations within the orientation of the graves and/or burials that could have been there as a result of major differences in ideologies and/or religions (e.g. Christianity and Islam) of the deceased and mourners and/or participants. Thus, within the study of the protohistoric cemeteries in northwestern Pakistan, the minor changes and variations within the graves and burials should be carefully recorded and investigated, which might have been meaningfully constructed to convey ideological messages of the buried and living.





Figure 7.10: Muslim graves of the Ismaili sect (without head and footstones) at village Tauq – Mastuj, Chitral, Pakistan (Photograph: Muhammad Zahir 2011).



Figure 7.11: Muslim graves of the Sunni sect (with head and footstones - foreground) and Ismaili graves (within wooden fence) at village Tauq – Mastuj, Chitral, Pakistan (Photograph: Muhammad Zahir 2011)

Furthermore, the graves belonging to the different sects of Islam (Ismaili and Sunni) within Chitral valley in northwestern Pakistan are differentiated by the provision or non-provision of small standing stones at the head and foot of the graves. The Sunni graves are provided with these stones while the Ismaili graves are not. These buried Sunnis and Ismailis may be from the same family, community and village, and these contemporary graves would be otherwise very difficult to distinguish archaeologically based on the evidence of grave structures and burial practices. This suggests that even if the grave structures, burial practices and orientation of the graves and bodies, within the protohistoric graves were the same, there could still have been room for different religious connotations and meanings within the protohistoric cemeteries for the living and deceased. This also means that the continuity of practice (e.g. the construction or orientation of the graves or deceased) may not mean the continuation of ideology and there may not always be a direct relationship between the two (e.g. see Cherryson et al. 2012: 158-9).

## **7.6 Protohistoric Cemeteries, Buddhism and Buddhist Art**

Naming the protohistoric cemeteries as Pre-Buddhist probably stemmed from Tucci's (1977:58) understanding that these graves were earlier than the spread of Buddhism in Swat in the middle of 3<sup>rd</sup> century BC. Although the association of protohistoric cemeteries and Buddhist Stupa sites is quite a recurrent phenomenon, particularly within Swat valley, Bajaur and Mohmand Tribal Agencies (Jan 2002; Tucci 1977:58), it does not mean that the followers with different ideologies than Buddhism were wiped out by the Buddhists. It should not probably be seen in the form of dualism of victory and defeat for many reasons as suggested by Tucci (1977:10). There is no archaeological or historical record of any conflict arising due to the conversion of the

people of Swat from their older religion(s) to Buddhism. In fact, Tucci suggested that the religious concepts of the non-Buddhist eventually prevailed upon the orthodox Buddhism to become Tantaric or Vajrayana Buddhism (Mystic Buddhism) in Swat, which became the basis of the present Tibetan Buddhism (Tucci 1977:68-70).

Furthermore, Tucci (1977:68-69) believed that the evolution of traditional Buddhism into mystic Tantric Buddhism in the Swat Valley was a sign of “the revival of the aboriginal, cruel presences and of the magic rituals for which Swat had been famous from its origin”, when Swat was the “country of fairies, the witches, and the wizards” and that it was the acceptance of these pre-Buddhist religious beings that transformed Buddhism. In fact, Schopen (2004:375) saw this association of the Buddhist Stupa with the old graveyards as not unique to Swat, but a very wide spread tradition and a policy of the outsiders, the immigrant Buddhist monastic community, who used these associations as a sign of the establishment of the “Buddhist monastic community as the keepers, the guardians of the native dead” and their commitment to the “continuance of the local tradition”.

Though undated, the presence of non-Buddhist rock carvings (e.g. rock carvings with scenes of agriculture rituals, ibex/wild goat or hunting) has been associated with the protohistoric non-Buddhist communities, living in the outskirts of the Buddhist establishments in the Swat valley (Olivieri 2011:124, 128). Olivieri suggested that the non-Buddhist communities were marginalized by the Buddhists and possibly forced into agriculture or building activities; however, there is no evidence to suggest their conversions to Buddhism (Olivieri 2011:132-3). These rock carvings are associated with the pre-Buddhist people, who practiced seasonal migrations and who had small-

sized protohistoric cemeteries in the sub-valleys (Olivieri 2011:127-8). The existence of protohistoric graves radiocarbon dated to almost to the beginning of the Christian era makes the assumption of victorious Buddhism taking over the older ideologies as more debatable and open to suggestions of the coexistence of Buddhism and older religious traditions.

Thus, due to the absence of archaeological and historical evidence to the contrary, we may assume the existence of other religious communities, probably, but not necessarily, smaller as compared to the Buddhist communities, which has not been visible in the archaeological records (except some of the alleged rock carvings (Olivieri 2011)) in the region. This situation was probably due to the lack of tangible evidence in major settlements or religious sites' excavations or as a result of the nature of the archaeological project designs and preconceived assumptions of the archaeologists. The concept of Buddhist dominance in Swat probably arose from the archaeological presence of large religious establishments and the historical interpretations of royal patronage accorded to Buddhism, rather than from the multiplicity of evidence from contemporary settlements. Furthermore, this concept, by archaeologists, of change within archaeological cultures, seen through the medium of domination of the new people over the old people, is a typical culture-historical explanation for a potentially very complex phenomenon.

The repertoire of the animal bones (Caloi and Compagnoni 1976:31) at Loebanr-III led Stacul (1976:29) to believe that "food resources" were as a result of "sedentary cattle-breeding rather than pastoral" activities. From the "exploitation of the agriculture potential of the area", Tusa (1981:120) pointed out the "peaceful coexistence" of



different protohistoric communities practicing agriculture and pastoral practices”. Olivieri (2011:133) believed that the territorial expansion of the Buddhists (elite class) forced the non-Buddhists (non-elite class) tribal people to be involved in agriculture and related activities. These justifications are aligned with stereo-typical explanations of the class struggle within Italian archaeology and it is clear from the onset that the IsMEO subsistence models, explanations in terms of tribes/tribal systems and materialistic understandings, are true to the Marxist paradigms within Italian archaeology, as developed by S. M. Puglisi in the footsteps of Childe (d’Agostino 1991:60-1). Marxist understandings of the past societies are linked and defined by the forces and relations of productions (Trigger 2009:345).



Figure 7.12: Schist stele representing the death of Buddha in Gandhara Art, Peshawar Museum, Pakistan (Accession No: PM\_02826) (Photograph: Fawad Khan 2012)





Figure 7.13: Schist stele representing the transportation of the bier of Buddha, Peshawar Museum, Pakistan (Accession No: PM\_02835). The men are shown carrying the bier while the women are lamenting in front of the bier (Photograph: Fawad Khan 2012)



Figure 7.14: Schist stele primarily representing the cremation pyre (of Buddha) attended by two attendants, pouring either water to extinguish or oil to accelerate the fire, Peshawar Museum, Pakistan (Accession No: PM\_02833) (Photograph: Fawad Khan 2012).





Figure 7.15: Schist stele representing the distribution of the cremated remains, Peshawar Museum, Pakistan (Accession No: PM\_02831) (Photograph: Fawad Khan 2012).



Figure 7.16: Schist stele representing four scenes of imminence of Buddha's death and the resultant grief, death of Buddha, distribution of the cremated remains and the construction of Stupa over the cremated remains and the veneration of the Stupa, Peshawar Museum, Pakistan (Accession No: PM\_02832) (Photograph: Fawad Khan 2012).

We do not know a great deal about the Buddhist burial practices in northwestern Pakistan. Inhumation and cremation burials are practiced by the modern Buddhists in Sri Lanka; however, the choice or decision of the burial practices are based upon the social and/or religious status of the deceased to either be inhumed (e.g. lay woman) or cremated (e.g. Buddhist monk) (Langer 2007:62, 66). Buddhist religious rituals and prayers in northwestern Pakistan were centred around the Stupa. Stupa is essentially an elaborate sepulchre constructions which ideally contain the cremated remains of the Buddha or other important saints (Myer 1961:25). These Stupas in northwestern Pakistan were provided with religiously embellished steles. This stone art within the northwestern Pakistan is collectively called Gandhara Art (generally dated from 1<sup>st</sup> to 5<sup>th</sup> century AD) and is a representation of the Buddhist religious narrative, primarily the life of the Buddha (Ali and Qazi 2008; Swati 1997:85-87). One of the subjects of this art is the representation of the Buddha's death, comprising of multiple events, from responses to the imminent death of Buddha, actual death, procession, cremation process, distribution of the cremated remains and construction of Stupas and their veneration (see Figs. 7.12 to 7.16). Without going into the details of the religious subjects of the art, the art shows that death in northwestern Pakistan in the first half of the 1<sup>st</sup> millennium AD was a an elaborate social affair that involved complex social and religious rituals, memories and monument construction. Thus, applying this analogy to the protohistoric cemeteries in northwestern Pakistan, I may argue that these inhumations and cremation burials were quite complex and that these involved many social processes, starting with the imminence of death, processions, burial, monument construction and that the memory of the deceased was kept alive by the monument constructed over their remains.

The Gandhara Art is intensively symbolic in nature and great symbolism is attached to the hand gestures within Buddhist Art, which may include the identification of the deity represented, role of the deity portrayed or to differentiate the different manifestation of the same deity (Bailey 1940:30, 51; Dale Saunders 1958:47). The developments of gestures of hands within the Buddhist art and Buddhism have been linked to Tantric Buddhism that developed primarily in the Swat valley (Dale Saunders 1958:50; Tucci 1977:68-70). The gestures of hands are considered as bonds that connect the worshipers with the deity (Dale Saunders 1958:50). Heyn (2010), based upon the study of the gestures of hands within the funerary art of Palmyra, suggested and linked the gender, professional and family based identities of the deceased and survivors with the representation of the hand gestures.

I may argue that the different gestures of the arms and hands of the buried individuals within the protohistoric cemeteries are primarily linked with their ideologies and in some cases (e.g. joining of hands with other buried individuals) with family/sexual relationships. The pulling of arms and placement of hands in front or near the face of the individual creates an image of intense devotion and is much similar to the presentation of devotees within the Buddhist Art of Gandhara (see chapter 6 Figs. 6.24-6.25). The ideological and devotional aspects of these actions are further strengthened by the strategic placement of small pottery vessels and female figurines near the hands and/or face of the buried individuals, which might have been intended as offerings or help vis-à-vis their respective deities. In fact, I may argue that the flexing of the body (in an embryonic style) within the protohistoric cemeteries as a whole was linked with devotion and prayers and that these were connected with the display of religious or ritual symbolic inclinations of the buried individual and/or survivors.

### 7.7 Protohistoric Cemeteries, Non-Muslim Beliefs and Burial Practices

Robertson (1985:630-651), an amateur 19<sup>th</sup> century ethnographer (and a high ranking British administrator), left a vivid record of *Kafir* burials that he witnessed during 1890-91 in Kafiristan (bordering Chitral, northwestern Pakistan) that allow me to briefly outline the key concepts and processes that may help in understanding the protohistoric burial traditions of northwestern Pakistan. Robertson (1985:630-651) records the deaths and related processes of five individuals, including a young girl, a woman, two fallen heroes and a celebrated warrior. The young girl, although being a daughter of high status *Kafir* elder, was taken directly to cemetery for burial without any ceremony or feasting (Robertson 1985:630-651). The death and burial of high status old woman was an elaborate affair and consisted of beautification of the body, display over her bed, sessions of lamentations, dancing, animal sacrifice, feastings and orations, and these were participated by all members of the family and community (Robertson 1985:631-32). The women could achieve status by giving feasts or her ability (e.g. wisdom) or ascription to the status of her husband (Robertson 1985:422; 450, 631). The severed heads of the fallen heroes from a raiding party, brought by their colleagues, were given bodies of straw and were given full *Kafir*'s ceremonies of death and burial for two-three days, varying and appropriated according to the status and wealth of their family (Robertson 1985:632-635). The body of the old warrior is brought from his village to the "high status" village and is given similar ceremonies as the fallen heroes with the exception that his ceremonies were marked with a lot of fervour and firing of guns, only reserved for a great warrior (Robertson 1985:635-636).

The women are buried with their jewellery and clothes, while the men are buried with their weapons and wooden grave goods (Robertson 1985:641). Ordinary men and women are kept in collective wooden coffins above ground, while high status men are given a coffin of their own (Robertson 1985:641). Old wooden store-chests or granaries are taken to cemeteries to be used as coffins and these acts as “family receptacle” (Robertson 1985:504, 630). The cemeteries are impure places and are usually located near the villages, but never in agricultural land, and the smell of the decomposing bodies is part of everyday life (Robertson 1985:642). For every adult *Kafir*, a wooden effigy is erected after a year of his/her death, and the size, nature and shape of the effigy is dependent upon the feastings given to the community (Robertson 1985:645-646). The Kalasha people of Chitral, northwestern Pakistan, are still practicing similar death and burial rites (see Figs. 7.17 to 7.26).

The erection of the effigy is considered helpful to the deceased and ensures a good position in the hereafter, through which position of the deceased could be raised to the “deified ancestors” (Jettmar 1986:98). This cult of ancestors is usually not communal, but is restricted to the immediate family and sometime extending to the village or tribe of the deceased and it is only the ancestral cult that is accessible to women, as they are not permitted to take part in the communal or gods cult (Jettmar 1986:98). The dead return to supreme goddess house, where they “give their energy to the living” and perhaps reborn in the same clan (Jettmar 1986:98). Within the *Kafir* pantheon, the goddess of death and the deceased is also the goddess of fertility, children, family, agriculture and wheat harvest (Jettmar 1986:68-69). She can appear in human forms, with her foot prints filled with grain, or in wild goat’s shape and only goats are



slaughtered for her (Snoy 1962:139 cf. Jettmar 1986:70). *Kafir* believed that human beings are sown as seed (Snoy 1962:203 cf. Jettmar 1986:99).

Thus, employing this analogy, I may argue that though the general burial practice within the protohistoric cemeteries might seem to have been the same but the accompanying social events and ceremonies might have been different, depending upon the age, social status and location within the landscape (i.e. high or low status village) of the deceased and/or survivors. Furthermore, I may also argue that within the protohistoric societies of northwestern Pakistan, the spheres of death, birth, rebirth, agriculture, storage, goats herding and sacrificing were perhaps interwoven and there were perhaps no segregations between these spheres of the living, dead/ancestors and gods, and that the roles of women (e.g. as wise woman or goddesses) were central to some if not all the ideological and ritual activities.



Figure 7.17: The body of deceased Kalasha woman (inside the house) with male and female mourners, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)



Figure 7.18: The body of deceased Kalasha male lying on a bed (outside the house) with male and female mourners, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)



Figure 7.19: Oration by Kalasha male elders facing the deceased male, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)





Figure 7.20: Dancing by Kalasha male and female members in death ceremonies, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)



Figure 7.21: Preparation of food (goat's meat) for mourners, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)





Figure 7.22: Kalasha death feasting (primarily of goat's meat, purified butter, cheese, red wine and wheat's bread) served in baskets made of twigs, Chitral, northwestern Pakistan (Photograph: Sayed Gul Kalash)



Figure 7.23: The above ground Kalasha cemetery with wooden coffins at an un-irrigated land on the Bamburet River bank, Bamburet valley, Chitral, Pakistan (Photograph: Muhammad Zahir 2004).





Figure 7.24: The collapsing and collapsed (sometime under the weight of heavy stones) wooden coffins, Bamburet valley, Chitral, Pakistan (Photograph: Muhammad Zahir 2004).



Figure 7.25: The underground Kalasha burial with the bier (common bed) and a wooden effigy on a mountain slope, Rumbur valley, Chitral, Pakistan (Photograph: Muhammad Zahir 2004).





Figure 7.26: The displacement of effigy, decay of wooden bier and natural growth, Rumbur valley, Chitral, Pakistan (Photograph: Muhammad Zahir 2005).

Within the present province of Gilgit-Baltistan, and other parts (e.g. Chitral) of northwestern Pakistan, ethnographers have recorded traces of old, non-Muslim, ideologies (e.g. Jettmar 1961, 1986, 2002; Parkes 1987). Within these ideologies, wild goats (ibex and markhor) were the symbols of purity and sacredness (Jettmar 1961:87; 2002:8; Parkes 1987:640). Every valley was considered to have a dominant mountain, known as the abode of the gods with regions of purity and impurity within the slope of the mountains divided by “altitudinal spirituality” (Jettmar 1986:37; 2002:21). The sky was not believed to be just above the earth but can be reached through a “gradual transition” from the mountain peaks (Jettmar 1986:36). The river was considered as a “link to the middle world where the *Kafirs* themselves live, and then flows out to the realm of the dead close to the exit of the valley” (Jettmar 1986:36). Tucci (1977:26-38) suggested the worship of the mountain, sun and horse, and sacredness of the lakes and terracotta figurines as fertility goddesses as part of the protohistoric religion of Swat.

Through this analogy, I may argue that the location of the protohistoric graves on slopes, their orientation from top of the mountain to the valley floor and the positioning of the body and their relationships with the mountain top, valley floor and flowing river were probably linked with their world views and their concepts of ritualized landscapes.

### **7.8 Protohistoric Burial Practices, Agency and Choices**

Within the IsMEO and UoP models, complex social processes of inhumation and cremation burials have been simplistically reduced to the discussions of the burial practices alone. Through my analysis of both the inhumation and cremation burial practices and through analogy with the Muslim, non-Muslims and Buddhist burial practices in the region, I suggest that both the inhumations and cremation burials were highly social processes (see figs. 7.27 and 7.28). These processes included multiple stages of display, mourning, feasting and rituals that were guided by religious connotations and were linked with the display and manipulation of the buried and living in this world and the afterlife. Their concepts of the sacred landscape and purity/impurity were vividly displayed within their choices of the placement of the graves, grave constructions and orientations, and that these were linked with the ritual and religious concepts of the regeneration or rebirth of the deceased in the world of the living. Some of the burial practices (e.g. the disarticulated human remains) were probably a show of help from the living to the dead in getting his/her rebirth or the status of an ancestor.

Further, I may also suggest that the people had a tremendous amount of choice that they could utilize for their or for the burial of their loved ones. My analysis showed that

people did choose a lot of different ways to dispose the remains of the dead within both the inhumation and cremation burials. There was simply no one way in which the deceased were disposed within the protohistoric cemeteries. I may also argue that the burials of deceased was not the end of the process, but a strong memory of the deceased was maintained and visits and monument construction were part of the commemoration of the deceased. Generally, there were no gender or sex based differences within the burial practices.

The differences and variations within the burial practices and landscape settings might have been linked with the group identities and ideologies of the people within those particular landscapes, which were rigorously maintained and transmitted through generations. However, the presence of different burial practices (e.g. inhumation and cremation) within single graves or variations within burial practices within each of the analysed cemetery shows that perhaps individuals' choices of the burial practice or grave construction or grave goods as a means of their personal linkages or opposition to the different identities and ideologies was also maintained and that individual actors and their actions were an integral part of the protohistoric burial traditions in northwestern Pakistan.

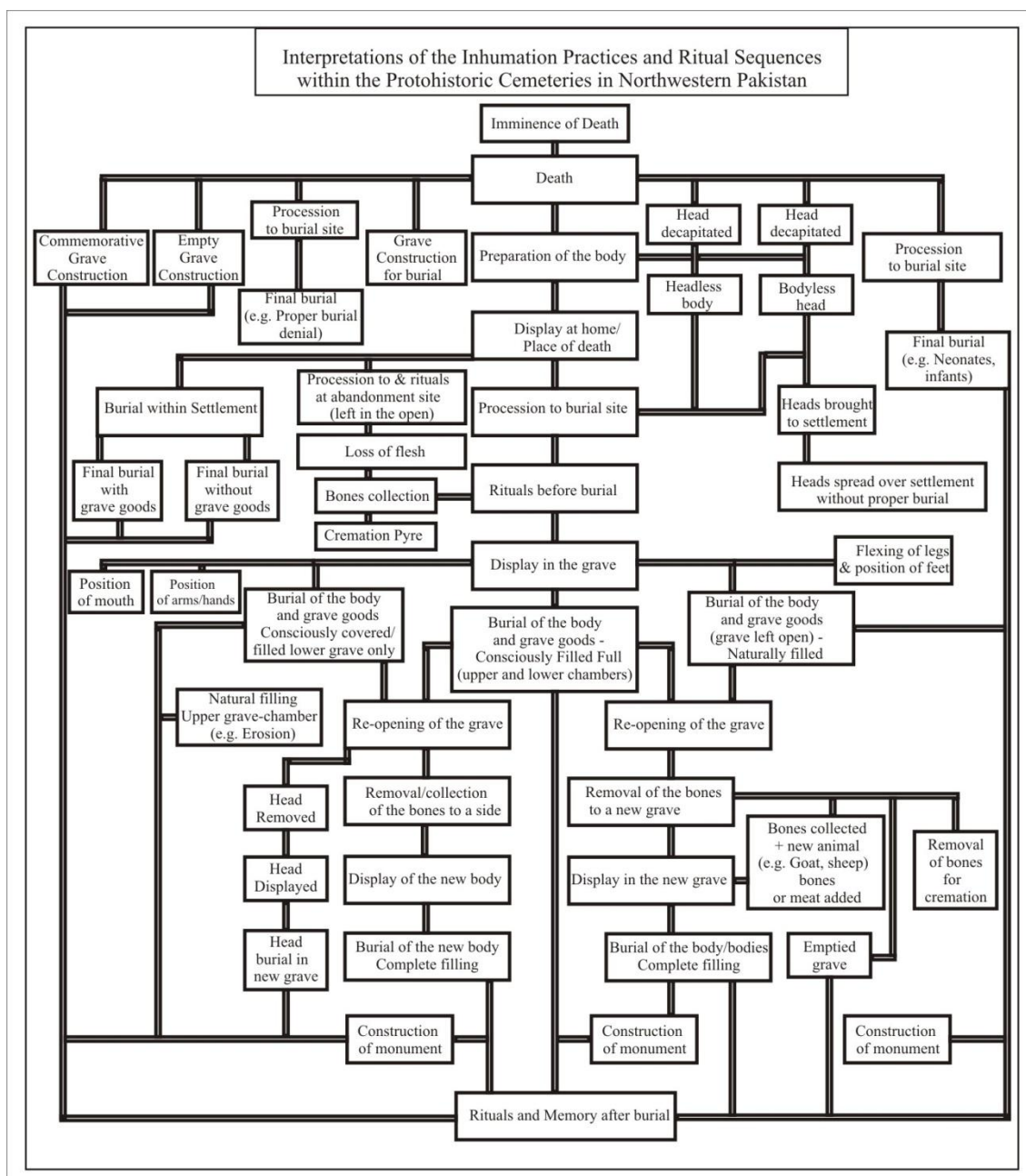


Figure 7.27: Interpretations of the agency and human choice of the inhumation practices and ritual practices within the protohistoric cemeteries, northwestern Pakistan (after Alciati 1967; Alciati and Fideli 1965; Bernhard 1968; Dani 1968; Silvi Antonini and Stacul 1972; Tucci 1977).

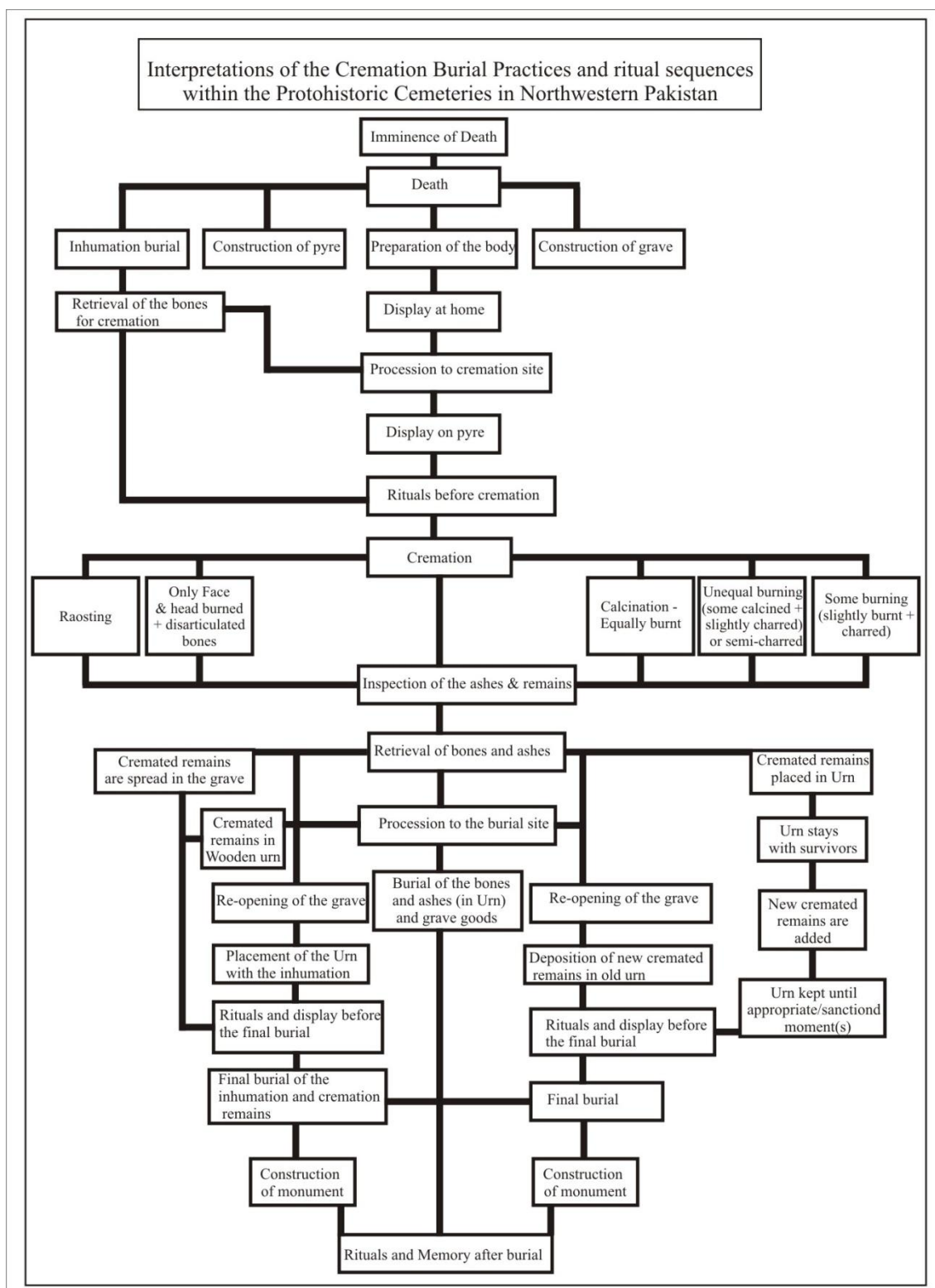


Figure 7.28: Interpretations of the agency and human choice in cremation burials and ritual practices within the protohistoric cemeteries, northwestern Pakistan (after Alciati 1967; Bernhard 1968; Dani 1968; Silvi Antonini and Stacul 1972)



### 7.9 Protohistoric Cemeteries and Subsistence Strategies

The association of copper/bronze artefacts (e.g. pins) and terracotta spindle-whorls within graves may be indicating a close link within these two groups of grave goods. This relationship may be more meaningful if we consider that the main researchers responsible for the creation of the IsMEO and UoP models probably had erred in the identification of the copper/bronze pins and/or as hair pins, which might have had other functional usages. Thus, for example, these copper/bronze pins might have been spindles and might have been used in conjunction with the spindle-whorls, or both might have been part of a tool repertoire for the manufacturing of yarn. The presence of possible high-whorl spindles (e.g. at Bir-kot-Ghwandai settlement (Stacul 1987:99 Fig. 42e) or types OM9-OM12 pins from Katelai-I and Loebanr-I cemeteries (Silvi Antonini and Stacul 1972:41 Fig. 24)), low-whorl spindle (e.g. types OB15-16 pins from Katelai-I (Silvi Antonini and Stacul 1972:42)), distaffs (graves 158 and 180 at Katelai-I cemetery (Silvi Antonini and Stacul 1972:347, 368 Pl. LVI d-e), bobbins (e.g. from Aligrama (Stacul and Tusa 1975:320 Fig. 103) and Loebanr-III settlements (Stacul 1976:26, Fig. 12a) may suggest the people within the Swat valley in northwestern Pakistan were probably actively involved in spinning.

Fuller (2008:11-13) associated the presence of spindle-whorls in first half of the second millennium BC in the Gangetic plains and Peninsular regions of India with the introduction of spinning, possibly from cotton or flax fibres. Costantini (1987:161) recorded the presence of flax from pit 1 at Loebanr-III. The three recalibrated radiocarbon dates from pit 1 at Loebanr-III ranges between 1820 to 1260 cal BC (see Table 7.1 and Fig. 7.1). This suggests to the use of flax fibre in diet and/or spinning

(possibly for clothes) during mid-2<sup>nd</sup> millennium BC. However, I may argue that although flax might have been utilized within the protohistoric contexts in the Swat valley, goats and sheep seem to have been the main source of fibres for spinning.

The representation of textiles within the Gandhara Art (particularly from Swat valley) is very unique within the Buddhist religious arts in India and the textile designs within this art are closely linked with the pottery decorations from the protohistoric cemeteries and settlement sites in northwestern Pakistan (Srinivasan 1994, 1997). In fact, Swat valley was known throughout ancient India for “fine woollen blankets (*Kambala*)” (Tucci 1977:9).

Spinning and weaving in the protohistoric cultures of Near East and Anatolia have been usually associated with women (Barber 1991:56-59). This led to the generalization that within the non-urban protohistoric societies women were as rule making cloths at home, as suggested by the presence of artefacts (e.g. spindles, spindle-whorls) within women graves (Barber 1991:289). The Assyrian women were making cloth for their own households and for export in their spare time and the men were only involved in the marketing of the finished products or that they just occasionally spun the yarn (Barber 1991:287; Keith 1998:499). Spindles and spindle-whorls were recorded from women's graves from period II at Tepe Hissar, Iran (Schmidt 1937:120 cf. Barber 1991:57-58). Male farmers spun fibre in Afghanistan (Barber 1991:52). Within the Early Iron Age cemeteries in Italy, spindles and spindle-whorls were mainly associated with female burials only and this pattern cross-cut other patterns within the datasets from the Early Iron Age cemeteries (Toms 1998:166). Spindle-whorls are associated with graves of the females in the fourth century AD Roman cemetery at Lankhills, England (Baldwin

1985:95-6). Spindle whorls were one of the ten most commonly found artefacts within the cremation burials in Anglo-Saxon cemeteries in England (Williams 2003:101). Biddulph (1971 [1880]:113) used the presence of “wooden” spindle-whorls within the cremation urns in non-Muslim cemeteries in Gilgit-Baltistan province as the mark of female burials. Spinning and the use of spindle-whorls have been attested within the seasonal migrants from Afghanistan into northwestern Pakistan and that both males and female were involved in these activities while tendering their flocks of sheep and goats (Knox et al. 2010:213).

Within the protohistoric cemeteries both the copper/bronze pins and terracotta spindle-whorls have been just once reported together within a single grave (grave 101 at Timargarha 1 cemetery) containing identifiable male and female individuals. Copper/bronze pins were recorded with both genders, for examples 6 graves with females (e.g. at grave 157 at Timargarha 1, grave 202 at Timargarha 2 and grave 31 at Butkara-II cemeteries), 4 graves with males (e.g. grave 111b at Timargarha 1, grave 256 at Timargarha 2 and grave 2 at Butkara-II cemeteries) contained copper/bronze pins while there were 7 graves (e.g. grave 137 at Timargarha 1 and grave 251 at Timargarha 2) which contained both male and female individuals. Thus, there is no distinctive pattern and association can be suggested for considering spindle-whorls as belonging to female or male only within the protohistoric cemeteries in northwestern Pakistan, and that probably both gender groups were actually involved within the spinning of yarn. Thus, it may not be wrong to suggest that generally within burial contexts spindle-whorls and spinning have been associated with females in different parts of the world; however, within the contexts of the protohistoric cemeteries and seasonal migrants in

northwestern Pakistan, both males and females were equally involved with spinning and using spindle-whorls.

From the Ghalegai sequence period II onward, domesticated goat and sheep (*Capra hircus* L. and *Ovis aries* L.) were present in equal numbers at the Ghalegai, Loebanr-III and Bir-kot-Ghwandai (Compagnoni 1987:142-145). In fact, bones of both of these, along with horse/ donkey, were recovered from all the settlement sites excavated in Swat (Young 2003:45). Horses and donkeys were considered to have been utilized for “work in the fields, for pulling vehicles, or for riding” (Compagnoni 1987:140). Young (2003:47) postulates the presence of dogs within the settlement of Swat valley might have been part of the herd management strategies. Though not discounting the use of horse/donkey in the agricultural activities and travelling, I may suggest that this visible presence of horse/donkey and dog bones perhaps attest to the possibility that these two animal families were an important part of the herd management. This line of thinking of relating the horse with the vehicles (an indirect reference to chariot) is a result of the culture-historical thinking of associating horse with the Aryans (e.g. Parpola 2005, 2009) and thus justifying the Aryan invasion theory (e.g. Dani 1972).

Jawad (1998:276-277), based upon her analysis of *Capra hircus* and *Ovis aries* species bones from Kalako-deray, Swat, suggested that males were killed young for meat, while females were kept for dairy and reproduction as they live long. However, the existence of larger number of older ewes might have been used for the production of wool and a few old rams for breeding (Barber 1991:26-27). In fact, Barber (1991:26-27) suggests that flocks kept for either dairy and wool production would typically have large number of older ewes and few rams. Both the *Capra hircus* (goats) and *Ovis aries* (sheep) are

known for the finest fibres (Barber 1991:22). Thus, I may suggest that the consideration of getting fine wool for spinning was perhaps dictating the kill pattern of *Capra hircus* and *Ovis aries* species at the settlement sites in the Swat valley. Perhaps the presence of an iron sheep shearer at Balambat settlement site, dated to the last occupation period (Rahman 1968c:275), attests to the existence of systematic wool production within the protohistoric settlements in the Swat and Dir valleys.

However, the food and wool requirements might have not been the only considerations for the kill patterns within the *Capra hircus* and *Ovis aries* species. Robertson (1985:449-452) records that within the Kafiristani politics of power and statuses, the feasting and sacrificing of goats had a special place and that only male-goats were offered within these ceremonies. In fact, heavy fines were imposed if candidates offer “male goats of inferior size” or in poor condition (Robertson 1985:450). Within the present non-Muslim Kalasha people in Chitral, northwestern Pakistan, male-goats are offered to gods (and consumed by people) on festivals and on religious and social ceremonies, such as death. Hence, the disparity between the sexual representation of both goats and sheep, and their particular ages, may be due to ritual or religious consideration of the people.

Young (2003) through her study of the modern transhumant groups and environmental data from protohistoric archaeological sites in northwestern Pakistan suggested the existence of multiple transhumance subsistence strategies within the region. She identified five subsistence strategies, namely intra-valley Winter Transhumance (from Dir and Swat valleys to Vale of Peshawar), inter-valley Winter Transhumance (within high/lowland regions of Dir and Swat valleys), inter-valley Summer Transhumance

(within high/lowland regions of Dir and Swat valleys), non-stationary Nomadic Pastoralists (from Dir and Swat valleys) and stable Sedentary Farmers (of Dir and Swat valleys) (Young 2003: 64-69). She suggested a close connection between the animal husbandry practices (primarily goats and sheep farming) to the transhumance practices in the protohistoric period of the region (Young 2003: 78-82). Thus, I may argue that if the protohistoric people within Swat and Dir valleys were practicing transhumance, the intra-valley transhumance strategy may explain the presence of some of the protohistoric cemeteries in the plains of northwestern Pakistan, for example Zarif Karuna cemetery in the Vale of Peshawar, with the similar burial practices and landscape choices as in the Dir and Swat valleys. Furthermore, I may argue that the presence of goat and sheep, along with the presence of spinning and weaving equipments within the protohistoric settlements and cemeteries suggest that through yarn/cloth manufacturing and trade, and transhumance practices, the protohistoric people buried within the graves were connected with the protohistoric settlements sites in the mountains and plains of northwestern Pakistan.

#### **7.10 Archaeological Models and Regional Politics**

The bulk of the research work of the IsMEO and UoP teams was carried out in the Swat and Dir valleys respectively and the main thrusts of their respective arguments were framed with the datasets from these two valleys exclusively. Although both the valleys are lying adjacent to each other, they were settled by different branches of the Yusufzai tribe of the Pathans, who invaded this region in the 16<sup>th</sup> century AD from Afghanistan and evicted the earlier Pathan and non-Pathan population from the region (IGI - NWFP 2002:215-220; Sultan-i-Rome 2009:2-3). It seems, with no authentic historical records, that the Dir region evolved into a confederation of tribal chieftains (*Khans* in Pashtu

language) with a leader, titled as Nawab or Khan of Dir, quite soon after their settlement there. The Pathans within the Swat region were without any formal structure but were governed by strict tribal traditions, and this period without any central authority in the Swat Valley is collectively known as “Pakhtu” or the period of Pathan tribal system (Khan 2011:2). The difference between the formal (Dir) and informal (Swat) systems, practiced by essentially the same people, gave rise to inter-tribal feuds, with the successive Nawabs of Dir trying to grab the land from the people of the Swat, with some records of feuds stretching back to as far as the 1870s (Sultan-i-Rome 1999:54-5, 2008a:48-57, 2009:2). This inter-tribal rivalry would only be broken in intermittent conflicts with the common enemy, the British. However, after some bloody conflicts in the second half of the 19<sup>th</sup> century, the British ultimately succeeded in exerting some control over both the regions from 1897 onwards, without subduing the inter-tribal animosity between the two, probably as a deliberate colonial tactic of keeping these tribal groups busy fighting within themselves rather than facing them in the battlefield.

In 1914, the Nawab of Dir, invaded parts of the Swat region and started collecting taxes; the people of Swat later repelled the attackers, but wary of their return, they agreed in forming a confederacy with a central figure in 1915 (Khan 2011:3). Thus, the whole of Swat as a state stemmed from rivalry and opposition with the Dir state, and this rivalry continued till 1947, when both the states, retaining their individualities, opted for Pakistan (Khan 2011:3-4; Sultan-i-Rome 2009:2-3; Ziring 2009:339). Both the states were abolished and formally integrated into Pakistan in 1969 (Sultan-i-Rome 2009:3). As a Pathan myself, I have always heard stories of the two, the Nawab of Dir and the Wali of Swat, in terms of the duality and stark differences of their characters; the

Nawab of Dir as a symbol of tyranny and oppression, while the Wali of Swat as a symbol of autocratic kindness, justice and progress.

Now, considering that the basics of both the IsMEO and UoP models were drawn before 1969, it is quite possible that their disagreements in the interpretation of the protohistoric cemeteries within a relatively small region were influenced by the contemporary ideas of identities of the people as distinct from each other, based upon their geography rather than ethnicity. Furthermore, in order to keep their respective local, but rival, governments of the Dir and Swat states happy, the archaeologists from both sides, the Italians and Pakistanis, were, probably, very keen in not upsetting the local sentiments, especially of the ruling class and elites, by appearing to be accepting the priority of the burial tradition from a rival region. This becomes an important consideration when looked at in conjunction with the vulnerability and reliance of both the teams on local support, especially from the elites, for the success and continuity of their research work. However, these divergent interpretations by both the teams might have also been intended to show to their own supporters the priority of their own findings and the validity of their arguments instead of those of the other group. Although this might have not been the case, it fits well within the generally accepted *modus operandi* of the classical and culture-historical archaeologies, to which both the IsMEO and UoP models loyally adhered.

### **7.11 Summary**

The recalibration of the radiocarbon measurements from the protohistoric cemeteries has extended the known date range, both in the upper and lower limits, of these cemeteries and in the process has left the existing chronological frameworks without



contexts. There is remarkable continuity and variations within the grave constructions methods and styles in all the analysed cemeteries individually and collectively. However, almost all the graves within in the analysed cemeteries are orientated along the slopes of the mountains, probably corresponding to the ideologies and concepts of the landscapes. The sizes and shapes of the graves are not linked with the either gender or age or burial practice or the height of the buried individuals. The contextual interpretation of the grave goods, particularly the VTf 68 vessel, terracotta figurines and spindle-whorls and copper/bronze pins opens up the grave goods as part of larger burial traditions that were meaningfully constituted as a reflection of the multiple ideologies of the deceased or mourners. The chronological interpretations of the VTf 68 rendered the existing typological understandings of the pottery assemblage as obsolete. Some of the grave goods, particularly the terracotta spindle-whorls and copper/bronze pins, were linked with the social and group identities of the deceased and survivors and provided a window into the subsistence and transhumance strategies of the protohistoric people. Inhumation and cremation burial practices continued throughout the existence of the protohistoric cemeteries with tremendous amount of variations. Though the methods of the disposal of the human remains in inhumations and cremation burials were different, both were thematically linked with the concepts of regeneration and rebirth. Flexed and disarticulated inhumations were carefully manipulated to reflect upon the concepts of regeneration and ritualized landscapes. The deviations within the burial practices such as the removal of the skull or headless bodies or presence of female human figurines reflected upon the coexistence of multiple and competing ideologies of ancestor veneration or worship or regeneration or lineage groups. All the burial practices were accessible to all ages and biological sexes. The multiple analogies with the Muslim, non-Muslim and Buddhist burial practices within northwestern Pakistan opened up

these protohistoric cemeteries as an active manipulation of the multiple ideologies, strongly linked with the purity/impurity and sanctity of the landscapes, particularly mountains, slopes, valley floors and rivers. These analogies also suggested that these burial practices were part of large body of social events, ceremonies and display that allowed the mourners to have multitude of options and choice for the burial of the deceased according to their preferred ideologies. These vibrant ideological based understandings of the graves, grave goods and burial practices within the protohistoric cemeteries are in contrast with their static interpretations within the existing models that were influenced by their reliance and connections with the elites and bureaucracy of their research areas.

## **Chapter 8: Conclusions and Future Research Directions**

My thesis represents the deconstruction and reinterpretation of the protohistoric cemeteries in northwestern Pakistan. The deconstruction process is based upon the contextual analysis of the existing archaeological models of the protohistoric cemeteries. The existing models are products of the research work of the Italian Archaeological Mission to Pakistan under the banner of IsMEO (currently IsIAO) and the Department of Archaeology (currently Institute of Archaeology and Anthropology), University of Peshawar. Both the IsMEO and UoP models are contemporary archaeological models and are based upon archaeological research conducted within the Swat and Dir valleys respectively in the 1960s. Though developed half a century ago, these models still enjoy tremendous institutional patronage and are actively transmitted to the younger generations of archaeologists, through the continuation of ideas, curriculum control and reproduction of the influential research works of the main researcher or of those sympathetic to their ideas (e.g. Dani 2000; Jan 2002; Mohammadzai 2006, 2007, 2008; Parpola 2005; Tucci 1997 a-b). Through deconstruction of the existing models, the reanalysis of the datasets used within these models, application of statistical softwares, analogies with the Muslim, non-Muslim and Buddhist burials, and recalibrations of the radiocarbon measurements, I have re-interpreted this archaeological phenomenon.

My research shows that both of the extant archaeological models are essentially the outcome of the same theoretical and political understandings of archaeology and both are the products of the ideas of a select few, representing their academic and political lineages. Through tracing the histories of the ideas of these scholars, I uncovered the

inner inconsistencies within the application of information from the excavations of the protohistoric cemeteries and the resultant theories. I can argue that the IsMEO model of the protohistoric cemeteries is the projection of the traditional Italian archaeology and is as much concerned with the restoration of the Italian prestige after World War II as with the archaeology of the region. I can also argue that the UoP model is a continuation of the colonial archaeological thinking within Pakistan archaeology and was aimed at the creation of a Muslim identity for the newly born nation of Pakistan, differentiating it from India. Both the models are formulated keeping in mind the audience within and outside the region of northwestern Pakistan.

My research shows that both of these competing models have more similarities than differences and both draw from each other (e.g. Dani 1968; 1992; Silvi Antonini 1963; Stacul 2000). They are mainly concerned with the ethnic identification of the people buried within graves and both associated the protohistoric cemeteries with groups of people discernible from the *Rigvedic* and Classical literary sources. The protohistoric cemeteries are generally dated from the mid-2<sup>nd</sup> to mid-1<sup>st</sup> millennium BC, corresponding to the perceived periodic invasions or large scale migrations from the west (Central Asia and Iran). Both the models understood and explained the protohistoric cemeteries within particular modern (e.g. Swat and Dir) and ancient (e.g. Gandhara) geographical settings. Within both, the material culture is understood in terms of the culture evolution paradigms and their links with the outside archaeological cultures (e.g. Iranian cultures).

The deconstruction and analysis of the IsMEO and UoP chronological frameworks reveals that both the models suffer from similar theoretical and practical problems. The

four chronological frameworks of Stacul (1969), Salvatori (1975) Fritsch (1997) and Vinogradova (2001) under the rubric of IsMEO model for the protohistoric cemeteries suffer from their heavy reliance on a singular chronological sequence established at the Ghalegai rock shelter and culture evolution understandings of the pottery typologies and none of these models utilized independent radiocarbon measurements as the central argument of their models. The UoP chronological framework is a projection of two uncalibrated radiocarbon dates from a single grave (grave 101) at Timargarha 1 cemetery and is based upon convoluted and circular arguments of pottery typologies, *Rigveda* dating and Aryan invasion.

Through my reanalyses of the grave constructions, burial practices and grave goods from the selected excavated cemeteries, I can argue that the preconceived ideas of the main researchers blurred the understandings of the protohistoric cemeteries, in fact, the UoP data is intentionally rendered, making it unusable and devoid of context. The contextual analysis of these datasets allowed me to investigate generally accepted statements (e.g. the relationship of the body placement on left or right sides with gender identifications) and results of analyses (e.g. the relationships between the different measurements of the grave constructions at Butkara-II cemetery). Through my new work, I showed that alternative analyses (such as frequency and cross-tabulation analysis) of the typological studies of the grave constructions, grave goods and burial practices could be used to open up new areas for interpretation (e.g. the relationship between grave goods frequencies and different types of burial practices). Through the interpretation of the grave constructions, grave goods, burial practices and landscape settings of the protohistoric cemeteries I argue for the existence of multiple, and

competing, ideologies that were central to the existence and continuity of this burial tradition or traditions within northwestern Pakistan.

### **8.1 IsMEO Model**

The IsMEO model of the protohistoric cemeteries in northwestern Pakistan is a product of Silvi Antonini's intellect, elaborated by Stacul and developed under the heavy influence of Tucci's theoretical and linguistic paradigms. The model was primarily concerned with the creation of pottery typologies from the graves in an effort to locate these within the broad chronological sequence (from Neolithic to early historic times) established at the Ghalegai rock shelter in the Swat valley. The study of pottery was concerned with the creation of "cultural province" or to show the existence of homogeneity and uniformity within northwestern Pakistan during the protohistoric period. This concept of regional homogeneity and uniformity was in turn linked with the association of these protohistoric cemeteries to historical, mythical and linguistic population groups. These population groups brought changes to the otherwise uniform archaeological culture primarily through the medium of large scale migrations. As the historical migrations and invasions (particularly of Alexander the Great around 327 BC) came through the western passes in the Hindu Kush Mountains, the protohistoric migrations and invasions must have also come from the west (Central Asia and Iran). As the 19<sup>th</sup> and early 20<sup>th</sup> century linguistic and literary studies were suggestive of invasions of South Asia prior to historic times by the Aryans during the 2<sup>nd</sup> millennium BC, the protohistoric cemeteries then related with the Aryans. As the pottery typologies showed connections with Iran and Central Asia, so the people buried in the protohistoric graves were linked with Iranians and Central Asians. As these movements of people happened between the fall of the Indus Valley Civilization and the Achaemenid rule in

the region, the chronological settings of the protohistoric cemeteries were fitted to the dates of mid-2<sup>nd</sup> millennium BC to 5<sup>th</sup> – 4<sup>th</sup> century BC. In short, the IsMEO model presented a complete narrative from Neolithic to the historic times with protohistoric cemeteries forming as part of the grand narrative and its legitimization process.

However, the deconstruction of the main researchers' theories and reanalysis of the grave constructions, burial practices, grave goods and chronological frameworks, the IsMEO model reveals the inner inconsistencies and assumptions. Thus, we know that the main researchers are primarily art historians, political scientists and linguists, whose ideas of archaeology were ingrained within the traditional Italian, Marxist and Classical archaeologies with heavy input from the culture-historical archaeology.

The extension of the Ghalegai rock shelter sequence, based upon culture evolution understandings of pottery typologies, is not a straightforward process, and in fact, I can argue that it is no more workable. The recalibration of the radiocarbon measurements from settlements and cemeteries expose the real extent of the unsystematic application of the pottery typologies as markers of different chronological periods and do not support to any of all the four chronological frameworks within the IsMEO model.

## **8.2 UoP Model**

The UoP model is a rough extension of Silvi Antonini's (1963) understandings of the protohistoric cemeteries in northwestern Pakistan, with the present form given by Dani. The main purpose of the UoP model was to prove the existence of Aryans and their multiple invasions into South Asia through citing differences within burial practices and chronology as evidence. The proof of Aryan invasions had a personal significance for

Dani as through this he proved his mentor Wheeler's ideas of the end of Indus Valley civilization linked with Aryan invasion as correct. He also proved his senior archaeologist (and his funding body head for cemetery excavations) F.A. Khan's hypothesis of the eventual archaeological evidence for Aryans coming from northwestern Pakistan. Dani's alignment of the Aryan invasion (from the Muslim west i.e. Central Asia and Iran) with the Muslim ideology of the newly born state of Pakistan, different from India (the Hindu east) was politically motivated and was linked with his contemporary political environment. The Muslim ideology, within the ambit of "Two Nation Theory", was actively propagated as an identity ploy by the ruling military junta, under Ayub Khan, in the 1960s.

Dani's interpretations of the protohistoric cemeteries misrepresented the archaeological evidence from the very start when he named it Gandhara Grave Culture; he thus associated the protohistoric cemeteries in Dir valley (and all the sites he knew at the time) with ancient Gandhara when the cemeteries were clearly located outside the geographical limits of Gandhara. Dani (1968) applied culture-historical understandings of archaeology to the protohistoric cemeteries in northwestern Pakistan and claimed to have identified Aryans, their waves of migrations, changes in the population landscapes and their present day equivalents, Pathans living in northwestern Pakistan (Dani 1968, 1997).

However, Dani's actual arguments are very convoluted and circular in nature. Thus, he explained burial practices in terms of actual differences in population groups, population groups from the *Rigvedic* literature as Aryans, Aryan invasions from material culture connections with the west and material culture from differences in



burial practices. Hence, he created an intricate web of circular and inter-dependent criteria to prove his preconceived ideas of the Aryans. Through deconstruction of ideas and reanalysis of his datasets, I can argue that there is no evidence to suggest that each burial style represented his single chronological periods within the UoP excavated cemeteries, in fact the data (both published and unpublished) presents a contrasting picture of the existence of multiple burial practices within his single chronological periods (e.g. see Dani 1966e). It is impossible to date the *Rigveda* to the time period that Dani has provided (mid-2<sup>nd</sup> millennium BC to 6-5<sup>th</sup> century BC) and there are no references to the elaborate grave constructions, flexed inhumations, disarticulated burials and multiple burials in urns in *Rigveda* (see Gonda 1975; Gupta 1972; Misra 2005).

None of Dani's evidence supports any of his theories of the Aryan invasions into South Asia and their presence within his Gandhara Grave Culture. In fact, there is no data to support the incoming groups of people or Aryans or discontinuities within the material culture or burial practices within the protohistoric cemeteries in northwestern Pakistan. Furthermore, the UoP model suffers from the non-representation or censoring of important information, the exaggeration of information and the misrepresentation of information. Thus, it would not be inaccurate to suggest that Dani practiced a tremendous amount of masking of the UoP excavation data in order to prove his preconceived ideas and his theoretical understandings of his Gandhara Grave Culture, which rendered almost all the data unusable for my research.

### **8.3 New Understandings of the Protohistoric Cemeteries**

The deconstruction and reanalysis of the protohistoric cemeteries in northwestern Pakistan not only allowed me to repudiate the main themes of the existing IsMEO and UoP models, but has also helped me in reinterpreting this archaeological phenomenon to come up with my own understandings. My understandings of the protohistoric cemeteries differ on many fronts from the existing models (e.g. theoretical and philosophical); however, the most fundamental difference within my and the existing models is that my research shows that there is no archaeological connection between the ethnic identification of the people practicing protohistoric burial traditions with the mythical (e.g. Aryans), semi-mythical (e.g. Assakenoi), linguistic (e.g. Dards) and current (e.g. Pathans) population groups. In fact, these ethnic identifications were more relevant to the archaeologists who proposed them rather than with the people who are buried in the graves. This is perhaps the most fundamental flaw and misplaced line of enquiry within the existing models of protohistoric cemeteries in northwestern Pakistan.

Furthermore, my research does not consider the protohistoric grave constructions, burial practices and grave goods as static objects devoid of their contexts, as dealt within the existing models, but rather lively snapshots from the long and complex social, ritualistic and ideological processes involving responses of the mourners, and the deceased, to death, emotions, display, disposal, burial, memory, reanimation, regeneration and commemoration. This shows that these burial traditions were linked with the manipulation of the ideological and social identities of the people buried within these protohistoric graves and the living were actively involved within these practices.

My deconstruction of the existing chronological frameworks and the recalibration of the radiocarbon measurements from both the protohistoric settlements and cemeteries suggest that none of the existing chronological frameworks within the IsMEO and UoP are capable of representing the full range of the protohistoric cemeteries within northwestern Pakistan. In fact, I have argued that none of them, in their present forms, can be used to understand the protohistoric cemeteries. The recalibration and analysis of the previous and new radiocarbon measurements from protohistoric settlements and cemeteries from northwestern Pakistan allows me to suggest a much larger range (from the end of 3<sup>rd</sup> millennium BC to end of 1<sup>st</sup> century BC at Swat valley, and to the end of 1<sup>st</sup> millennium AD at Chitral) than the accepted range (of 16-15<sup>th</sup> to 5-4<sup>th</sup> century BC) within the IsMEO and UoP chronological frameworks. This suggests the possible continuity and existence of more than two to three thousand years for the protohistoric cemeteries in northwestern Pakistan.

My analyses reveal the existence of at least five types of graves construction methods within the protohistoric cemeteries, with local preferences within different cemeteries. The majority of the graves were constructed with upper and lower grave-chambers and almost all the lower grave-chambers were provided with sealing. However, there does not seem to have been a single formula or measurements employed within the construction of the graves. Most of the graves were oriented along the slope of the mountains and thus, the orientations of the graves varied within different cemeteries. There was no distinctive pattern within the association of a particular grave construction method or structure or size with the social identities (age, sex) of the buried individuals, except children who were sometime buried in small sized graves (particularly at Timargarha 1 cemetery).

My analysis of the grave goods revealed that the majority of the graves contained less than five artefacts. Pottery was most common of all the grave goods and was present in almost all the analysed graves within the selected protohistoric cemeteries. Copper/bronze artefacts and terracotta spindle-whorls were the second and third most present artefacts in graves and that these two groups of artefacts are linked together; however, no specific association was found between these artefacts and gender and age groups. Based upon my analysis and interpretation of the copper/bronze pins, terracotta spindle-whorls and sex-based groups, I may suggest that both the males and females were probably involved in the manufacturing of yarn and wool, a by-product of the goat and sheep husbandry. Through the interpretation of the material culture and animal bones from the protohistoric settlements and cemeteries, I argue that the protohistoric people, buried within graves, were probably practicing transhumance as suggested by Young (2003), which might explain the existence of some of the protohistoric cemeteries within the plains of northwestern Pakistan, for example Zarif Karuna in the Vale of Peshawar.

The human remains were either inhumed or cremated within the protohistoric cemeteries. There were a lot of variations within the different inhumation (flexed and disarticulated) and cremation practices within each of the cemeteries and no two cemeteries were the same in terms of the burial practices. Both the flexed and disarticulated human remains were carefully manipulated within the graves to reflect upon the concepts or ideologies of devotion and regenerations of the deceased and/or survivors. The cremated remains were mostly placed within urns, some of which were decorated with human face, and were probably linked with the concepts of regeneration

and ancestor veneration or cult. The analysis of the sex and age-based groups suggests that both males and females, and children (with few exceptions at Timargarha 1) and adults were buried in similar fashions, in similar graves with the same repertoire of grave goods. There were no specific sex or age-based differentiations that were maintained within the protohistoric cemeteries. The double (and multiple) burials involving both the sexes were probably part of a tradition of family or lineage burials. The children were part of the inhumation as well as cremation burials, buried individually or with other adults.

My chronological analysis (based upon radiocarbon dated graves from Loebanr-I and Katelai-I cemetery) of the different aspects of the grave constructions (e.g. orientations), burials (i.e. cremation) and grave goods (e.g. pottery assemblages) showed tremendous continuity from the past within these, particularly at Loebanr-I cemetery. Thus, there are no abrupt changes within the different aspects of the graves, grave goods and burial practices.

The analogy with the Muslim burial tradition allowed me to support my untying of this archaeological phenomenon from the archaeological concept of “culture”. This negated the culture-historical understandings of the protohistoric cemeteries as promoted by both the IsMEO and UoP models. This led to the understanding that the protohistoric cemeteries were part of burial traditions that transcended different geographical regions, people and archaeological cultures. These burial traditions were extremely fluid, with variations in grave constructions, orientations, forms of burials, placements and body manoeuvring within the graves (particularly of flexed burials). However, all were meaningfully constituted in relation to the mountain top, slope, valley floor and river

below, perhaps a ritualized landscape setting that represented the conceptual cosmos and worldview of the deceased and/or survivors. The analogy with the Buddhist burial practices as manifested in their art (1<sup>st</sup> – 5<sup>th</sup> century AD) allowed me to see cremation burials as complex and multi-stage social events that were linked with the living. The analogy of the gestures of the hands within the Buddhist Art of Gandhara suggested that perhaps the gestures of the arms and hands, the flexed burials, within the protohistoric cemeteries were part of the display of devotion.

The analogy with the non-Muslim populations of the recent past of northwestern Pakistan explained the concepts of religious and ritualistic landscapes, where rivers, high mountains and slopes are related with spheres of gods and ancestors, men and women, purity and impurity and social status. The study of the late 20<sup>th</sup> century non-Muslim ceremonies of death and burials in Kafiristan suggested that the protohistoric burials were probably part of the long list of ceremonies and rituals of display, sorrow, joy and status performance and remembrance, and the active roles of the dead in the negotiation of the identities of the living. The fluidity of the burial practices based upon the age, gender and status within the society (e.g. children, females or warriors) that accompanied completely different sets of death and burial rituals helped in explaining similar practices within protohistoric cemeteries as socially, culturally and perhaps ideologically manipulated within the same group of people depending upon the identity, religiosity and status of the deceased and/or survivors. I may argue that the protohistoric cemeteries in northwestern Pakistan were not just about the dead, grave goods and graves, but they were part of the realms of the living, ancestors and gods.

Although the scope of my PhD research has limited the detailed geographical distribution and landscape study of the protohistoric cemeteries; I have already collected most of the published and/or unpublished information of 260 protohistoric cemeteries/grave sites in northern and northwestern South Asia that are part of (or alleged to have been linked with) the protohistoric cemeteries in northwestern Pakistan (see appendix 1 and Maps 1.3 -1.11). However, most of the information of these sites comes from the published explorations (primarily village to village surveys), including the sites discovered by the IsMEO and UoP teams (along with a few un-published sites) and that almost all the archaeological explorations (with one or two exceptions) are not systematic. However, this gives us an idea of the distribution of these protohistoric cemeteries within varied environments (but mostly located in relation to the mountains, slopes, valleys and rivers) from the northern Indian states of Uttarakhand and Himachalpradesh, bordering Nepal, and Jammu and Kashmir to Gilgit-Baltistan to North Waziristan Tribal Agency of Pakistan on the northwestern border of Afghanistan, almost covering the entire run of the Himalayan, Karakorum and Hindu Kush mountain ranges (primarily within the regions of their southern foothills) in northern and northwestern South Asia and possibly extending into Afghanistan and the neighbouring regions. This puts the notions of Gandhara as the centre of the protohistoric cemeteries in perspective and it shows that it was a much larger phenomenon than envisaged by either of the main researchers of the IsMEO or UoP models, and hence these existing models lack the capacity to handle this phenomenon. The existence of this protohistoric phenomenon within a range of more than two – three thousand years and their discovery in more than a million square kilometre region (by conservative estimates) in northern and northwestern South Asia is not explainable within any definition of an archaeological culture; this represent something bigger or a step higher than the concept

of culture, suggesting to the presence of multiple and competing ideologies and identities within this vast geographical region that promoted and sustained these burial traditions.

#### **8.4 Future Research Directions**

My present research has been instrumental in opening up new avenues of research and scholarship that I would not have been able to comprehend (far too taboo to talk about) within the traditional Pakistani archaeology, such as questioning and mounting multiple challenges to the *icons* of archaeology (e.g. Dani, Wheeler, Tucci and Stacul) and accepted *facts* (e.g. Aryan invasion theory or the Gandhara Grave Culture). However, the most important thing that I take from this research is the ability to continuously question myself and my ideas and to take sides in dealing with politically charged and theoretically laden ideas within both the existing models of protohistoric cemeteries in northwestern Pakistan. The deconstruction and reinterpretations of both these models has made me and my future vulnerable within the Pakistani academia in general and archaeology in particular. However, the potentials of applying these concepts to the archaeology of Pakistan are limitless, enabling me to trace back the history of almost any idea for its deconstruction and analysis within the archaeology of Pakistan and leaving me with potentially a vast array of research opportunities in my professional career. However, keeping in view my PhD research, I plan to undertake research on the following themes:

1. My research has identified the study of religious and ritual landscapes as one of the most exciting new field in the study of protohistoric cemeteries in northwestern Pakistan. For my present research, I have access to information



(with varying degrees) of 260 protohistoric and alleged protohistoric cemeteries/grave sites in northern and northwestern South Asia; however, the scope of this research did not allow me to undertake a comprehensive geographical distribution and landscape analysis of these cemeteries with my acceptable skills in Geographical Information System (GIS), SPSS/PSAW and File Maker Pro softwares. I would like to undertake this analysis to know more about the strategies of the protohistoric people in managing and defining religious and ritual landscapes through the location of cemeteries, the locations and directions of the grave constructions, body positions and provision and non-provision of the grave constructions, grave goods and burial practices, after the completion of my PhD research.

2. The deconstruction and the reanalysis of the contexts of the existing chronological frameworks within IsMEO and UoP models and the recalibration of the radiocarbon measurements have eroded the aspect of certainty from these models and in the process have left a potential vacuum for future research. Thus, I would like to go back to the protohistoric settlement sites, particularly Ghalegai rock shelter, Aligrama and Bir-Kot-Ghwandai, and the protohistoric cemeteries of Katelai-I, Loebanr-I and Butkara-II in Swat valley, and Timargarha 1 and 2 in Dir valley, to study their material culture without applying the culture evolution paradigms and typologies and to obtain maximum possible radiocarbon measurements. Through this research, I plan to work on creation of site specific chronological framework first, both within settlements and cemeteries independently, and then try to come up with (if possible)

comprehensive regional chronological ranges for the protohistoric settlements and cemeteries in northwestern Pakistan.

3. The absence of physical anthropological information from the major protohistoric cemeteries (Loebanr-I and Katelai-I) excavated by the IsMEO team severely restricted my study of the age and sex-based groups within the protohistoric cemeteries in northwestern Pakistan. I believe that most of the physical remains from these cemeteries are still lying in different museums' stores within Pakistan and Italy. I plan to team up with the current IsIAO (the inheritor of IsMEO) team working in Pakistan to get their physical anthropological study undertaken and then use the resultant information about sex and age based groups and my extensive databases in SPSS/PSAW and File Maker softwares with other relevant information (that I have created for my PhD studies) for their analysis and interpretation within the protohistoric cemeteries in northwestern Pakistan.
4. The brief analogies of the selected aspects of the Muslim burial tradition, the non-Muslim burial practices and the protohistoric cemeteries have allowed me to understand the protohistoric cemeteries from completely new perspectives. Thus, I am interested in undertaking a detailed analysis of the Muslim and non-Muslim burial traditions within northwestern Pakistan to understand the issues of continuities and discontinuities within the different aspects of these traditions and how these have been manipulated by their adherents in their interactions with and in opposition to each other in shaping their local, regional and religious identities and how these traditions are used to maintain a link with the past alive.

5. The recognition that the archaeological and historical debates about ethnic identities of the modern population groups living within the boundaries of northwestern Pakistan (e.g. Pathans as Aryans (Dani 1997)) have a history that can be traced back and deconstructed is another important theme from my PhD, which I intend to follow in my future research. I also intend to extend this debate further to deconstruct the artificially constructed historical and linguistic ethnicities (e.g. Dards) of the alleged population groups living within northwestern Pakistan.
  
6. Although I had access to published (and some un-published) data of Saidu Sharif cemetery in the Swat valley (Noci et al. 1997), Sarai Khola in Taxila valley (Bernhard 1969; Halim 1972), Adina in the Vale of Peshawar (Khan 1993; Jawad 2006) and Kerbezakai cemetery in North-Waziristan tribal region (F. Khan pers. comm.) I did not include them in my current study primarily due to their non-utilization within the formation of both the IsMEO and UoP models and that all of these (except Adina cemetery) contained extended inhumation burials without the provision of grave goods (except Adina and Karbezakai cemeteries). I intend to reanalyse them for their possible links with the protohistoric cemeteries in northwestern Pakistan that I have already analysed for my PhD research.

## 8.5 Summary

Through the deconstruction of both the existing models, the analyses and reinterpretation of the protohistoric cemeteries, along with multiple analogies, I argue that the protohistoric cemeteries in northwestern Pakistan were neither part of a singular archaeological culture nor belonged to single ethnic groups or geographical or historical

enclaves but rather as multiple burial traditions that were transmitted from one generation to another. These burial traditions were not a result of a singular ideology or concept but rather a broad range of multiple, perhaps competing, ideologies and concepts with similarities in themes that existed and survived on the fringes of the formalized religions (i.e. Hinduism, Buddhism and Islam) in northwestern Pakistan. These ideologies were probably responsible for the presence of concepts of ancestral beings, god and goddesses, and a strong sense of ritual purity and impurity of landscapes and regeneration. Family, ancestral lineages, goat and sheep husbandry, yarn/cloth manufacturing and sense of belonging to particular locations within particular landscape and transhumance were central to their identity. Thus, within the contexts of the protohistoric cemeteries, I may argue for the existence of archaeologically un-documented multiple ideologies, probably not as formal as Islam and Christianity is, but influential enough to have sanctioned burial traditions that were sustained by their adherents for more than two - three thousand years in northern and northwestern South Asia. Future research involving the investigations of the large body of the protohistoric cemeteries/grave sites in northern and northwestern South Asia, along with new chronologies of the excavated cemeteries based upon radiocarbon measurements and their physical anthropological studies, and detailed analogies and studies of the historic and modern burial practices in the region, may provide better understandings of these protohistoric ideologies and their reflections within the archaeological record of the region.

## **Appendix 1: List of Protohistoric Cemeteries/Grave Sites in Northern and Northwestern South Asia**

The following is a comprehensive list of all the explored protohistoric cemeteries/grave sites (260 in all) within northern and northwestern South Asia to date, associated with the protohistoric cemeteries in northwestern Pakistan. I have presented this list in the form of a table, where S. No means the general order of the sites within this list (corresponding to their respective order in the regional maps in my chapter 1 - Maps 1.3 to 1.11). I have singularly mentioned the earliest (where possible) reference to each cemetery (recorded in full in my thesis references). Where the site is unpublished, I have noted it with (up) and have abbreviated my personal communication as pers. comm.

I used the published information about the location of the protohistoric cemeteries/grave sites and with the help of Dr. Luca M. Olivieri (for sites in Swat valley), Dr. M. Qasim Jan Mohammadzai (for sites in Mohmand Tribal Agency), Mr. Subhani Gul (for sites in Dir valley) and Mumtaz Ahmed Yattoo (for Kashmir and Uttarakhand - India) to create GIS maps (chapter 1, Maps 1.3 to 1.11) for all the recorded/explored sites in northern and northwestern South Asia. However, due to the absence or ambiguous information or accessibility of the maps/Google Earth data (e.g. the maps of tribal areas of Pakistan are restricted in Pakistan, and other parts of the world, and Google Earth has been manipulated/tempered for these areas possibly due to the ongoing terrorism related activities in the region), I could not represent 45 sites in my GIS maps. These include sites number 15, 29, 49, 64, 121, 123-4, 126-9, 131, 133-4, 136-7, 139, 141-3, 149-50, 167, 176, 178, 185-6, 212-4, 216, 223, 226-9, 240-3, 246-8 and 259-60. Information of

the last two sites (259 and 260) was received in July 2012 and was incorporated in the list.

<b>S. No.</b>	<b>Site Name</b>	<b>Region</b>	<b>Reference</b>
<b>1</b>	Aligrama	Swat Valley	Tusa 1981:105
<b>2</b>	Aligrama Settlement	Swat Valley	Stacul and Tusa 1975:307
<b>3</b>	Arkot-Kili	Swat Valley	Tusa 1981:104
<b>4</b>	Bajkata	Swat Valley	Jan 2002:105(up)
<b>5</b>	Bang-Khas 1	Swat Valley	Olivieri and Vidale: 2006:80
<b>6</b>	Basham	Swat Valley	Dani 1988:70
<b>7</b>	Bir-Kot-Ghwandai 2	Swat Valley	Olivieri and Vidale 2006:77
<b>8</b>	Bir-Kot-Ghwandai settlement	Swat Valley	Stacul 1989:250
<b>9</b>	Butkara-II	Swat Valley	Silvi Antonini 1963
<b>10</b>	Butkara-IIb	Swat Valley	Tucci 1977:23
<b>11</b>	Charbagh	Swat Valley	Tucci 1963:27
<b>12</b>	Damkot	Swat Valley	Vinogradova 2001:10
<b>13</b>	Dangram	Swat Valley	Tucci 1977:10
<b>14</b>	Dwolasmane-patai 3	Swat Valley	Olivieri and Vidale 2006:79

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<b>15</b>	Gatkot	Swat Valley	Silvi Antonini and Stacul 1972:map
<b>16</b>	Gogdara	Swat Valley	Tucci 1963:27
<b>17</b>	Gogdara III	Swat Valley	IsMEO-Archives
<b>18</b>	Gogdara-IV	Swat Valley	Olivieri and Vidale 2012(Pers. comm.)
<b>19</b>	Goratai-Kandao 1	Swat Valley	Olivieri and Vidale 2006:78
<b>20</b>	Gumbatuna	Swat Valley	Tucci 1963:27
<b>21</b>	Jowar-Bandai	Swat Valley	Olivieri and Vidale 2006:79
<b>22</b>	Kamal-china 4	Swat Valley	Olivieri and Vidale 2006:79
<b>23</b>	Kamal-china 5	Swat Valley	Olivieri and Vidale 2006:79
<b>24</b>	Kandak	Swat Valley	Olivieri and Vidale 2006:79
<b>25</b>	Kanjar-Kote 2	Swat Valley	Olivieri and Vidale 2006:79
<b>26</b>	Katelai-I	Swat Valley	Silvi Antonini: 1963
<b>27</b>	Kherai	Swat Valley	Stacul 1966a
<b>28</b>	Kukarai	Swat Valley	Silvi Antonini and Stacul 1972:Map
<b>29</b>	Kuz Batkot	Swat Valley	IsMEO-Archives
<b>30</b>	Lalbatai	Swat Valley	Stacul 1967b:223
<b>31</b>	Loebanr-II	Swat Valley	Stacul 1976:28-29

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<b>32</b>	Loebanr-I	Swat Valley	Silvi Antonini 1963
<b>33</b>	Miage 2	Swat Valley	Olivieri and Vidale 2006:79
<b>34</b>	Nangrayal	Swat Valley	Khan 1996:1
<b>35</b>	Nazahei	Swat Valley	Tusa 1981: 102
<b>36</b>	Palai	Swat Valley	Jan 2000
<b>37</b>	Pulanr	Swat Valley	Stacul 1967b:225
<b>38</b>	Rahmanuddin-House	Swat Valley	Olivieri and Vidale 2006:80
<b>39</b>	Rashnel- Kalam	Swat Valley	Stacul 1970:88
<b>40</b>	Saidu Sharif 1	Swat Valley	Noci and Macchiarelli 1997
<b>41</b>	Salampur	Swat Valley	Silvi Antonini and Stacul 1972:Map
<b>42</b>	Shaga-Malkidam 1	Swat Valley	Olivieri and Vidale 2006:78
<b>43</b>	Shaga-Malkidam 3	Swat Valley	Olivieri and Vidale 2006:79
<b>44</b>	Sogalai	Swat Valley	Stacul 1967b:224
<b>45</b>	Tahsildar[sep]- Kabiruna	Swat Valley	Olivieri and Vidale 2006:78
<b>46</b>	Tarike	Swat Valley	Stacul 1967b:221
<b>47</b>	Thana	Swat Valley	Dani 1968:213
<b>48</b>	Tilgram	Swat Valley	Tusa 1981:101
<b>49</b>	Thutanu Bandai	Swat Valley	Silvi Antonini and Stacul

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			1972:Map
<b>50</b>	Uech-Tangai	Swat Valley	Olivieri and Vidale 2006:77
<b>51</b>	Ushoram	Swat Valley	Stacul 1970:88
<b>52</b>	Balambat	Dir Valley	Dani 1968:237
<b>53</b>	Chatpat (Charpat)	Dir Valley	Dani 1968:233
<b>54</b>	Don kacha Baba	Dir Valley	Ali et al. 2010b:153
<b>55</b>	Ganauri	Dir Valley	Zahir 2003(up)
<b>56</b>	Jabagai	Dir Valley	Ali et al. 2010b:152
<b>57</b>	Kaskay Ziarat	Dir Valley	Ali et al. 2010b:154
<b>58</b>	Keetyarai	Dir Valley	Ali et al. 2010b:152
<b>59</b>	Khanano Dherai	Dir Valley	Ali et al. 2010b:155
<b>60</b>	Mashomaano Hadira	Dir Valley	Ali et al. 2010b:154
<b>61</b>	Sheikh Ali Baba	Dir Valley	Ali et al. 2010b:150
<b>62</b>	Rabat	Dir Valley	Zahir 2005(up)
<b>63</b>	Sadar Baba	Dir Valley	Ali et al. 2010b:154
<b>64</b>	Sansan Dandha	Dir Valley	Ali et al. 2010b:145
<b>65</b>	Sar Hadira	Dir Valley	Ali et al. 2010b:154
<b>66</b>	Shamlai	Dir Valley	Dani 1965(up)

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<b>67</b>	Timargarha 1	Dir Valley	Dani 1968:59
<b>68</b>	Timargarha 2	Dir Valley	Dani 1968:95
<b>69</b>	Timargarha 3	Dir Valley	Dani 1968:110
<b>70</b>	Zara Hadira , Jabagai	Dir Valley	Ali et al. 2010b:146
<b>71</b>	Ziarat	Dir Valley	Dani 1968:233
<b>72</b>	Ayun	Chitral Valley	Zahir 2005(up)
<b>73</b>	Ayun Junali ...	Chitral Valley	Zahir 2005(up)
<b>74</b>	Ayun Road	Chitral Valley	Zahir 2005(up)
<b>75</b>	Ayun-Bamburait Road	Chitral Valley	Zahir 2005(up)
<b>76</b>	Bakamak	Chitral Valley	Stacul 1969:92
<b>77</b>	Bala Hisar	Chitral Valley	Stacul 1969:93
<b>78</b>	Balanguru	Chitral Valley	Ali et al. 2002:651
<b>79</b>	Basnak	Chitral Valley	Ali et al. 2002:651
<b>80</b>	Biyaar -Lotedeh	Chitral Valley	Ali and Zahir 2006(up)
<b>81</b>	Bros	Chitral Valley	Stacul 1969:95
<b>82</b>	Buni	Chitral Valley	Khan 2002:181
<b>83</b>	Chakasht 1 & 2, Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>84</b>	Chakasht-Singoor	Chitral Valley	Ali et al. 2002:651

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<b>85</b>	Chakguru	Chitral Valley	Ali et al. 2002:651
<b>86</b>	Chewdhok	Chitral Valley	Ali et al. 2002:651
<b>87</b>	Darosh 1	Chitral Valley	INSPIRE-Project 2009-10(up)
<b>88</b>	Darosh 2	Chitral Valley	INSPIRE-Project 2009-10(up)
<b>89</b>	Gahirat	Chitral Valley	Ali et al. 2002:651
<b>90</b>	Gankorini-o-Taek	Chitral Valley	Ali et al. 2005:94
<b>91</b>	Garam Chasma Road	Chitral Valley	Khan 2002:181
<b>92</b>	Governor Cottage	Chitral Valley	Khan 2002: 181
<b>93</b>	Hindukush Heights Hotel	Chitral Valley	Ali and Zahir 2006(up)
<b>94</b>	Jashagha Goal	Chitral Valley	Ali et al. 2002:651
<b>95</b>	Jhang Bazar	Chitral Valley	Ali and Zahir 2006(up)
<b>96</b>	Koghuzi/Zukhsahain	Chitral Valley	Ali et al. 2002:651
<b>97</b>	Kolambhi-Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>98</b>	Kolo Gree	Chitral Valley	Ali et al. 2002:651
<b>99</b>	Korat	Chitral Valley	Ali et al. 2005:94
<b>100</b>	Lashino Dhok , Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>101</b>	Lashtotak , Ayun	Chitral Valley	Ali et al. 2002:651
<b>102</b>	Mirandeh Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>103</b>	Mogh	Chitral Valley	Rehman 1997(up)

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<b>104</b>	Noghormuri	Chitral Valley	Stacul 1969:93
<b>105</b>	Noghur Dhok , Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>106</b>	Noghur Muri	Chitral Valley	Ali et al. 2005:94
<b>107</b>	Parwak/Sako Lasht	Chitral Valley	Ali et al. 2005:94
<b>108</b>	Parwak/Shapeer-o-Noghur	Chitral Valley	Ali et al. 2005:94
<b>109</b>	Ragh	Chitral Valley	Khan 2002:181
<b>110</b>	Sangoor/Singur	Chitral Valley	Ali et al. 2002:651
<b>111</b>	Seen Lasht - Dolamuch	Chitral Valley	Zahir 2008(up)
<b>112</b>	Saham Junah	Chitral Valley	Ali et al. 2002:651
<b>113</b>	Shawai Dap	Chitral Valley	Ali et al. 2005:94
<b>114</b>	Sinjal-Singoor	Chitral Valley	Ali and Zahir 2006(up)
<b>115</b>	Tamunak/Broz Tamunyak	Chitral Valley	Stacul 1969:95
<b>116</b>	Thuryandeh , Ayun	Chitral Valley	Ali et al. 2002:651
<b>117</b>	Urghuch 1	Chitral Valley	INSPIRE-Project 2009-11(up)
<b>118</b>	Urghuch 2	Chitral Valley	INSPIRE-Project 2009-11(up)
<b>119</b>	Badan	Bajaur Tribal Agency	Rahman 1996:76(up)
<b>120</b>	Dag	Bajaur Tribal Agency	Rahman 1996:77(up)
<b>121</b>	Danghisar, Shawai	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>122</b>	Dinkot	Bajaur Tribal Agency	Jan 2002:95(up)

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<b>123</b>	Ghafoor Shah	Bajaur Tribal Agency	Ali and Rahman 2005:68
<b>124</b>	Ghakhai	Bajaur Tribal Agency	Rahman 1996:78(up)
<b>125</b>	Ghundai	Bajaur Tribal Agency	Jan 2002:96(up)
<b>126</b>	Gudar Tangai	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>127</b>	Inayat Qila	Bajaur Tribal Agency	Dani 1966e
<b>128</b>	Kharkai	Bajaur Tribal Agency	Ali and Rahman 2005:68
<b>129</b>	Kohi	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>130</b>	Manai	Bajaur Tribal Agency	Rahman 1996:79(up)
<b>131</b>	Mano Nao	Bajaur Tribal Agency	Ali and Rahman 2005:68
<b>132</b>	Mena	Bajaur Tribal Agency	Jan 2002:98(up)
<b>133</b>	Muhammad Gat	Bajaur Tribal Agency	Rahman 1996:78(up)
<b>134</b>	Mula Adil	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>135</b>	Myana Warsak	Bajaur Tribal Agency	Jan 2002:98(up)
<b>136</b>	Nino Ziarat	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>137</b>	Qazi Ghondai	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>138</b>	Sabagai	Bajaur Tribal Agency	Rahman 1996:80(up)
<b>139</b>	Shahi Tangai	Bajaur Tribal Agency	Ali and Rahman 2005:67
<b>140</b>	Shahkhanai	Bajaur Tribal Agency	Rahman 1996:80(up)
<b>141</b>	Shinkot	Bajaur Tribal Agency	Ali and Rahman 2005:68
<b>142</b>	Shinkotai Sewai	Bajaur Tribal Agency	Ali and Rahman 2005:68
<b>143</b>	Spino Parkho	Bajaur Tribal Agency	Ali and Rahman 2005:67

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<b>144</b>	Tora Dherai	Bajaur Tribal Agency	Rahman 1996:79(up)
<b>145</b>	Adin Khel	Mohmand Tribal Agency	Mohammadzai 2007:26
<b>146</b>	Alingar	Mohmand Tribal Agency	Ali and Rahman 2005:68
<b>147</b>	Chinarai	Mohmand Tribal Agency	Mohammadzai 2007:27
<b>148</b>	Danishkool	Mohmand Tribal Agency	Mohammadzai 2007:28
<b>149</b>	Deo Dherai	Mohmand Tribal Agency	Mohammadzai 2007:28
<b>150</b>	Faqirabad	Mohmand Tribal Agency	Mohammadzai 2007:35
<b>151</b>	Gandaghar	Mohmand Tribal Agency	Mohammadzai 2007:28
<b>152</b>	Garang	Mohmand Tribal Agency	Mohammadzai 2007:29
<b>153</b>	Gatoghundai	Mohmand Tribal Agency	Mohammadzai 2007:29
<b>154</b>	Gumbatai	Mohmand Tribal Agency	Mohammadzai 2007:29
<b>155</b>	Kamalai	Mohmand Tribal Agency	Mohammadzai 2007:30
<b>156</b>	Karer	Mohmand Tribal Agency	Mohammadzai 2007:34

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<b>157</b>	Karkanai	Mohmand Tribal Agency	Mohammadzai 2007:30
<b>158</b>	Katar	Mohmand Tribal Agency	Mohammadzai 2007:30
<b>159</b>	Khanqa	Mohmand Tribal Agency	Mohammadzai 2007:31
<b>160</b>	Khapakh	Mohmand Tribal Agency	Mohammadzai 2007:31
<b>161</b>	Khazano Sar	Mohmand Tribal Agency	Jan 2002:75(up)
<b>162</b>	Kochyan	Mohmand Tribal Agency	Mohammadzai 2007:32
<b>163</b>	Kuda Khel	Mohmand Tribal Agency	Mohammadzai 2007:32
<b>164</b>	Kwee	Mohmand Tribal Agency	Mohammadzai 2007:32
<b>165</b>	Naranj	Mohmand Tribal Agency	Ali and Rahman 2005:68
<b>166</b>	Nazar Khel	Mohmand Tribal Agency	Mohammadzai 2007:33
<b>167</b>	Nazar Pana	Mohmand Tribal Agency	Mohammadzai 2007:37
<b>168</b>	Pampokha	Mohmand Tribal Agency	Mohammadzai 2007:33
<b>169</b>	Pandyalai	Mohmand Tribal	Mohammadzai 2007:33

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		Agency	
<b>170</b>	Qandaro	Mohmand Tribal	Jan 2002:82(up)
		Agency	
<b>171</b>	Qayumabad	Mohmand Tribal	Mohammadzai 2007::34
		Agency	
<b>172</b>	Qutai	Mohmand Tribal	Jan 2002:84(up)
		Agency	
<b>173</b>	Sagi Bala	Mohmand Tribal	Mohammadzai 2007:35
		Agency	
<b>174</b>	Samghakhe	Mohmand Tribal	Mohammadzai 2007:36
		Agency	
<b>175</b>	Sangar Kandwalai	Mohmand Tribal	Mohammadzai 2007:35
		Agency	
<b>176</b>	Shahgai	Mohmand Tribal	Ali and Rahman 2005:68
		Agency	
<b>177</b>	Shaikhan	Mohmand Tribal	Mohammadzai 2007:36
		Agency	
<b>178</b>	Shatikhel	Mohmand Tribal	Mohammadzai 2007:31
		Agency	
<b>179</b>	Sheikh Ismail	Mohmand Tribal	Mohammadzai 2007:36
		Agency	
<b>180</b>	Sheikhano Dada	Mohmand Tribal	Ali and Rahman 2005:67
		Agency	
<b>181</b>	Spera Kale	Mohmand Tribal	Mohammadzai 2007:37
		Agency	

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<b>182</b>	Surai	Mohmand Tribal Agency	Jan 2002:90(up)
<b>183</b>	Tangi upper Tsagai	Mohmand Tribal Agency	Ali and Rahman 2005:68
<b>184</b>	Tarakai Tangi	Mohmand Tribal Agency	Mohammadzai 2007:37
<b>185</b>	Tor Kamar	Mohmand Tribal Agency	Mohammadzai 2007:33
<b>186</b>	Warkote Nao-Alingar	Mohmand Tribal Agency	Mohammadzai 2007:27
<b>187</b>	Yousaf Khel	Mohmand Tribal Agency	Mohammadzai 2007:38
<b>188</b>	Adina	Vale of Peshawar	Khan 1993 :1
<b>189</b>	Biblai	Vale of Peshawar	Jan 2002:49(up)
<b>190</b>	Chichar	Vale of Peshawar	Jan 2002:50(up)
<b>191</b>	Dargai	Vale of Peshawar	Salim 2001:188
<b>192</b>	Deo Dherai	Vale of Peshawar	Mohammadzai (pers. comm.)
<b>193</b>	Gharoona Banda	Vale of Peshawar	Ali 2003:265
<b>194</b>	Jamal Garhi	Vale of Peshawar	Dani 1978:43
<b>195</b>	Katigarhi	Vale of Peshawar	Jan 2002:52(up)
<b>196</b>	Katozai	Vale of Peshawar	Jan 2001
<b>197</b>	Lande Rud	Vale of Peshawar	Jan 2002:54(up)
<b>198</b>	Mairo Kili	Vale of Peshawar	Ali 2003:237

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<b>199</b>	Maneri Payan	Vale of Peshawar	Dani 1978:43
<b>200</b>	Matha	Vale of Peshawar	Jan 2002:55(up)
<b>201</b>	Panjpir	Vale of Peshawar	Dani 1968:234
<b>202</b>	Pehur	Vale of Peshawar	Dani 1968:234
<b>203</b>	Shah Mansur	Vale of Peshawar	Jan 2002:60(up)
<b>204</b>	Topai	Vale of Peshawar	Jan 2002:61(up)
<b>205</b>	Zarif Karuna	Vale of Peshawar	Khan 1973:1
<b>206</b>	Ziam-Gurguri Baba	Vale of Peshawar	Ali 2003:261
<b>207</b>	Gumla	Dera Ismail Khan District	Dani 1972:40
<b>208</b>	Hathala	Dera Ismail Khan District	Dani 1972:54
<b>209</b>	Marha Sharif	Dera Ismail Khan District	Dani 1972:53
<b>210</b>	Kerbezkai	North Waziristan Tribal Agency	Farid Khan 2010(pers.comm.)
<b>211</b>	Astore	Gilgit-Baltistan	Mughal 1985:217
<b>212</b>	Bojo Kot	Gilgit-Baltistan	Stein 1916:104
<b>213</b>	Gauharabad (Gas)	Gilgit-Baltistan	Dani 1998:156
<b>214</b>	Kandia Valley	Gilgit-Baltistan	Dani 1998:156
<b>215</b>	Mankiala	Gilgit-Baltistan	Qamar 1985:142
<b>216</b>	Muzot	Gilgit-Baltistan	Khan 2000:109
<b>217</b>	Nomal Health Resort	Gilgit-Baltistan	Dani 1998:156

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<b>218</b>	Khaplu	Gilgit-Baltistan	Mughal 1985:217
<b>219</b>	Chatorkand	Gilgit-Baltistan	Mughal 1985:217
<b>220</b>	Duran Sor	Gilgit-Baltistan	Dani 1998:156
<b>221</b>	Gakuch/Gokuch	Gilgit-Baltistan	Mughal 1985:217
<b>222</b>	Upper Gakuch	Gilgit-Baltistan	Dani 1998:156
<b>223</b>	Naupura	Gilgit-Baltistan	Dani 1998:156
<b>224</b>	Bubur	Gilgit-Baltistan	Dani 1998:156
<b>225</b>	Daeen	Gilgit-Baltistan	Dani 1998:156
<b>226</b>	Gichi	Gilgit-Baltistan	Mughal 1985:217
<b>227</b>	Gurunjar	Gilgit-Baltistan	Dani 1998:156
<b>228</b>	Hatun	Gilgit-Baltistan	Dani 1998:156
<b>229</b>	Sultanabad	Gilgit-Baltistan	Dani 1998:156
<b>230</b>	Pattan	Gilgit-Baltistan	Taxila Museum Archives: 2009(up-German Mission)
<b>231</b>	Kes-Ges	Gilgit-Baltistan	Taxila Museum Archives: 2009(up-German Mission)
<b>232</b>	Imit	Gilgit-Baltistan	Taxila Museum Archives: 2009(up-German Mission)
<b>233</b>	Chamaid High School	Abbottabad	Ali et al. 2009:146

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<b>234</b>	Hajia Gali	Abbottabad	Ali et al. 2009:146
<b>235</b>	Khairiwala Baba	Abbottabad	Ali et al. 2009:146
<b>236</b>	Malka	Abbottabad	Ali et al. 2009:146
<b>237</b>	Chansoor	Mansehra	Ali et al. 2009:145
<b>238</b>	Kot Najib ullah	Haripur	Khan 2000:24
<b>239</b>	Sarai Kholā	Taxila	Halim 1972:23
<b>240</b>	Kotan	Rawalpindi	Salim (up-Taxila institute museum)
<b>241</b>	Morgah	Rawalpindi	Salim 1992:37
<b>242</b>	Najpur	Rawalpindi	Salim 1992:37
<b>243</b>	Takal	Rawalpindi	M.Ashraf Khan (pers.ccomm.)
<b>244</b>	Dhok Malot	Chakwal	Dar 2001:30
<b>245</b>	Lilla	Chakwal	Salim 2001:186
<b>246</b>	Jhelum	Jhelum	Dani 1978:42
<b>247</b>	Musa Khel	Mianwali	Dani 1978:42
<b>248</b>	Sialkot	Sialkot	Dani 1978:42
<b>249</b>	Aishmuquam	Jammu and Kashmir	Shali 2001:109
<b>250</b>	Basiri	Uttarakhand	Khandhuri et al. 1997:78
<b>251</b>	Gagrigol	Uttarakhand	Agrawal and Kharkwal

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			1998:95
<b>252</b>	Ganai	Uttarakhand	Khandhuri et al. 1997:78
<b>253</b>	Jainul-Naula	Uttarakhand	Khandhuri et al. 1997:78
<b>254</b>	Ladyura	Uttarakhand	Sharma 1997:71
<b>255</b>	Leh	Jammu and Kashmir	Francke 1914:65-66
<b>256</b>	Malari	Uttarakhand	Kandhuri et al. 1997:77
<b>257</b>	Sanana	Uttarakhand	Khandhuri et al. 1997:78
<b>258</b>	Srikot	Uttarakhand	Khandhuri et al. 1997:78
<b>259</b>	Kinnaur	Himachalpardesh	V. Nautiyal pers. comm. 2012
<b>260</b>	Udegram-G	Swat Valley	M. Vidale and L.M. Olivieri pers. comm.. 2012

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## **Appendix 2: Analyses through Vinogradova (2001) Chronological Framework**

I have noted in my chapter 3 (section 3.3.3) that within the existing chronological frameworks, Vinogradova (2001) is the latest and has been accepted by archaeologists working in the region but outside the IsMEO and UoP teams. My analysis of the Vinogradova (2001) framework is aimed to show the significance of chronological analysis of the different aspects of the cemeteries for the interpretation of the protohistoric cemeteries that has been lacking in the existing models. Vinogradova (2001) provided chronological details of 318 of the 636 or 50 % graves for Loebanr-I, Katelai-I and Butkara-II cemeteries, which I individually quantified into my extensive databases containing other relevant information on the graves, grave goods and burial practices.

I have not included the results of the chronological analysis through Vinogradova (2001) framework into either my analysis or discussion chapter, due to fundamental flaws within this framework (see chapter 3 section 3.3.3). My analysis of the Vinogradova (2001) chronological framework datasets does not mean that I endorse her periodization or her use of the datasets or her culture-historical interpretations. The following sections represent a brief outline of the results of my analysis of the Katelai-I, Loebanr-I and Butkara-II cemeteries using Vinogradova (2001) chronological framework, which shows that even if accept this framework and the IsMEO model, the existing datasets do not support it. Furthermore, this also shows that the analyses and interpretations of the graves, burial practices and grave goods could have been undertaken in a variety of ways other than culture evolution typologies.

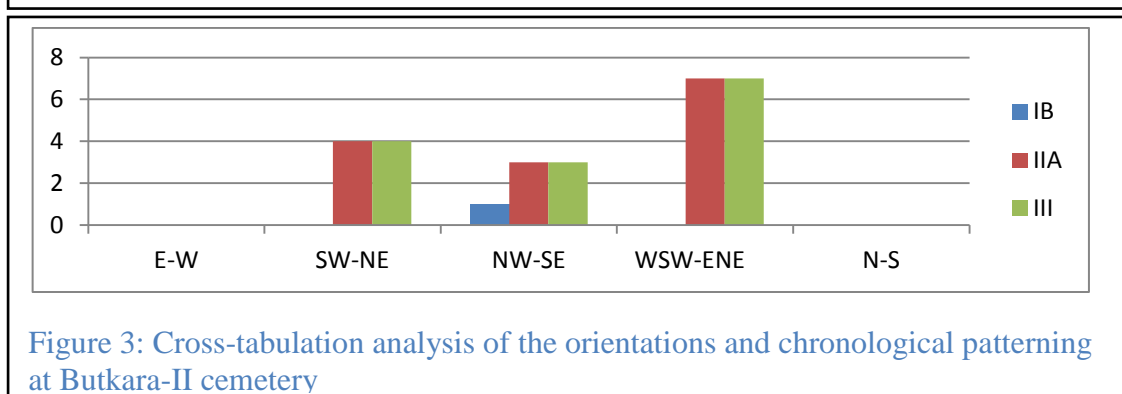
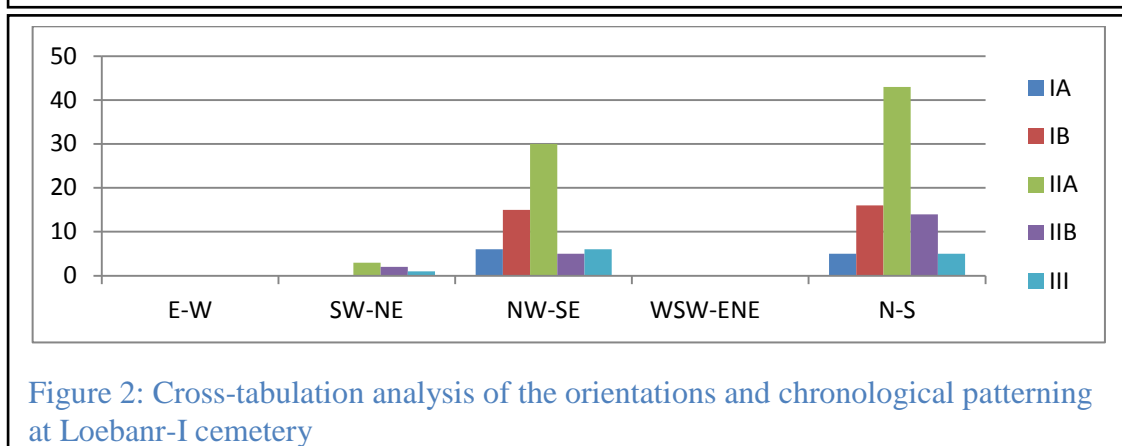
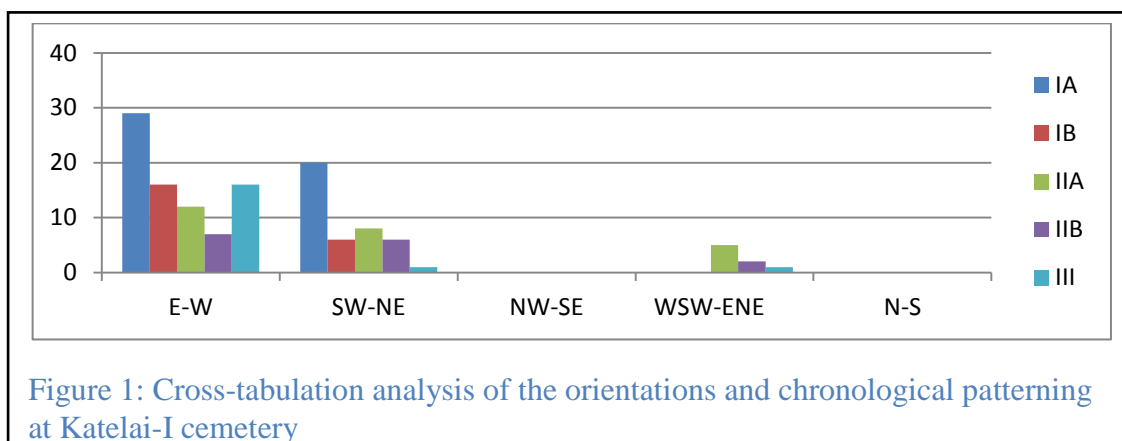
## 1. Graves

Within the Vinogradova (2001) chronological framework, none of the cist-graves were included and the majority of the lower grave-chambers with masonry walls come from period III. The majority of the lower grave-chambers were rectangular in shape and this pattern was quite consistent in all of her chronological periods.

	Period	Graves	Wall structure		Lower grave Chamber shapes				
			Cist	Masonry	Rectangular	Circular	Oval	Square	Irregular
<b>Katelai-I</b>	IA	53		3	49	1	2		1
	IB	22		1	20				
	IIA	25		3	20			1	2
	IIB	15		4	14				1
	III	20		5	18	1			1
<b>Loebanr-I</b>	IA	11		1	10			1	
	IB	31		3	28			3	
	IIA	76			74			1	1
	IIB	21		1	19			2	
	III	12		3	12				
<b>Butkara-II</b>	IA								
	IB	2			2				
	IIA	14			14				
	IIB								
	III	16		5	13				2
<b>Total</b>		<b>318</b>		<b>29</b>	<b>293</b>	<b>2</b>	<b>2</b>	<b>8</b>	<b>8</b>

Table 1: Total number of graves with chronological ascriptions in the Vinogradova (2001) framework and the frequency analysis of construction and shapes of the lower grave chambers.

As per Vinogradova (2001) chronological framework, E-W was the most frequent orientation for the graves at Katelai-I cemetery, while N-S orientation was chronologically the most favoured orientation at Loebanr-I and Butkara-II cemeteries (see Figs. 1 to 3).



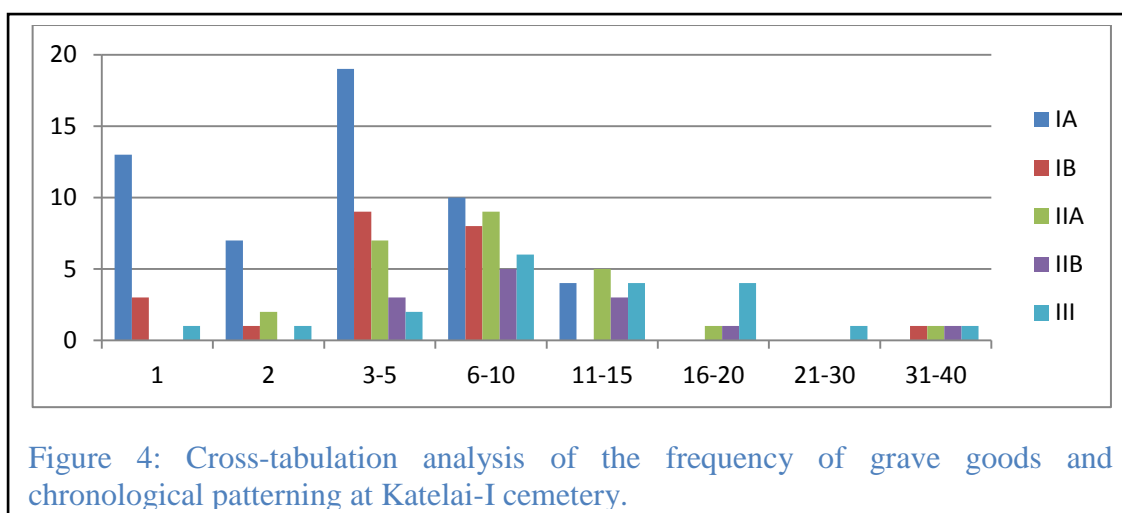
## 2. Grave Goods

The cross-tabulation analysis of the frequency of the grave goods per grave and their chronological attribution within the Vinogradova (2001) framework consist of 135 (75%), 151 (86%) and 32 (76%) of the graves with grave goods at Katelai-I, Loebanr-I and Butkara-II cemeteries respectively. At Katelai-I and Loebanr-I, graves with artefacts 1 to 5 and 6 to 10 were the most common in all the chronological periods. In



addition, at Katelai-I cemetery few graves with more than 15 artefacts were also present in all periods (except period IA). Similarly, there are relatively very few graves with less than 3 artefacts at Loebanr-I as compared to Katelai-I. At Butkara-II, graves with 6 to 10 and 21 to 30 artefacts were the most common.

Chronologically there were significant patterns within the grave goods in the protohistoric cemeteries (especially at Katelai-I and Loebanr-I), and these patterns were relatively consistent within these three cemeteries. Generally, graves with fewer grave goods tend to be earlier in date, as compared to those with large numbers of grave goods (e.g. at Katelai-I cemetery). Initially the frequencies of grave goods within graves were rather restricted (as suggested by emphasis on a smaller number of grave goods) but with the passage of time, the graves with 6 to 10 artefacts seem to have been the preferred number of grave goods.



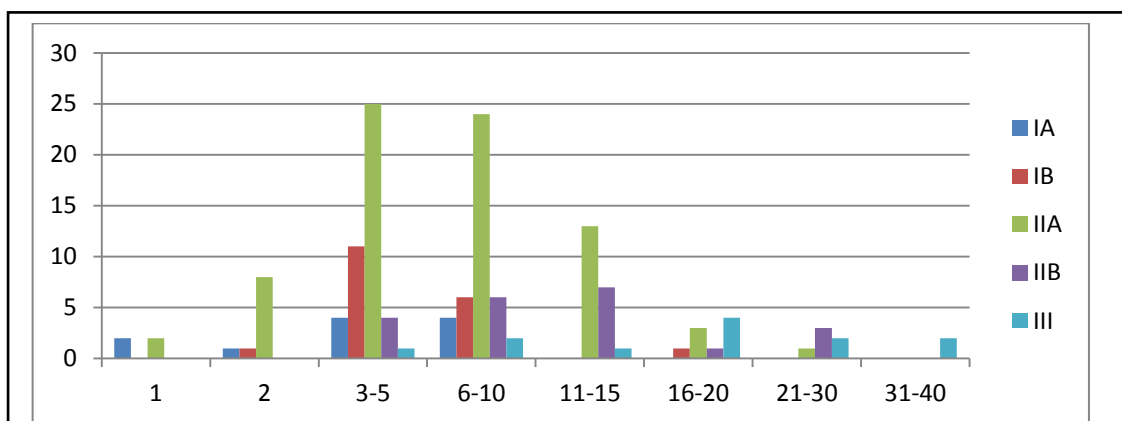


Figure 5: Cross-tabulation analysis of the frequency of grave goods and chronological patterning at Loebanr-I cemetery.

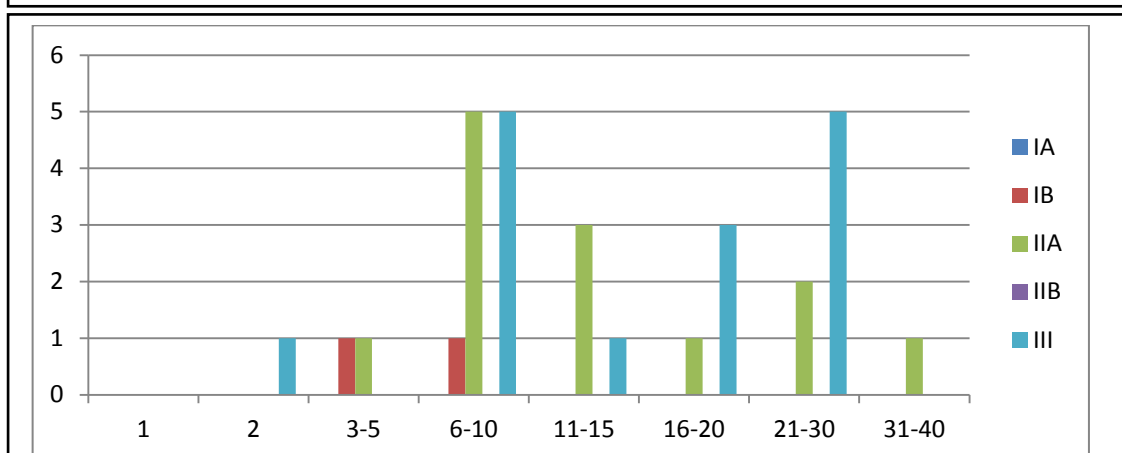


Figure 6: Cross-tabulation analysis of the frequency of grave goods and chronological patterning at Butkara-II cemetery.

Through the chronological analysis of the selected groups of grave goods, I may suggest that there are significant patterns within the distribution of these groups of artefacts at Katelai-I, Loebanr-I and Butkara-II cemeteries. There is certainly a very strong association between copper/bronze artefacts, especially pins, and terracotta spindle-whorls. Furthermore, the continuous presence of copper/bronze artefacts, even in the last period, may imply the continuation of the older technological traditions even in the face of new technological developments, such as iron artefacts. This continuation of artefact categories and materials suggests to the continuous link of the people with their past.

Cemetery	Period	Copper/bronze artefacts		Copper/bronze pin		Terracotta spindle-whorl		Iron	
		Frequency (Graves)	Frequency (Artefacts)	Frequency (Graves)	Frequency (Pins)	Frequency (Graves)	Frequency (whorls)	Frequency (Graves)	Frequency (Artefacts)
Katelai-I	IA	11	18	5	6	7	7		
	IB	6	10	5	6	5	6		
	IIA	11	23	11	15	7	8		
	IIB	6	12	4	6	3	3		
	III	5	22	7	9	5	8	14	29
Loebanr-I	IA	4	4	4	4	2	2		
	IB	18	24	17	22	12	13		
	IIA	37	62	27	38	20	22		
	IIB	10	17	7	8	5	7		
	III	6	19	5	10	6	10	6	9
Butkara-II	IA								
	IB	1	3	1	2				
	IIA	10	30	10	17	6	8		
	IIB								
	III	8	11	2	2	2	2	9	11

Table 2: Frequency analysis and chronological patterns within the selected grave goods' groups at Katelai-I, Loebanr-I and Butkara-II

At Katelai-I and Loebanr-I cemeteries, copper/bronze artefacts and terracotta spindle-whorls were part of the grave goods within all the chronological periods, primarily from periods IA and IIA. The majority of pins and spindle-whorls were recovered from period IIA. At Butkara-II cemetery, period IIA accounts for the most graves containing copper/bronze artefacts, including copper/bronze pins and terracotta spindle-whorls (Table 1).

### 3. Human Remains

Chronologically, there were local patterns within the distribution of inhumations (both flexed and disarticulated) and cremation (in urns) burials within these cemeteries. Thus,

at Katelai-I cemetery, flexed inhumations and cremation burials decreases through time, while there is no regular pattern within disarticulated inhumations between period IA and III (with maximum number of disarticulated burials).

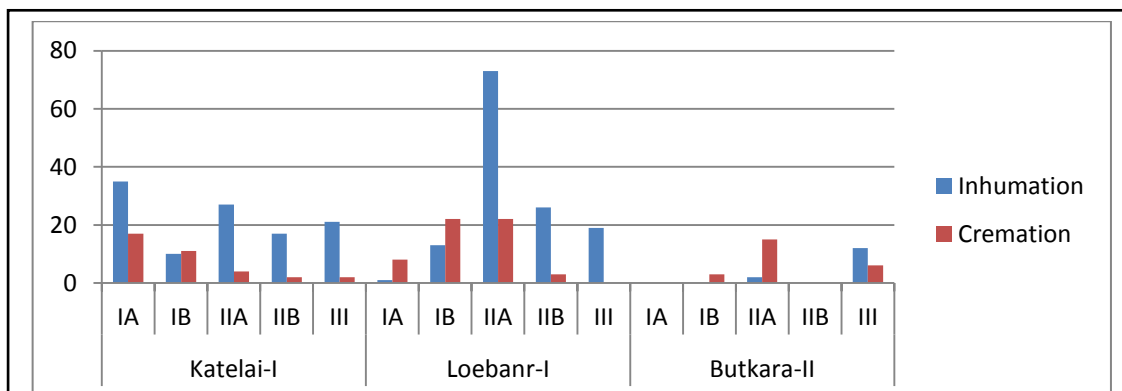


Figure 7: Chronological distribution of inhumations and cremation burials at Katelai-I, Loebanr-I and Butkara-II

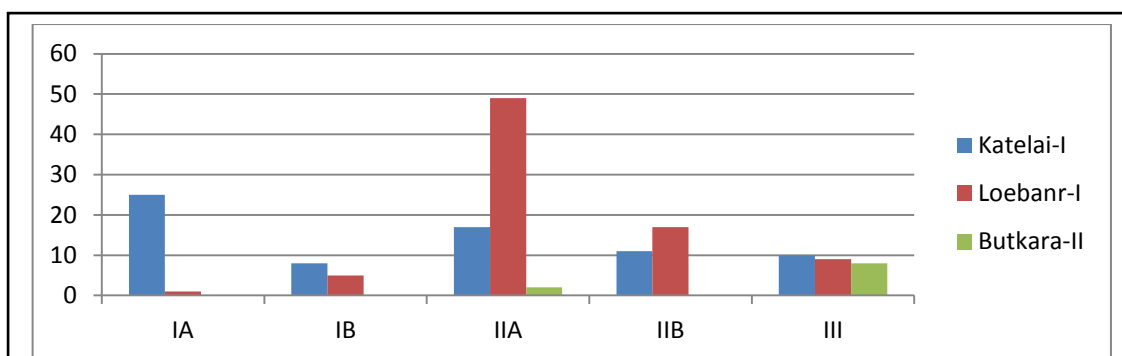


Figure 8: Chronological distribution of flexed inhumations at Katelai-I, Loebanr-I and Butkara-II cemeteries

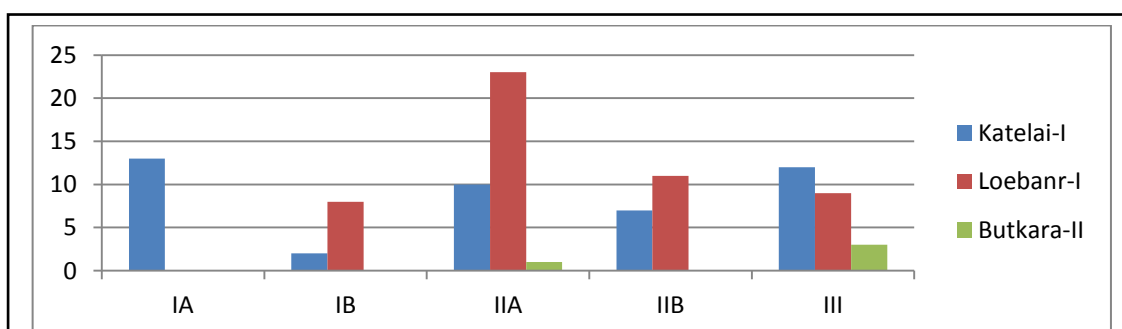
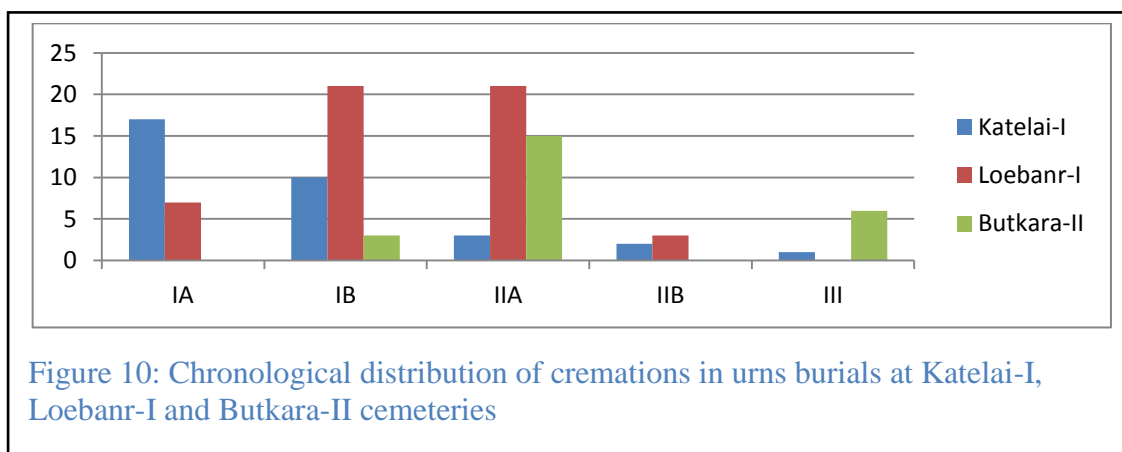
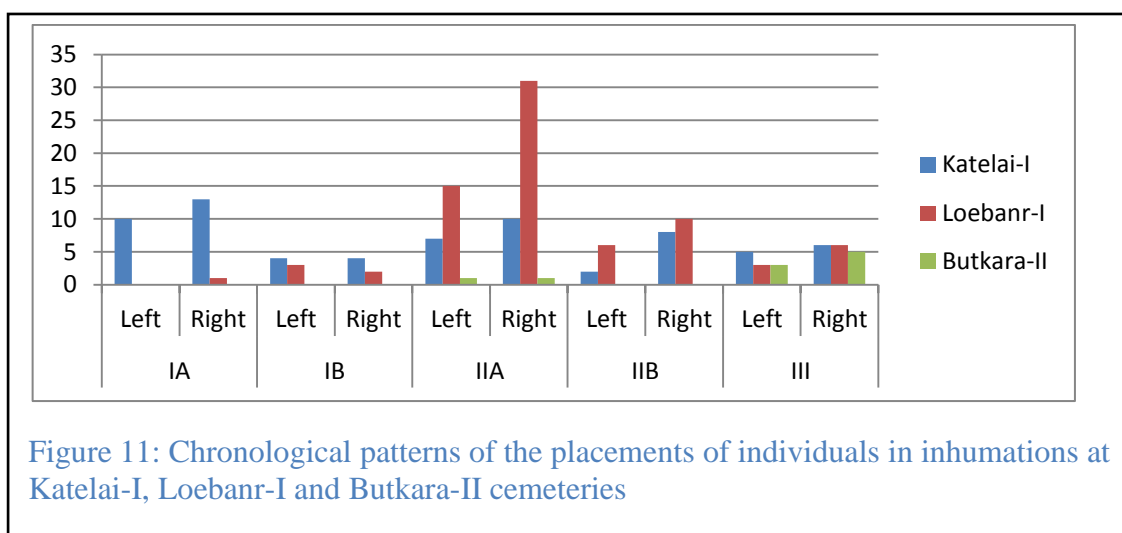


Figure 9: Chronological distribution of disarticulated inhumations at Katelai-I, Loebanr-I and Butkara-II cemeteries.



Within the flexed inhumation, the bodies were predominantly placed lying on their right sides inside graves in all the selected cemeteries. This pattern continues within all the chronological periods within protohistoric cemeteries.



Within each of the analysed cemeteries, there are chronological patterns within the most favoured orientations; however, these choices of orientations differ within each of analysed cemeteries. Similar chronological patterns are also observed in the orientation of the faces of the buried flexed individuals.

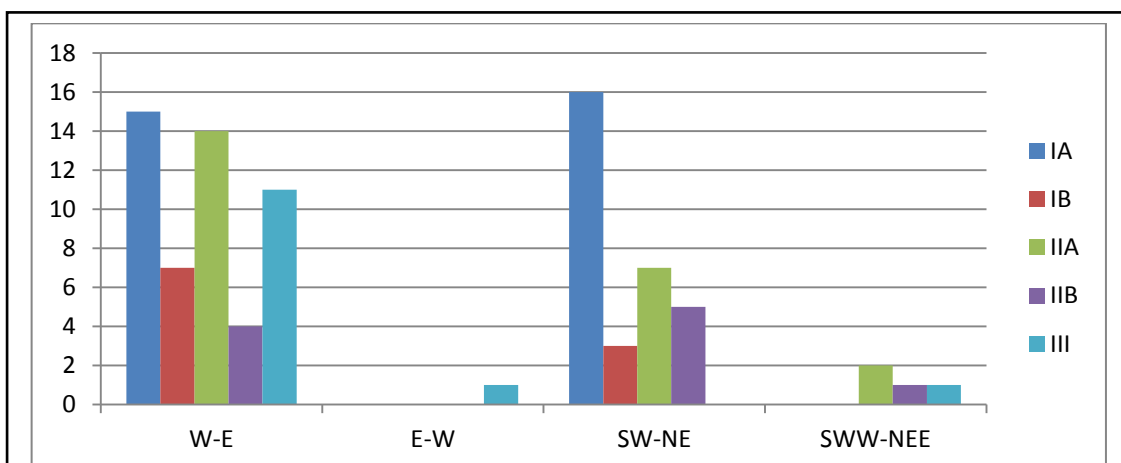


Figure 12: Chronological patterning of orientations in inhumation-graves at Katelai-I cemetery

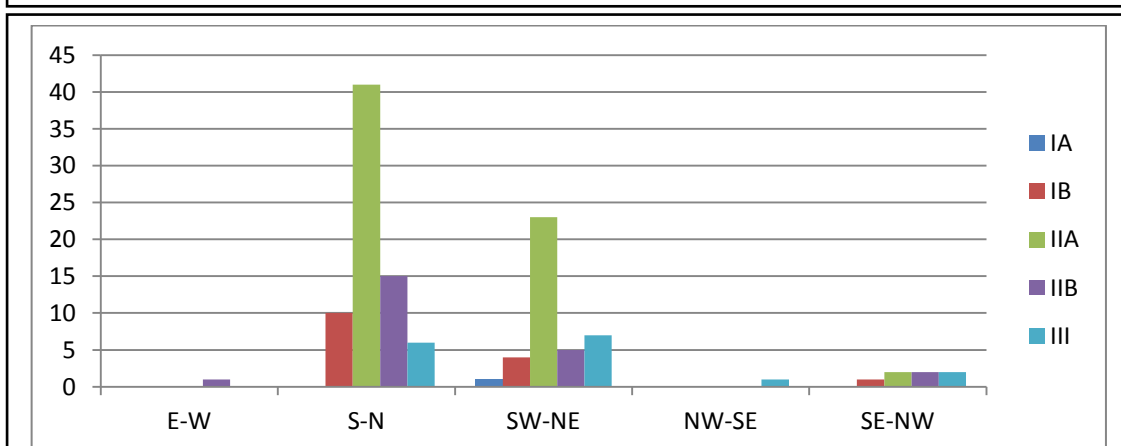


Figure 13: Chronological patterning of orientations in inhumation-graves at Loebanr-I cemetery

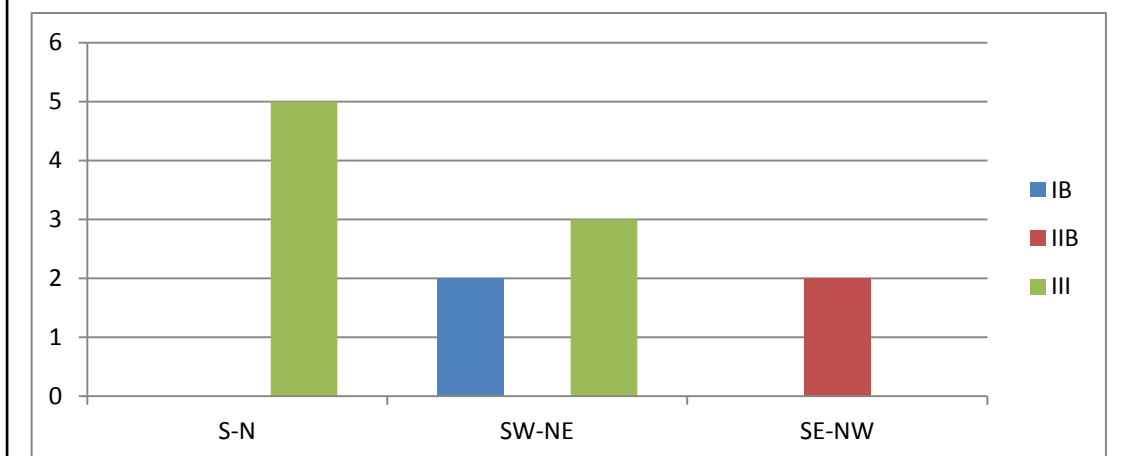


Figure 14: Chronological patterning of orientations in inhumation-graves at Butkara-II cemetery

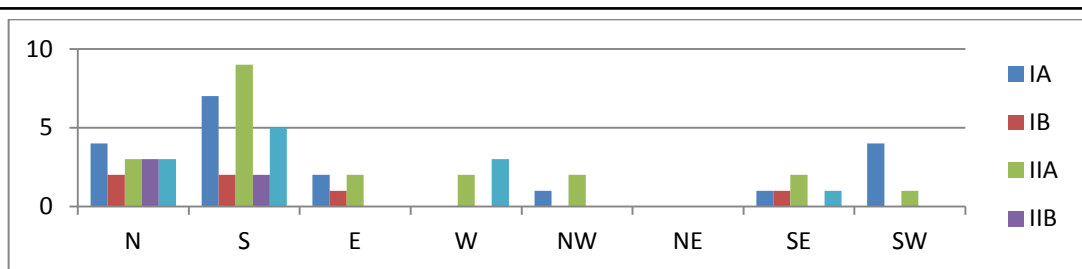


Figure 15: Patterns within the face directions of flexed individuals at Katelai-I cemetery

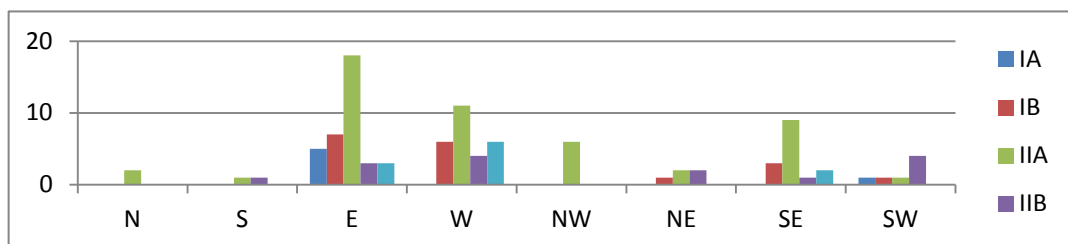


Figure 16: Patterns within the face directions of flexed individuals at Loebanr-I cemetery

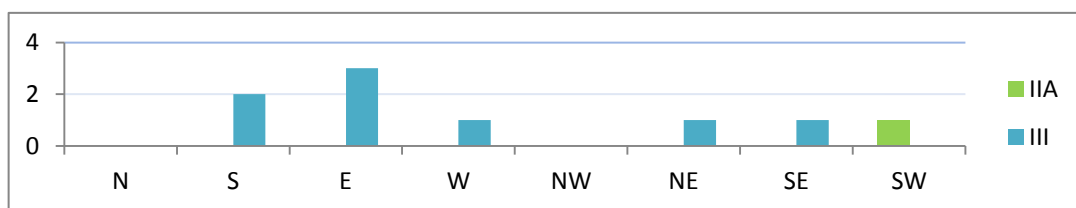


Figure 17: Patterns within the face directions of flexed individuals at Butkara-II cemetery

The majority of the skeletons with open mouths come from period IIA at Loebanr-I, while at Katelai-I, the majority of the skeletons have had their mouths closed in period IIA.

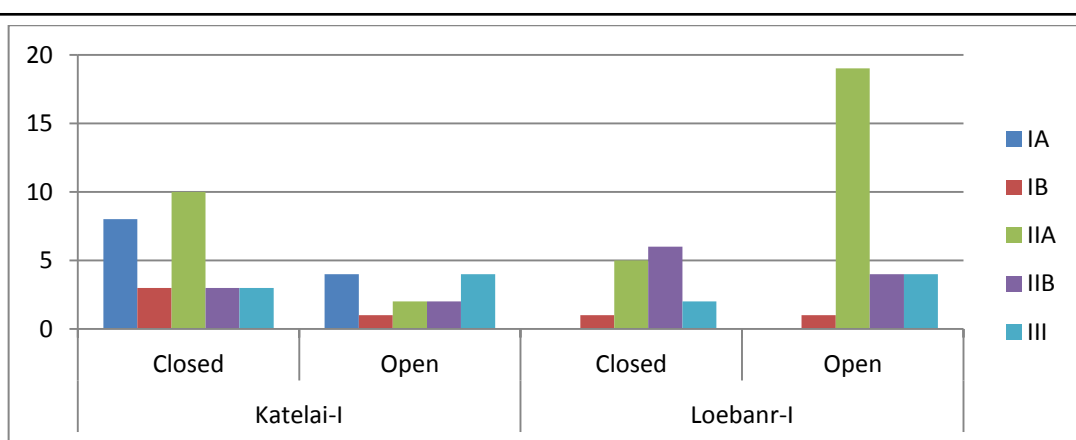


Figure 18: Position of the individuals' mouths at Katelai-I and Loebanr-I cemeteries

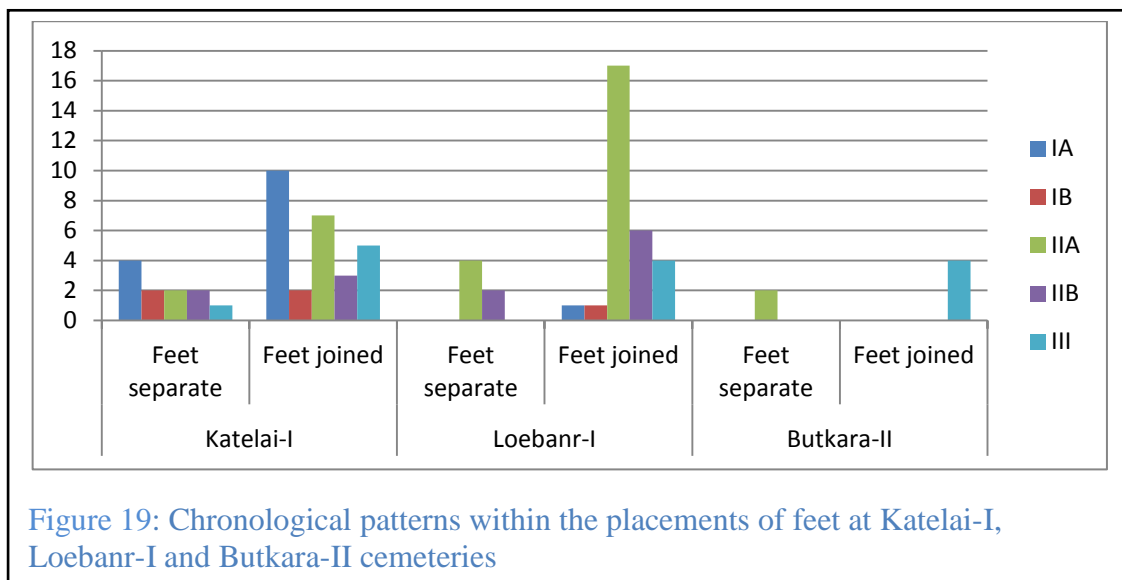
Chronological pattern of flexion within upper and lower legs of skeletons											
		< & = 30°		> 30° & = 60°		> 60° & = 90°		> 90° & = 120 °		> 120 ° & = 150°	
Leg position		Femur	Tibia	Femur	Tibia	Femur	Tibia	Femur	Tibia	Femur	Tibia
Katelai-I	IA Upper		6	3	8	10	4	5	1	2	
	IA Lower	1	6	3	12	9	1	3		4	
	IB Upper		2	4	3		1	1		1	
	IB Lower	1	3	1	2	3	1	1			
	IIA Upper		5	6	5	5	1				
	IIA Lower		6	3	5	6		2			
	IIB Upper		2	1	4	1		4			
	IIB Lower		1	1	5	4		1			
	III Upper			1	6	7	1		1	1	
	III Lower		1	1	3	8	4				
Loebanr-I	IA Upper			1	1						
	IA Lower		1	5		5		3		1	
	IB Upper		3			2		1			
	IB Lower		3					1			
	IIA Upper		13	8	22	16	3	12		2	
	IIA Lower	5	16	9	20	18	2	4		2	
	IIB Upper		6		6	10				2	
	IIB Lower		5	1	7	7		4			
	III Upper		1	1	6	7	1				
	III Lower	2	6	1		4	2	1			
Butkara-II	IA Upper										
	IA Lower										
	IB Upper										
	IB Lower										
	IIA Upper		1	2	1						
	IIA Lower		1	2	1						
	IIB Upper										
	IIB Lower										
	III Upper	2	1	4	6	2	1				
	III Lower	2	2	4	4	1	1				

Table 3: Chronological patterning of the degrees of flexions of the lower and upper legs of the skeletons at Katelai-I, Loebanr-I and Butkara-II cemeteries.

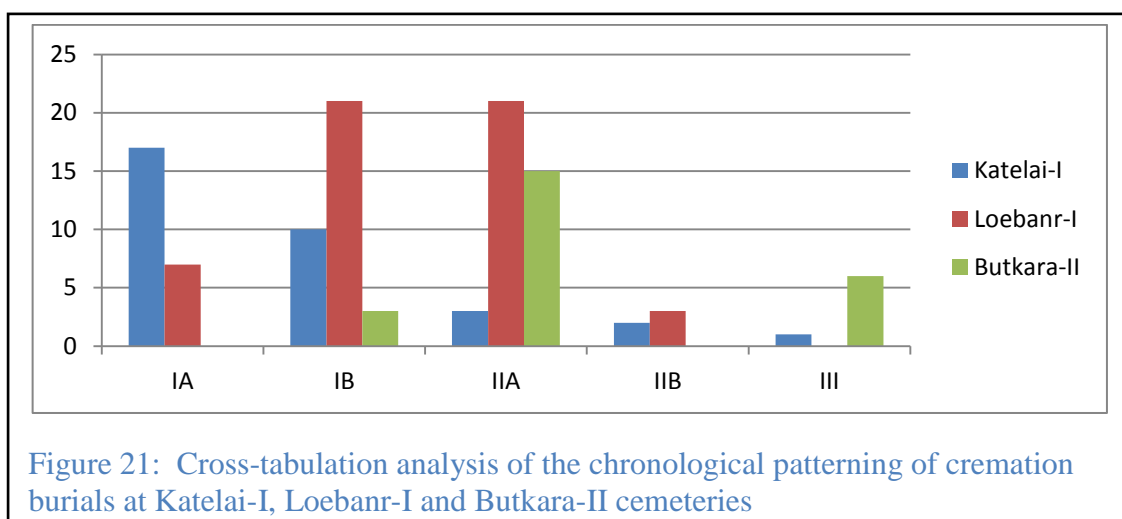
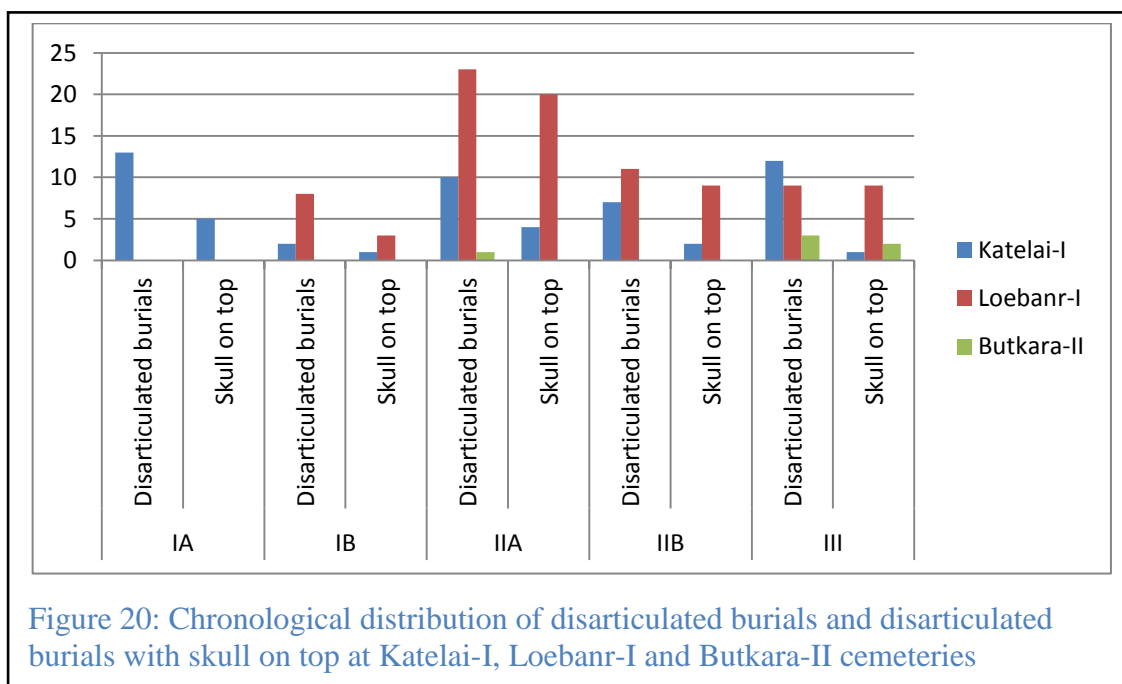
There were considerable variations within the degrees of flexions of the lower and upper legs within the different chronological periods. Thus, the majority of the lower legs with less than 30 and 60 degrees flexion come from period IIA within Katelai-I and Loebanr-I cemeteries.



Most of the feet within period IIA Loebanr-I cemetery were joined together, while at Katelai-I, the majority of the skeletons' feet were joined in period IA.



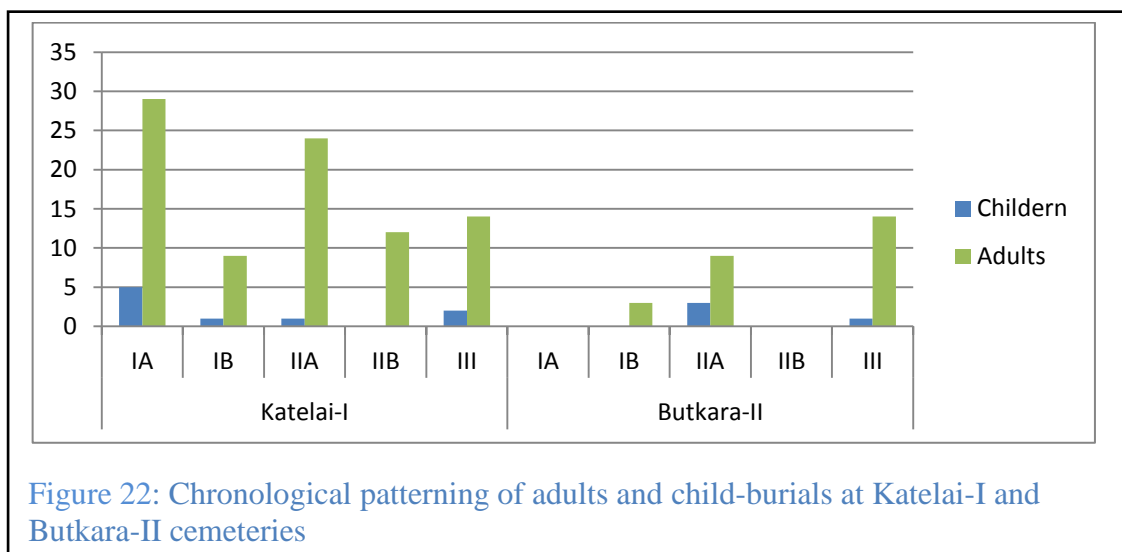
The earliest presence of disarticulated burials comes from the period IA graves at Katelai-I cemetery, half of which were provided with a skull on top. The number of graves with disarticulated burials generally increases with the passage of time, but the practice of placing the skull over the top decreases with time at Katelai-I cemetery. At Loebanr-I, simple disarticulated and skulls on top disarticulated burials were introduced in period IIA, which gradually decreases with the passage of time.



The chronological analysis of the cremation burials suggests to different chronological patterns within the analysed protohistoric cemeteries. Thus, at Loebanr-I cemetery, cremations were mainly recorded from periods IB and IIA burials, while at Katelai-I cemetery, cremation burials were predominantly found in period IA graves.

The chronological analysis of the children and adult burials at Loebanr-I could not be undertaken as only one child-burial could be distinguished through the excavation

report. Most of the child-burials from Katelai-I cemetery comes from period IA and II A, while at Butkara-II cemetery most of the child-burials come from period III.



#### 4. Discussion

Within the IsMEO model, cremation was considered as the dominant burial practice within the first period (i.e. Period V of the Ghalegai sequence) within the protohistoric cemeteries in the Swat valley (Stacul 1975b:330). My analysis of period I graves (corresponding to periods IA and IB within Salvatori (1975) and Vinogradova (2001) models) at Katelai-I, Loebanr-I and Butkara-II cemeteries indicates that cremation was not the dominant burial practice within the earliest dated graves in the Swat valley. Although, the sample is quite small, the number of graves with cremation (58) burials was marginally less than the number of graves with inhumations (59) within these two chronological periods. In fact, the number of period IA graves with inhumations (36) IA at Katelai-I and Loebanr-I cemetery was much higher than cremation (24) graves. This phenomenon was also reported by Salvatori (1975:347). Even graves with flexed inhumations (26) were more than the cremation graves within period IA in these two cemeteries. Thus, the claims of cremation as the dominant burial practice within the

earlier periods of the protohistoric cemeteries could not be verified within my analysis. However, this discrepancy might have been the result of Stacul's tendency of associating more graves with cremations to the earliest periods, which were not included within the Salvatori (1975) and Vinogradova (2001) chronological frameworks. It might be suggested that perhaps Stacul has preconceived ideas of cremation as the earliest form of burial practices within the protohistoric cemeteries.

Within the second period of the protohistoric cemeteries (i.e. period VI of the Ghalegai sequence) within the IsMEO model, the number of graves with inhumations increased compared to the graves with cremation burials (Stacul 1975:330). My analysis of the periods IIA and IIB (corresponding to period VI of Stacul (1975) within the Salvatori (1975) and Vinogradova (2001) models) at Katelai-I, Loebanr-I and Butkara-II cemeteries supports this argument in the sense that the number of graves with inhumations was greater than the graves with cremation burials. In fact, my analysis shows that for every one grave with cremation burial (46), there were more than three graves with inhumations (145) within these protohistoric cemeteries. The ratio of graves with flexed inhumations (96) to cremation burials was almost 2 to 1 within period IIA and IIB. Furthermore, Stacul's (1975:330) statement that the inhumations overtook cremation burials within period VI is a wrong premise to start with as cremation burials were never in dominance in the preceding period V within these protohistoric cemeteries. Thus, I argue that inhumation was the main burial practice within the period VI of the Stacul (1969) Ghalegai sequence

The third period of the protohistoric cemeteries (corresponding to period VII of the Ghalegai sequence) witnessed a marked increase in graves with inhumation burials over

graves with cremation burials (Stacul 1975b:330). My analysis also suggests the dominance of inhumation graves (52) as compared to the graves with cremation burials (7) within the Katelai-I, Loebanr-I and Butkara-II cemeteries. However, the proportion of the inhumation graves with the cremation graves is different within these protohistoric cemeteries, e.g. for 21 graves with inhumations at Katelai-I cemetery, there was a single grave with cremation, while there were 6 cremation graves for 12 inhumation graves at Butkara-II cemetery. There was no cremation burial at Loebanr-I cemetery within period III.

Salvatori (1975:347) noted that in period IA cremation burials were prevalent than inhumations (55 % to 45%) at Katelai-I cemetery; however, my analysis shows that it is not the case and that, in fact, graves with inhumations were in more than 2 to 1 ratio to the cremation burials. Salvatori was correct in identifying cremation burials more predominant than inhumations in periods IA and IB at Loebanr-I cemetery (Salvatori 1975:347). The frequency analysis of the inhumations burials at Katelai-I, Loebanr-I and Butkara-II by me and Salvatori (1975) converged on the fact that during periods IIA, IIB and III, inhumation was the choicest burial practice within these protohistoric cemeteries. Thus, within the different chronological periods, the choices of the most preferred ways of disposing the human remains did not remain constant within the protohistoric cemeteries.

The cross-tabulation analysis of the chronological patterning of the cremation burials with the inhumations and disarticulated burials with flexed burials allows some interesting insights into the patterning of these burial practices. Thus, within period IA at Katelai-I, Loebanr-I cemeteries, cremation burials existed in 3 to 5 ratio with the

inhumations (i.e. 24 to 36 graves). In period IB, cremation burials showed marked increase and were present in 1.5 to 1 ratio with inhumation burials (i.e. 34 to 23 graves); however, period IIA witnessed the reverse of this trend (39 to 102 graves). In periods IIA and III, cremation burials existed in almost 1 to 10 ratio with the inhumations. Thus, we can conclude that there was a marked decrease in cremation burials as compared to inhumations within the protohistoric cemeteries from period IB onward. A reverse of this trend can be noted within the frequency of the disarticulated human remains as compared to the flexed inhumations within the protohistoric cemeteries, as they witnessed a steady increase from period IB to period III. In period III, disarticulated and flexed inhumations (in 27 to 24 graves respectfully) were almost equally represented within the Katelai-I, Loebanr-I and Butkara-II cemeteries.

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