A CHRONOLOGICAL INVESTIGATION OF THE MIDDLE KINGDOM TOMBS AT MEIR

Steven Darlow

B.App.Sc., University of Technology Sydney
M.Comp., M.A., Macquarie University

A thesis submitted for the degree of
Doctor of Philosophy

Department of Ancient History
Faculty of Arts
Macquarie University
2017
Front Cover Image: Tomb C1 (Ukhhotep III), Meir. Top Register, North wall of Statue Recess.
(from author’s photograph, 2011 site visit)
For Aidan and Ciara
DECLARATION

I certify that the work in this thesis titled: “A Chronological Investigation of the Middle Kingdom Tombs at Meir”, has not previously been submitted for a degree, nor has it been submitted as part of requirements for a degree to any other university or institution.

I also certify that the thesis is an original piece of research. Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged. All sources of information and literature utilised in the writing this work have been acknowledged and referenced where appropriate. No ethics approval was required for this dissertation.

Dated this 20th day of December 2017

Steven Darlow

Student ID: 89023315
ABSTRACT

In the early to mid-Twelfth Dynasty, the provincial governors of the region downstream of Asyut developed a strong local culture, maintaining a degree of independence from the royal court that lasted until the reign of Senusret III. Located geographically in the middle of this group of four provinces is the fourteenth Upper Egyptian Nome, with the tombs of its governors situated in the necropolis of Meir. While the Meir tombs, along with the contemporary tombs of the other three provincial centres of Beni Hasan, Bersheh and Asyut have been the subjects of extensive prior study, aspects of the modes of artistic transmission between these provinces (and possible driving influences, including external factors) have not been fully addressed.

This thesis is arranged as a comparative chronological investigation, with the governors’ tombs at Meir as the primary focus, and the tombs of the governors of the neighbouring provinces making up the comparison sites. Contemporary tombs from other provincial sites and the royal courts of Western Thebes and Lisht are also included, for assessment of influences on Meir from these sources, as well as sources from earlier periods in Egyptian history (including Old Kingdom influences from Meir and the Memphite court and First Intermediate period / Eleventh Dynasty influences from various sites).

The chronological framework of the study is established from textual sources in chapter three, primarily relying on fixed dating via regnal references and relative dating via genealogical references. Other attributes of the tomb texts are investigated for their chronological dimension, confirming that changes in the phrases of the hetep-di-nesu formula established in prior studies are observed in the tombs of the study, and that epithets and titles of the tomb owner (with the exception of the title ‘Great Overlord of the N Nome’) are less variable from a chronological perspective.

Chapter four compares the architectural features of the Meir tombs with those of the comparison sites, with the finding that architectural styles are largely driven by local influences, but some common elements are identified which emphasise a longitudinal axis of orientation towards a cult focus (shrine) on the rear wall. Part two of chapter four compares the governors’ tombs at Meir with the burials of their direct subordinates (extended family and officials) by textual comparisons with the coffins from the lesser burials. Three distinct clusters of coffins are identified, with the names of the owners of the later group suggesting probable intermixing of individuals from this social class with their contemporaries from Beni Hasan (possibly via intermarriage and associated migration).

Chapter five compares the artistic styles and techniques observed in the Meir tombs with those of the comparison sites, noting that canonical techniques are universally applied, but are subject to local conventions and varying artistic capabilities. Case studies outline selected stylistic and compositional features of Meir tomb B2, highlighting the significant achievements of that particular artist in advancing the
Meir artistic style from Eleventh and early Twelfth Dynasty royal styles, as well as the development of the artists’ grids through the Twelfth Dynasty as observed in tombs B2 and C1 (taking advantage of the unique existence at Meir of two chronologically separate tombs attesting surviving grids).

The iconography of the desert hunt and the tomb owner fishing and fowling is examined in Chapter six. Influences on the depiction of these themes at Meir are traced from royal and elite examples from the Fifth and Sixth Dynasty Memphite cemeteries, via the Sixth Dynasty tombs at Meir. Alignment of key attributes of these scenes are noted between Meir and all of the comparison sites towards the mid Twelfth Dynasty.

The data from the above analyses are synthesised in chapter seven, which illustrates points at which the paternal line of succession is interrupted at Beni Hasan and Meir, and similarities in how royal legitimacy was invoked at both sites to support the new incumbent. Routes of artistic transmission to and from Meir are presented for the iconographic themes of the desert hunt and the tomb owner fishing and fowling, demonstrating a tendency towards horizontal transmission processes which correlate with the evidence of intermarriage and migration between nomes during the Twelfth Dynasty, particularly noting evidence of this between Beni Hasan and Meir. Changes in technique can also be aligned chronologically with evidence of intermarriage and migration between nomes, particularly the change in technique in Meir tomb C1 from cut relief to purely painted representation (following the long-standing technique of artistic execution at Beni Hasan).
ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to my principal supervisor, Professor Naguib Kanawati for his infinite patience and encouragement over the eight years of my candidature. Without his guidance and ongoing support this thesis would not have been possible.

I would like to thank my associate supervisor Dr Alexandra Woods for her advice in framing my research at the outset and her valuable feedback on my early work on the thesis. Her expertise in the iconography of the tomb owner fishing and fowling was also invaluable in guiding my research in this aspect of the study.

I am indebted to the Department of Ancient History, Faculty of Arts, Macquarie University for giving me the opportunity to join Prof Kanawati, Dr Woods and the team on field work at Meir and Beni Hasan, where I was able to collect data directly from the tombs which form a central part of this work.

I would like to thank my family for all the support over the years I have spent undertaking this task. Without their encouragement I would not have been able to finish it. Special thanks must go to my wife Monica, for carrying out the onerous task of proof-reading the final draft. I also acknowledge the life-long passion of my father in ancient worlds and peoples, and who passed this enduring interest on to me. To him I owe everything for my starting down this path in the first place.
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>Architectural Features of the Governors’ Tombs</td>
<td>113</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Seriation of Architectural Features of the Governors’ Tombs</td>
<td>117</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Seriation of Textual Attributes of the Meir Governors’ Tombs and Coffins from Associated Shaft Tombs.</td>
<td>127</td>
</tr>
<tr>
<td>Table 6.1</td>
<td>Seriation of the Desert Hunt scene (a) constrained (b) unconstrained</td>
<td>220</td>
</tr>
<tr>
<td>Table 6.2</td>
<td>Seriation of the Tomb Owner Fishing and Fowling scene (a) constrained (b) unconstrained</td>
<td>236</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1.1  Sketch Map of the Meir Necropolis (northern part)  18
Figure 4.1  Elevated Porch fronting Statue Recess – Tomb B4 (Ukhhotep II)  140
Figure 4.2  Elevated statue recess – Tomb C1 (Ukhhotep III)  140
Figure 4.3  Probable portico remnant – Tomb C1 (Ukhhotep III)  141
Figure 4.4  Typical Plain Fronted Eleventh Dynasty Tomb Exterior, Beni Hasan  141
Figure 4.5  Portico of tomb BH2 at Beni Hasan (Nomarch Amenemhat)  142
Figure 4.6  Approach to statue recess – tomb BH2 (Nomarch Amenemhat)  142
Figure 4.7  Coffin of Overseer of Sealbearers Ukhhotep (M1NY) MMA 12.182.132a.  143
Figure 4.8  Shaft tomb on terrace above and behind governor’s tomb B1 (Senbi I) at Meir.  143
Figure 5.1  Wing Detail from Pintail Duck – Tomb B1 (Senbi I)  206
Figure 5.2  Procession of Cattle – Tomb B1 (Senbi I)  206
Figure 5.3  Procession of Cattle - Tomb B2 (Ukhhotep I)  207
Figure 5.4  Beja Leading Cattle – Tomb B2 (Ukhhotep I)  207
Figure 5.5  Leading Cattle – Tomb B2 (Ukhhotep I)  208
Figure 5.6  Tomb Owner Seated – Tomb B2 (Ukhhotep I)  208
Figure 5.7a  Tomb Owner seated, with (presumed) wife at feet, Tomb B2 (Ukhhotep I)  209
Figure 5.7b  Detail of (presumed) wife, Tomb B2 (Ukhhotep I)  209
Figure 5.8a  Divergence from Canon – Facial Features: Blind Musician, Tomb B2 (Ukhhotep I)  209
Figure 5.8b  Divergence from Canon – Facial Features: Beja Herdsman, Tomb B2 (Ukhhotep I)  209
Figure 5.9  Transmission of Expression in animal figures – Tomb B2 (Ukhhotep I)  210
Figure 5.10  Divergence from Canon in Posture of minor figure – Tomb B1 (Senbi I)  210
Figure 5.11  Bringing Down a Bull (Detail) – Tomb B2 (Ukhhotep I)  211
Figure 5.12  Duelling Boatmen (Detail) – Tomb B2 (Ukhhotep I)  211
Figure 5.13  Painted Representation of tomb owner’s wife - Tomb C1 (Ukhhotep III)  212
Figure 5.14  Female offering bearer – Tomb C1 (Ukhhotep III)  212
Figure 5.15  Artists Grid for composition of Tomb Owner’s Official (detail) - Tomb B2 (Ukhhotep I)  213
Figure 5.16  Artists Grid behind Sem and Chief Lector Priests – Tomb C1 (Ukhhotep III)  213
Figure 5.17  Full (18-square) artists grid behind offering bearers – Tomb C1 (Ukhhotep III)  214
Figure 5.18  Comparison of Standing Main Figure – Meir Tombs B1, B4 and C1 compared with Tomb B2  215
Figure 5.19  Comparison of Standing Main Figure – Meir Tomb B2 (Nomarch Ukhhotep I) with Beni Hasan Tomb BH17 (Nomarch Khety)  215
Figure 5.20  Comparison of Female Subsidiary Figures from Meir Tombs B2 (Ukhhotep I) and C1 (Ukhhotep III)  216
Figure 7.1  Routes of Transmission of Artistic Themes of the Desert Hunt  266
Figure 7.2  Routes of Transmission of Artistic Themes of the Tomb Owner Fishing and Fowling  268
## TABLE OF CONTENTS

Declaration ii  
Abstract iii  
Acknowledgements v  
List of Tables vi  
List of Figures vii

### CHAPTER ONE

OVERVIEW AND SCOPE 7

I. BACKGROUND AND OBJECTIVES 7  
A) HISTORICAL CONTEXT 7  
B) MAJOR RESEARCH QUESTIONS 11  
C) ORGANISATION OF THE THESIS 14  

II. DESCRIPTION OF THE SITE OF MEIR 17  
A) GEOGRAPHICAL OVERVIEW AND ORGANISATION OF THE SITE 17  
B) PRIOR SITE INVESTIGATIONS AND SCHOLARSHIP 19  
   Notes on the nomenclature of the Middle Kingdom Meir governors 22  

III. CONTEMPORARY AND COMPARATIVE SITES 22  
A) SELECTION OF COMPARATIVE SITES: PRIOR INVESTIGATIONS AND SCHOLARSHIP 22  
B) PRIOR SITE WORK AT ADJACENT NOMES 23  
   Beni Hasan 23  
   Deir el-Bersha 24  
   Asyut 26  
   Deir el-Rifa 29  
C) NECROPOLEIS OF THE ROYAL COURT 29  
   Eleventh Dynasty Court: Western Thebes 29  
   Twelfth Dynasty Court: el-Lisht 31  
D) OTHER UPPER EGYPTIAN SITES 32  
   Qaw el-Kebir 32  
   el-Kab 33  
   el-Moalla 33  
   Qubbet el-Hawa 33  

III. CHAPTER SUMMARY 34

### CHAPTER TWO

THEORY AND METHODOLOGY 35  

I. FRAMING THE ANALYSIS TO THE RESEARCH QUESTIONS 35  
A) CHRONOLOGICAL INVESTIGATION AND THE STUDY OF ARTISTIC TRANSMISSION 35  
B) DEVELOPING A DATING FRAMEWORK FOR THIS INVESTIGATION 37  
   Analysis of Texts 38  
   Review of Physical Evidence. 39  
C) CASE STUDIES OF SPECIFIC ASPECTS OF TOMB DECORATION AT MEIR 41  
   Artistic Style and Innovation by the Meir Artists 41  
   Compositional Control at Meir using Artists’ Gridlines 41
II. DESIGN OF COMPARATIVE ANALYSIS USING SERIATION 41
A) REVIEW OF MIDDLE KINGDOM ELITE TOMB OWNERS 41
B) COMPARISON OF MEIR TOMB ARCHITECTURE WITH OTHER SITES 42
C) TYPOLOGY OF MEIR COFFINS AND CHRONOLOGICAL ALIGNMENT WITH GOVERNORS’ TOMBS 43
D) ICONOGRAPHIC ANALYSIS 43
   Overview of Iconographic Classification in the Meir Tombs 44
   Ritual Scenes 44
   Offering Scenes 44
   Scenes of Daily Life 46
   Pastimes and Entertainment involving the Tomb Owner. 46
   Scenes involving Subsidiary Figures 47

III. TECHNIQUES FOR CHRONOLOGICAL ANALYSIS 49
A) ESTABLISHING ATTRIBUTE DEFINITIONS FOR SERIATION 49
B) OVERVIEW OF SERIATION 51
   Assumptions for validity of the technique 51
   Mathematical algorithm and procedure (unconstrained seriation) 53
   The constrained seriation technique as applied in this study 54

IV. CHAPTER SUMMARY 54

CHAPTER THREE 57

CHRONOLOGICAL FRAMEWORK: ANALYSIS OF TEXTS 57
I. REGNAL CitATIONS AND REGNAL/NOMARCHAL DATES IN TOMB TEXTS 58
A) MEIR 58
B) DEIR EL-BERSHA 59
C) BENI HASAN 60
D) ASYUT 62
E) MOALLA 63
F) QUBBET EL-HAWA 64

II. REGNAL CitATIONS IN OTHER CONTEXTS 64
A) SHATT ER-RIGAL 65
B) DEIR EL-BAHRI, MORTUARY TEMPLE OF NEBHEPETRE MENTUHOTEP II 66
C) WADI HAMMAMAT 68
D) HATNUB 68
E) WADI EL-HUDI 69

III. FIXED DATING FRAMEWORK BASED ON REGNAL CITATIONS 70

IV. FAMILY MEMBERS ATTESTED 71
A) FAMILY OF UKHOTHOTEP / SENBI AT MEIR 71
B) BAQET FAMILY DYNASTY AT BENI HASAN 73
C) KHNUMHOTEP FAMILY DYNASTY AT BENI HASAN 74
D) AHAHAKHT / DJEHUTINAKHT FAMILY AT DEIR EL-BERSHA 75
E) KHETY/ITI-IBI FAMILY AT ASYUT 77

V. TITLES AND EPIPHETES OF THE TOMB OWNER 79
A) FUNCTIONAL AND RANKING TITLES 79
B) EPIPHETES OF THE TOMB OWNER 81
C) TYPOLOGICAL CLASSIFICATION OF NON-ROYAL EPIPHETES 82
   Group 1: Character and Conduct of the Official 83
   Group 2: Interaction with Superiors (gods and the King) 84
   Group 4: Interaction with Subordinates and the Community 87
VI. OFFERING FORMULAS: THE $htp-di-nsw$

The Gods Formula (phrase 2): the Epithets of Anubis and Osiris 90
The Offering/Request (phrase 3): Variations in introduction and forms of the request 94
The Recipient of the Request (phrase 4): the Introduction of the Beneficiary 97

VII. PALaeOGRAPHIC AND ORTHOGRAPHIC INDICATORS

VIII. CHAPTER SUMMARY

CHAPTER FOUR

THE MEIR TOMBS: ARCHITECTURE AND ARCHAEOLOGY

I. THE TOMBS OF THE GOVERNORS

A) GENERAL DESCRIPTION OF THE MEIR TOMBS 104
B) COMPARATIVE ANALYSIS OF ARCHITECTURAL FEATURES 105
    Seriation of the Governors tombs of Meir with those of the comparison sites 117
    Common architectural features of Twelfth Dynasty tombs 119

II. SHAFT TOMBS AND COFFINS OF SUBSIDIARY BURIALS

A) MEIR COFFINS PREDATING THE TWELFTH DYNASTY GOVERNORS TOMBS: THE EARLY CLUSTER 127
    Characterising Attributes for the Early Coffin Cluster 129
B) MEIR COFFINS CONTEMPORARY WITH SENBI I AND UKHHOTEP I: THE MIDDLE CLUSTER 130
    Attributes predominantly attested in the middle cluster 131
    Middle cluster attributes in common with the earlier group 131
    Middle cluster attributes in common with the late group 132
C) MEIR COFFINS CONTEMPORARY WITH THE LATER GOVERNORS: THE LATE CLUSTER 133
    Attributes Predominantly Attested in the Late Cluster 133
D) POSITIONING THE GOVERNORS TOMBS RELATIVE TO THE COFFIN CORPUS 135

III. CHAPTER SUMMARY

CHAPTER FOUR PHOTOGRAPHS AND FIGURES (FIGURES 4.1 TO 4.8) 140

CHAPTER FIVE

THE MEIR TOMBS: ARTISTIC STYLE AND EXECUTION

I. COMPOSITIONAL PRINCIPLES

    Typical Aspect 146
    Representation of the human form 149
    Pattern 150
    Balance 151
    Spatial distribution 154
    Scale 155

II. STYLISTIC FEATURES OF INDIVIDUAL TRAITS IN HUMAN SUBJECTS

    (A) FACE AND HEAD
        Eyes and Eyebrows 156
        Nose, Lips and Ears 157
    (B) TORSO
        Breast, Waist, Small of Back 159
    (C) LIMBS
        Hands, Knees, Lower Legs 161

III. TECHNIQUES OF EXECUTION: RELIEF AND PAINTED REPRESENTATION

    (A) CASE STUDY – MEIR TOMB B2 (UKHHOTEP I)
        Stylistic Features 164
        Achievements of the artist 166
<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divergence from the canon</td>
<td>170</td>
</tr>
<tr>
<td>(B) ARTISTIC STYLES AND TECHNIQUES IN COMPARISON TOMBS</td>
<td>171</td>
</tr>
<tr>
<td>Comparison of tomb B2 to Other Meir Tombs</td>
<td>171</td>
</tr>
<tr>
<td>Comparative Tombs at Other Sites</td>
<td>173</td>
</tr>
<tr>
<td>Beni Hasan</td>
<td>173</td>
</tr>
<tr>
<td>Deir el-Bersha</td>
<td>175</td>
</tr>
<tr>
<td>IV. CONVENTIONS FOR CONTROL OF THE ARTISTIC MEDIUM</td>
<td>177</td>
</tr>
<tr>
<td>(A) REGISTERS AND BASELINES</td>
<td>177</td>
</tr>
<tr>
<td>(B) GRIDLINES AND PROPORTIONALITY</td>
<td>182</td>
</tr>
<tr>
<td>Case Study I – Meir Tomb B2 (Ukhhotep I)</td>
<td>183</td>
</tr>
<tr>
<td>West Wall</td>
<td>183</td>
</tr>
<tr>
<td>North Wall</td>
<td>184</td>
</tr>
<tr>
<td>North Pillar and Statue Recess</td>
<td>185</td>
</tr>
<tr>
<td>South Wall</td>
<td>185</td>
</tr>
<tr>
<td>The Tomb Owner and subsidiary figures standing</td>
<td>185</td>
</tr>
<tr>
<td>The significance of the number 18 in the formation of the grid</td>
<td>187</td>
</tr>
<tr>
<td>Human figures in other positions</td>
<td>190</td>
</tr>
<tr>
<td>Case Study II – Meir Tomb C1 (Ukhhotep III) – Statue Recess North Wall</td>
<td>192</td>
</tr>
<tr>
<td>Divergent aspects of the grid as applied in the tomb C1 statue recess</td>
<td>194</td>
</tr>
<tr>
<td>Analysis of the Meir B2 and C1 Grids with reference to other tombs</td>
<td>197</td>
</tr>
<tr>
<td>Grids in Other (non-human) Representations</td>
<td>200</td>
</tr>
<tr>
<td>Grids Used to Copy Old Kingdom Scenes</td>
<td>201</td>
</tr>
<tr>
<td>IV. CHAPTER SUMMARY</td>
<td>204</td>
</tr>
<tr>
<td>CHAPTER FIVE PHOTOGRAPHS AND FIGURES (FIGURES 5.1 TO 5.20)</td>
<td>206</td>
</tr>
<tr>
<td>CHAPTER SIX:</td>
<td>217</td>
</tr>
<tr>
<td>ICONOGRAPHY OF THE TOMB OWNER IN SCENES OF DAILY LIFE</td>
<td>217</td>
</tr>
<tr>
<td>I. THE DESERT HUNT</td>
<td>218</td>
</tr>
<tr>
<td>A) OVERVIEW OF THE DATA SET</td>
<td>218</td>
</tr>
<tr>
<td>B) RESULTS AND INTERPRETATION OF THE CONSTRAINED SERIATION</td>
<td>219</td>
</tr>
<tr>
<td>Iconographic attributes of chronological significance</td>
<td>221</td>
</tr>
<tr>
<td>C) THE ICONOGRAPHIC TRADITION AND OLD KINGDOM ANTECEDENTS OF THE DESERT HUNT</td>
<td>222</td>
</tr>
<tr>
<td>Alignment of the iconography of Meir tombs B1 and B2 with canonical motifs</td>
<td>222</td>
</tr>
<tr>
<td>D) OTHER ICONOGRAPHIC INFLUENCES IN THE DESERT HUNT</td>
<td>228</td>
</tr>
<tr>
<td>Early Twelfth Dynasty Contemporary Sites</td>
<td>229</td>
</tr>
<tr>
<td>Mid Twelfth Dynasty Contemporary Sites</td>
<td>230</td>
</tr>
<tr>
<td>The Final Example at Meir: The Desert Hunt of Ukhhotep III</td>
<td>231</td>
</tr>
<tr>
<td>II. THE TOMB OWNER FISHING AND FOWLING</td>
<td>233</td>
</tr>
<tr>
<td>A) OVERVIEW OF THE DATA SET</td>
<td>233</td>
</tr>
<tr>
<td>B) RESULTS AND INTERPRETATION OF THE CONSTRAINED SERIATION</td>
<td>235</td>
</tr>
<tr>
<td>Iconographic attributes of chronological significance</td>
<td>237</td>
</tr>
<tr>
<td>C) OBSERVED ELEMENTS OF THE SCENE IN OLD KINGDOM ANTECEDENTS</td>
<td>240</td>
</tr>
<tr>
<td>Fifth Dynasty royal mortuary temples</td>
<td>240</td>
</tr>
<tr>
<td>Conventional forms of the scene in Old Kingdom Memphite tombs.</td>
<td>241</td>
</tr>
<tr>
<td>Influences from the Sixth Dynasty governors tombs at Meir</td>
<td>243</td>
</tr>
<tr>
<td>Iconographic alignment of the Meir tombs with established canonical motifs</td>
<td>243</td>
</tr>
<tr>
<td>D) OTHER ICONOGRAPHIC INFLUENCES</td>
<td>247</td>
</tr>
<tr>
<td>Comparison tombs of the identified 'Early Group' (dated prior to Dynasty Twelve)</td>
<td>247</td>
</tr>
<tr>
<td>Twelfth Dynasty comparison tombs ('Middle Group' - early Twelfth Dynasty)</td>
<td>251</td>
</tr>
<tr>
<td>Twelfth Dynasty comparison tombs ('Late Group' - mid Twelfth Dynasty)</td>
<td>253</td>
</tr>
<tr>
<td>III. CHAPTER SUMMARY</td>
<td>254</td>
</tr>
</tbody>
</table>
CHAPTER SEVEN 257

DATA SYNTHESIS AND CONCLUSIONS 257

I. DATA SYNTHESIS AND DISCUSSION 257
A) INTERRELATED ASPECTS OF CHRONOLOGICAL SIGNIFICANCE 257
   Fixed Dating, Regnal References and Observations on their Occurrence 258
   Genealogical References and Relative Chronological Positioning 259
   Evidence for Intermarriage of Provincial Elites 260
   Evidence in Art and Architecture 263
B) ARTISTIC TRANSMISSION IN UPPER EGYPT BETWEEN MEIR AND NEIGHBOURING SITES 264

II. CONCLUDING REMARKS 275
   a) Old Kingdom influence on artistic styles and motifs 275
   b) Alignment with other Middle Kingdom provincial sites 275
   c) Evidence of innovation in artistic styles and motifs 276
   d) Comparison of Meir with royal court styles and motifs 276

RECOMMENDATIONS FOR FURTHER STUDY 277

BIBLIOGRAPHY 280

APPENDIX A 296

OCCURRENCE MATRICES OF SERIATION DATA 296
CHAPTER ONE

OVERVIEW AND SCOPE

I. Background and Objectives

a) Historical Context

The Middle Kingdom of Ancient Egypt represented a time of renewal of state authority and material culture, following the reunification of the kingdom by Nebhepetre Mentuhotep II of the Theban Eleventh Dynasty after a period of divided rule and intermittent conflict lasting some ninety to one hundred and ten years.\(^1\) The shift of political power from the Old Kingdom capital of Memphis to Herakleopolis marks the beginning of this so-called First Intermediate Period, characterised by diminished political authority and a resultant power vacuum in the Upper Egyptian provinces. It is in this environment that the local culture and political autonomy of the provincial elite thrived, leading to the establishment of powerful and wealthy family dynasties who were to build the tombs that are the subject of this investigation.\(^2\)

The nobility of Thebes arose to pre-eminence in the south during this period of transition of wealth and authority to the provinces, and following reunification, a resurgence of large scale building of tombs and monuments took place in the new capital of Thebes and its western necropolis, as well as at other Upper Egyptian centres.\(^3\) The resultant building program was characterised by a new, distinctive art style and innovations in architecture that influenced the styles seen in the tombs of this study. Following the establishment of the Twelfth Dynasty and relocation of the state capital to Lisht by Amenemhat I, consolidation of central power and influence over the whole country, was pursued by successive monarchs, with the process being essentially complete by the reign of Amenemhat III. The early part of

\(^2\) This topic is dealt with extensively in recent publications. See for example GRAJETSKI (2013), ‘Setting a State Anew’ in Moreno (Ed.), 213-221; GRAJETSKI (2006), Middle Kingdom of Ancient Egypt, 7-16; ARNOLD, D and ARNOLD, Do. (2015), ‘A New Start from the South’ in Oppenheim et al. (Eds.), 38-41; SEIDLMAYER in Shaw (Ed., 2003), op. cit. 108-136.
this period also saw further artistic and architectural innovations, and an even more pervasive building program throughout the country.\footnote{ARNOLD (2015), ‘Building for Eternity Across Egypt’ in Oppenheim et al. (Eds.), 10-16.}

In terms of governmental reform, an outcome of the renewal of political unity by Mentuhotep II was a re-invention of the concept of a royal dynasty, with a central administration organised according to the former provincial model based around a High Steward,\footnote{GRAJETSKI (2013), op. cit. 225-6, 247-250; GRAJETSKI (2009), op. cit. 69-80.} although following reunification the Old Kingdom office of Vizier was re-instituted as the head of the judicial and civil administration.\footnote{GRAJETSKI (2009), op. cit. 15-16.} The Old Kingdom office of Treasurer continued as a senior title of the central administration, and by the reign of Amenemhat I was ranked second to the post of Vizier, and was in charge of the High Steward and his administration.\footnote{GRAJETSKI (2013), op. cit. 239-247; (2009), op. cit. 43-66.}

The situation regarding the provincial governors of Upper Egypt with respect to the organisation of authority through from the First Intermediate period to the early Twelfth Dynasty is less clear however. The traditional provincial ruler (attested from the Sixth Dynasty onward) is referred to by the title of Nomarch and is identified in texts as hr.y-tp rs N.y [nome] (Great Overlord of a named nome). From the end of the Old Kingdom, officials bearing the title of Town Mayor (hs.ty-ε n.y [town]) are increasingly attested with regional governance responsibilities,\footnote{HELCK (1958), Zur Verwaltung des Mittleren und Neuen Reichs, 207-211.} suggesting that following the dissolution of nomarchal authority during the First Intermediate Period, regional authority was located in the larger towns. According to this theory, the surrounding lands and estates were administered as part of the town and the title of a ‘nome’ existed as an anachronism only, and not as an actual administrative entity. This is refuted by Willems, who sees the provincial governors as belonging to a social class termed as the ‘Nomarchy’,\footnote{WILLEMS (2014), Historical and Archaeological Aspects of Eg. Funerary Culture, 58. WILLEMS also critiques Helck’s position in ‘Nomarchs and Local Potentates’ in Moreno (Ed., 2013), 369-381.} regardless of whether they carry the titles in inscriptions of hs.ty-ε or hr.y-tp rs, noting that they carried out a similar ‘nomarchal’ role of provincial administration. The application of the title of Nomarch also varies with time and locality, with evidence that administrative systems differed prior to reunification between the region under Herakleopolitan
rule, where nomarchal titular was retained, and that under Theban control, where
the new regime predominated by town mayors prevailed.\textsuperscript{10} Willems cites evidence
from Ankhtify’s autobiography of the state of flux of the nomarchal system in the
south during the period,\textsuperscript{11} stating that this may have prompted the Eleventh
Dynasty Theban rulers to reorganise regional administration, and that relative
stability of the system in the Herakleopolitan sphere of influence led to the
nomarchal system being retained until being abolished in all regions by Mentuhotep
II post reunification.\textsuperscript{12} As discussed in chapter three of this thesis, inscriptions
evidence shows, however, that by the early Twelfth Dynasty use of the title of
Nomarch was once again attested at Meir and the adjacent sites of Beni Hasan,
Asyut and Deir el-Bersha, although these sites also attest governors bearing the title
of Mayor from the same period. This thesis will therefore align with Willems’
position in using the generic term Governor to describe those tomb owners
identified in texts as provincial rulers, including those who also carry the title of
Great Overlord or Nomarch.

Throughout the Twelfth Dynasty, until well into the reign of Senusret III, the
governors of the Upper Egyptian nomes apparently maintained a degree of
independence from the royal court, as exemplified by their continuing practice of
building substantial decorated rock cut tombs in the provincial cemeteries. The
continuance of local authority in this period is generally considered to be influenced
by a combination of geographic and population factors,\textsuperscript{13} as much as the evolving
political environment of the royal court in the early to mid Twelfth Dynasty. A
relatively small population (estimated at around two million by the end of the Old
Kingdom) implies that the major and minor population centres along the Nile in
Upper Egypt, would have been separated by substantial, unoccupied and
uncultivated tracts of land.\textsuperscript{14} The topography of the Meir region in particular

\textsuperscript{10} GESTERMANN (1987), Kontinuitat und Wandel in Politik und Verwaltung des fruhen Mittleren
Reiches in Agypten, 135-144.
\textsuperscript{11} WILLEMS (2014), op. cit. 35-8, referring to VANDIER (1950), Moalla for the autobiographical
text.
\textsuperscript{12} GESTERMANN (1987), op. cit. 138-9, 142-3.
\textsuperscript{13} WILLEMS (2013), op. cit. 342-350; GILLAM (2010) ‘From Meir to Quseir el-Amarna and back
again’ in Woods et al. (Eds.), 136-141; KESSLER (1981), Historische Topographie der Region
Zwischen Mallawi und Samalut (Weisbaden)
\textsuperscript{14} WILLEMS (2013), op. cit. 343 (quotes Butzer (1976), Early Hydraulic Civilisation in Egypt, 84, for
population estimate).
exerted an influence on the patterns of settlement and land usage in the province, and this in turn is reflected in the selection of iconographic themes displayed in the governors’ tombs (see the discussion in chapter five of this thesis). With agriculture being the primary activity of the provincial centres, it can be assumed that movements of the majority of the population would have been restricted to the adjacent fields by the demands of their work during the growing and harvest seasons, and to the settlements during the annual inundation. Travel between provincial centres (and between the provinces and the Royal court) would therefore be limited to a relatively small number of officials, merchants and artisans. The relative isolation resulting from these environmental factors likely influenced the development of specific provincial artistic styles.

Reconsolidation of central authority is evident in the tombs of the nobles at the new capital of Thebes through innovations in architectural style and artistic conventions, particularly seen in the passage and chamber style of tombs of the officials of Mentuhotep II on the Asasif. Evolution in tomb art and architecture of the court officials continued following the relocation of the royal court to Lisht. Distinct provincial typologies emerged during the Twelfth Dynasty at sites such as El-Bersha, Beni Hasan and Meir, where the architectural form was based on the cliff-side rock-cut tomb.

The cemetery at Meir in Middle Egypt is significant in relation to the study of the establishment of the Middle Kingdom, in that it shows evidence of continual use throughout the latter part of the Old Kingdom, into the First Intermediate Period and throughout the first half of the Middle Kingdom (the continuity is attested for shaft tombs of subsidiary officials, although there is a gap in the building of decorated governor’s tombs lasting from the final Sixth Dynasty construction of

15 WILLEMS (2013), op. cit. 344.
17 WINLOCK (1942), Excavations at Deir el-Bahri.
18 Where the tombs of the officials in the pyramid cemeteries of North and South Lisht reverted to a mastaba superstructure with underground burial chambers, reminiscent of Old Kingdom court types, see ARNOLD (2008), Middle Kingdom Tomb Architecture at Lisht.
20 NEWBERRY, Beni Hasan I-IV; KANAWATI et al., Beni Hassan I & III.
21 BLACKMAN, Meir I-IV; BLACKMAN & APTED, Meir V- VI; KANAWATI et al., Meir I-III.
Pepiankh-henykem to the first Twelfth Dynasty tomb of Senbi I). This continuity of occupation may have been a factor in the preservation of cultural integrity through this period of major political upheaval and the consequent reconsolidation of authority under a reunified state.

b) Major Research Questions

(1) Archaeological reports are often structured to consider specific sites in isolation, and sometimes only single tombs within a given site. A major aim of this thesis is to take an overview of the existing scholarship to investigate points of alignment, firstly between the Meir governors and their peers, and secondly between the Meir governors and their subordinates. The provincial centres of upper Middle Egypt are geographically quite closely situated, and even in ancient times the respective centres would have been easily accessible to each other via the river. It follows that relations between the governing elites would have been expected, and this should be reflected in the archaeological record. Stylistic similarities in both the architecture (examined in chapter four, section one) and tomb art (examined in chapter five) may provide an indication of the strength of the cultural connection between them.

Evidence of intermarriage between the elite families is also a strong indicator of these interrelationships, and this is noted where indicated in tomb biographies (chapter three). Besides intermarriage between the ruling families themselves, similar unions may have taken place between the official class and the extended families of the respective rulers. These individuals represent the direct subordinates of the governor and typically comprise the shaft tomb burials found in close association with the governor’s tombs, as exemplified at Meir by the numerous shaft burials in the terrace immediately behind the governors tombs of group B. The coffins recovered from these burials are sequenced in chapter four part two, to align them chronologically with specific governors of Meir and examine for evidence of family connections to other sites. This thesis attempts to address the question as to whether there is evidence for intermarriage between the ruling family of Meir and their peers in other provincial centres, and whether similar evidence exists for the level of Meir society immediately below the governor.
(2) The artistic decoration of the Middle Kingdom tombs at Meir has been described as exhibiting a ‘remarkable naturalism’ of style, particularly with respect to the first two tombs of the series. The quality of the artwork in tomb B2 (Ukhhotep I) is particularly notable, and represents the culmination of the early Middle Kingdom style as attested at Meir. A case study of selected artistic themes from this tomb may trace the development of the Meir style and help to answer the question as to how this style balances influences deriving from contemporary and earlier tomb art from royal court, local and adjacent provincial sources. Observed Innovations and divergences from the artistic canon can also be used to assess the degree to which the earlier Middle Kingdom Meir tombs were a locus for innovation in artistic transmission to the neighbouring provinces.

The site of Meir is also unique in that two of the Middle Kingdom governor’s tombs, due to the partially complete state of their internal decoration, attest significant surviving artist’s gridlines. These tombs, B2 (Ukhhotep I) and C1 (Ukhhotep III) are sufficiently chronologically separated that a case study of these artist’s grids will address the question as to how compositional control of wall art by grid systems changed through the course of the early to mid Twelfth Dynasty.

(3) Representations of the tomb owner occupy the most important part of the decorative programme in any tomb, and are typically executed in large scale and with the most prominent placement. The essential themes are involved with the mortuary ritual and are generally placed on the rear wall, in the statue recess itself or at the innermost ends of the side walls, and depict the tomb owner at an offering table, inspecting the bringing of offerings for the sustainment of the mortuary cult, or performing religious duties. The other iconographic themes involving the tomb owner, which are commonly depicted in Middle Kingdom tomb decoration involve scenes of daily life, which for the tomb owner depict his leisure pursuits of fishing and fowling in the marshes or

---

22 BLACKMAN, Meir I, 16-17. See also DAVIS (1989), Canonical Tradition, 85-86.
23 Tombs B1 (Senbi I) and B2 (Ukhhotep I).
hunting game in the desert. Like the ritual scenes, these activities are also executed as major compositions and occupy a significant proportion of the available wall space, with the major figure of the tomb owner executed in large scale and with a similar attention to detail. Unlike the ritual scenes, however, their placement is generally observed on the outer part of the decoration (closer to the tomb entrance, which marks the connection of the tomb with the living world), and the iconography reflects a greater degree of variability (in both chronological and geographical terms). Some differences in the motifs employed between individual tombs (or even whether the scene is omitted from the decorative programme) may in part reflect the tomb owner’s preferences in leisure pursuits. What is noted, however, is that the artists draw on a common palette of individual motifs within these compositions that allow alignments to be established between different tombs based on these. Taken together, the relative size and complexity of the fishing and fowling and hunting scenes, along with the noted variability around commonly employed motifs, make them good candidates for typological analysis to track the origins and transmission routes of iconographic innovation.

Utilising the site of Meir as a focus, this study examines the development of these two key iconographic themes of the tomb owner’s activities, particularly with respect to the nomarchal tombs of the neighbouring provinces, and as far as surviving archaeological evidence remains, with tombs of persons of similar rank in the central administration located in the Middle Kingdom royal cemeteries of Western Thebes and el-Lisht. The approach taken is to view developments in tomb iconography from a chronological perspective, so that changes and trends can be tracked over time.

The concept of artistic transmission of common themes in tomb decoration in the provincial elite tombs of Upper Egypt has not been fully addressed in studies to date. This thesis will attempt to close this gap with respect to the above iconographic themes specific to Meir and neighbouring provinces. The role played

in this artistic transmission by the tomb artists of Meir specifically and the other provinces more generally is examined.

Four sub-questions related to the process of artistic transmission are:

i) To what extent are the Middle Kingdom motifs and styles derivative of Old Kingdom antecedents at Meir (is cultural continuity evidenced by examples of Middle Kingdom artists copying Old Kingdom local examples).

ii) To what extent do the motifs in the Middle Kingdom tombs at Meir align in content, style and execution with those at other provincial sites (indicating an active transmission process between provincial centres).

iii) Is there evidence of sites of origin where these alignments are observed (in the context of this study: are the Meir artists or ateliers originators of artistic conventions adopted at other sites, or consumers of imported artistic conventions).

iv) How do the Meir motifs compare with those of the royal court (indicating the degree of court-centric outward transmission in the evidence). Furthermore, is there an observable difference in this outward transmission following the relocation of the Twelfth Dynasty court to Lisht?

The comparative analysis of the aspects of art and architecture (or mortuary items, specifically coffins, in the case of the Meir subordinate class) forms the third major part of this thesis, and is the basis of the contribution to original work for the thesis on this topic.

c) Organisation of the Thesis

This work is organised into three parts, the first defining the scope and methodology of the research, the second establishing a chronological framework for the study, and the third conducting a detailed investigation based on the derived chronological foundation.

The first two chapters form the first part of the thesis, with chapter one setting the historical context for the study’s objectives and the major research questions to be addressed. The remainder of the chapter provides an overview of the site of Meir as well as contemporary and comparative tomb sites from provincial Upper Egypt and
from the Eleventh and Twelfth Dynasty royal necropoleis of Western Thebes and Lisht, with a review of prior investigations and scholarship. Chapter two discusses the research methodology used for the investigation. A review of elite Middle Kingdom tomb owners is presented to define the corpus of available sources examined in the study, and an overview of the analytical technique of seriation is discussed, including a rationale as to how and why the technique is suitable for this study.

The second part of the study is the establishment of a dating framework for the investigation. This is based on an analysis of the texts, and is covered in chapter three. The framework is primarily based on evidence from royal name citations and regnal years (where available), using these to establish fixed dates, and constructs a sequence for other tombs based on relative dating indicators including family relationships attested, titles and epithets, variations of funerary formulas and paleographic indicators.

The major research questions of the thesis are addressed the third part of the thesis, comprising chapters four to six. The aims of chapter four are two-fold, firstly to begin the process of comparison of the Meir governors with their counterparts in the neighbouring nomes by conducting a comparison of the architectural features of their tombs, and secondly, to align the governors with their direct subordinates by comparison of common textual (wish formula) elements from the tombs with equivalent usage on coffins from the subsidiary shaft tombs at Meir.

Chapter five continues the comparative analysis of the Meir governors and their counterparts, concentrating first on the artistic styles attested, and secondly on the application of artists grids as a means of compositional control. The first two sections cover compositional principles and stylistic features of human subjects observed at Meir and the comparison sites, and the third section covers techniques of execution with particular emphasis on the development of relief and painted decoration at Meir. A case study of selected themes from tomb B2 demonstrates the achievements of the artist responsible for this tomb and identifies the reliefs as the culmination of the early relief style at Meir. The fourth section of this chapter takes advantage of the unique situation at Meir where substantial artists gridlines are
present in two chronologically separated tombs (B2 and C1) to present a case study on the application of these grids for compositional control through the early to mid Twelfth Dynasty at Meir.

Chapter six presents the comparative analyses of the two major iconographic themes selected for this study: The Tomb Owner Fishing and Fowling, and The Desert Hunt, using the technique of seriation to identify elements within each theme that align with a chronological dimension as opposed to those where changes in typology reflect other local influences.

Findings from these analyses are pulled together in chapter seven, which summarises the development of the respective themes and draws conclusions on the roles of the Meir artists in transmission of these themes in the Upper Egyptian provincial centres. The thesis is concluded with recommendations for further investigation leading on from the presented findings.
II. Description of the site of Meir

a) Geographical Overview and Organisation of the Site

In addition to a general description of the site, a geographical overview of the surrounding region is given here to support the argument presented in this thesis that geographical factors and subsequent land use patterns influenced the choice of iconographic themes represented in the nomarchal tombs.

The archaeological site of Meir lies approximately ten kilometres west of the Nile River, on the line of ridges forming the western rim of the Nile Valley. Named after the modern village located in the cultivation about five kilometers north-east from the tombs, the site is made up of individual cemeteries that collectively form the western necropolis for Qis (Cusae), the ancient capital of the fourteenth Upper Egyptian nome25 (which is itself overbuilt by modern el-Qusiya, situated on the Ibrahimiya canal about two kilometres west of the present course of the Nile). Qis was noted as a cult centre of Hathor, also celebrated locally during the Old and Middle Kingdoms as ‘Mistress of Cusae’ and ‘Mistress of Heaven’.

The edge of cultivation lies several hundred metres out from the base of the ridges, and this area forms a band of low desert in front of the hillside, where graves of lower ranking individuals were situated.26

---

25 KESSLER, Meir, LÄ IV: 14-19. Kessler includes a sketch map showing the position of the Meir cemeteries in relation to the village of Meir and to el-Qusiya, however no attempt is made to depict the individual ridges locating the tombs in his sketch. This study includes a new sketch map at larger scale to represent the ridges on which the Middle Kingdom tombs of groups A B and C are situated, based on observations from my 2011 site visit.
26 BLACKMAN, Meir I, 5.
The ridges leading to the high desert take the form of a series of limestone outcrops, separated by small wadis (see site map, Fig 1.1). The tombs of the Old and Middle Kingdoms are located in a series of cemeteries occupying these outcrops, which were identified by Blackman as tomb groups A, B, C, D and E. The rock-cut governors’ tombs are positioned about halfway up the respective ridges towards the high desert, with numerous shaft tombs of family members and retainers dug into the low desert below and into rock terraces immediately above them. Groups B and C are exclusively occupied by tombs of the Middle Kingdom governors of Qis, and are consequently the major sites for investigation in this study. Group A is predominantly a site of large tombs of the Old Kingdom governors, although one

27 BLACKMAN, Meir I, 5
tomb chapel (A3) and several shaft tombs are likely dated to the Middle Kingdom and these will be examined in the thesis. Groups D and E are located further south along the ridge line, and are exclusively Old Kingdom tomb sites.

As described above, the Nile valley at Qis widens on the western bank downstream of Asyut to a distance of over ten kilometers, following an ancient fault line, which continues northward with similar geographical features towards Beni Suef at the entrance of the Faiyum. Alluvial deposits from successive annual floods created over time a convex topography on the broad (western) side of the valley. This resulted in low areas towards the western cliffs retaining water in a series of natural basins and channels when the yearly floodwaters receded. While at the adjacent nome 15U.E, it has been postulated that the natural system of basins were managed for agriculture, no evidence exists of similar water management practices during the Middle Kingdom at Meir. The probability remains that these areas of 14U.E. remained a substantial natural or rangeland region (given the large land area of the province, combined with the small population estimates referred to above), and it is argued in this thesis that this pattern of land use influenced the relative importance of various iconographic themes in the Meir nomarchal tombs (see chapter five with respect to the significant representation of livestock, particularly cattle, within the decorative programme).

b) Prior Site Investigations and Scholarship

The governors’ tombs at Meir are the subject of the major work in six volumes by Aylward Blackman, compiling the results of site work conducted from 1911 through to 1923 (first four volumes), with follow up work in conjunction with Michael Apted in 1955-6 (resulting in the final two volumes). The site is under present investigation by Kanawati et al. with the goals of re-publishing the tombs to

---

30 GILLAM (2010), op. cit., 138; WILLEMS in Moreno (Ed. (2013), 347-9, Fig. 1, describing similar landscape patterns at the adjacent downstream province around el-Ashmunein (15U.E.).
31 WILLEMS (2013), ibid.
modern standards and investigating First Intermediate Period tombs not published by Blackman.

Besides the great tombs, Meir is also known for a substantial corpus of funerary artifacts recovered from the site’s subsidiary burials and for group statues from tomb C1 of governor Ukhhotep III. The study of these artifacts has been made difficult by the disorganised nature of their excavation in the early phase of investigation in the late 19th and early 20th Centuries. The initial phases of work at the site amounted to an antiquities-gathering exercise for the Cairo Museum, along with an undetermined amount of unauthorized plundering by local inhabitants. This early work (such as was authorized) was in keeping with the scientific standards of the day, in that excavation records were not kept, and the whole exercise focused on the recovery of high quality antiquities of what was considered museum standard. Not only did this result in significant information relating to tomb sites and object placement contexts being left unrecorded, it also resulted in significant disturbance to the burials and, in the case of unauthorised plundering, the breakage and scattering of unwanted objects in debris fields around the burial sites (adding further to the damage done by thefts in antiquity). To quote early reports from Department of Antiquities officials, “…the peasants have long been digging in these tombs”34 and “the harm done is irreparable, a good half of the necropolis is upset from top to bottom and forever lost to science.”35 No less damaging was the first excavation conducted with the consent of the Department of Antiquities in 1877-78, for which no documentation exists.36

Further excavations commenced in September 1892 on behalf of the Department of Antiquities, and continued at intervals through 1895. Although no site details of the work are documented, objects recovered for the Cairo Museum are listed.37

KANAWATI et al. (2015), The Cemetery of Meir, Vol 3, The Tomb of Niankhpepy the Black; with volumes covering tombs B1 (Senbi), B2 (Wekkhhotep) and C1 (Wekkhhotep) forthcoming.
34 LEGRAIN (1900), Notes sur la Necropole de Meir, ASAE I, 65
35 CHASSINAT (1900), Notes Prises a Meir (Mars-Avril 1899), Rec. Trav. [22], 74
36 BLACKMAN (1914), Meir I, 12. This expedition was carried out by Muhammad Shehin on behalf of the Director of the Department of antiquities. According to oral accounts given to Blackman by the site ghafir, only the best coffins were retained for the museum and the remainder of those recovered were burned, including those that were damaged in the recovery of the cartonnage masks they contained.
37 LEGRAIN (1900) op. cit.: 65-66. The designated officers in charge were Daressy, Barsanti and Mohamed Dohair, who continued work after the departure of Daressy & Barsanti. Items preserved
Following these expeditions, Ahmed Bey Kamal commenced work at the site in April 1910, returning in subsequent seasons through 1914. Kamal concentrated on the shaft tombs in all five cemeteries, however, while listing tomb owners (where known), along with objects recovered from each, exact tomb locations and dispositions of objects within the tomb are not recorded, with the exception of a single shaft and burial chamber which was discovered intact.

Despite this loss of data, the Old and Middle Kingdom tombs at Meir became a rich source of material, which now comprises substantial collections in several major museums. This study includes a typological seriation of the exterior decoration of the sources that were recovered substantially intact (some are documented but no longer extant), and interpolates the governor’s tombs into the seriation based on commonalities of textual attributes (see chapter four, section two).

The major focus of the thesis however remains the five great tombs of the Senbi / Ukhhotep Family Dynasty, who were the governors of 14 U.E. from the early to mid Twelfth Dynasty. These tombs comprise the exclusively Middle Kingdom groups B and C, with the four tombs B1 (Senbi I), B2 (Ukhhotep I), B3 (Senbi II) and B4 (Ukhhotep II) located in a line along the terrace of the B Group ridge, and a fifth tomb C1 (Ukhhotep III) being the sole major tomb on the C Group ridge immediately to the south. The smaller tomb chapel of Ukhhotep son of Iam is located in Group A above the old kingdom tomb of Pepiankh Henykem (A2).

from this work were assigned catalogue numbers 359, 468, 780-4, 790, 810, 853, 913, 913bis, 914, 1315, 1321, 1325, 1328, 1340, 1347, 1359

38 KAMAL (1911), Rapport sur les Fouilles Executees Dans la Zone Comprise Entre Deirout au Nord et Deir-el-Ganadlah, au Sud, ASAE[11]: 7
39 The only fully documented shaft & burial chamber is that of of Nebet-Hut, pit 3 of tomb B3, KAMAL (1911) ASAE 11, 10-15, figs 1-3. KAMAL also provides a diagram of the burial chambers of overseer of sealbearers Ukhhotep (ASAE 12, 109; source of coffin M1NY, see chapter four section two) and the late governor Khalhekerre-seneb (ASAE 14, 75) and official Hapiankhtify (ASAE 14, 82, source of coffin M2NY), although these records are incompletely documented and do not include exact locations of the tombs.
40 For a review of finds and objects from Meir, see VOGT (2017), Meir – Die Nekropole im Mittleren Reich. Eine Archivgrabung, PhD Dissertation, University of Basel.
41 BLACKMAN (1914), Meir I.
42 BLACKMAN (1915a), Meir II.
43 BLACKMAN and APTED (1953), Meir VI, 3-7.
44 BLACKMAN (1915b), Meir III.
45 BLACKMAN and APTED (1953), Meir VI, 8-37.
46 Not attested as a governor. See BLACKMAN and APTED (1953), Meir VI, 1-2.
Notes on the nomenclature of the Middle Kingdom Meir governors

There are three tomb owners attested at Meir with the name of Ukhhotep, and two with the name Senbi. This work adopts the convention where the earliest attested governor Ukhhotep is denoted with the postnominal I, and succeeding governors of the same name are numbered II and III accordingly.

The sequence of tomb owners is thus:

- Tomb B1: Senbi I
- Tomb B2: Ukhhotep I
- Tomb B3: Senbi II
- Tomb B4: Ukhhotep II
- Tomb C1: Ukhhotep III

In contrast to the above naming system, some publications refer to the owner of tomb B2 as Ukhhotep II,\(^{48}\) relying on the fact that a prior Ukhhotep is identified as Senbi I’s father in tomb B1.\(^{49}\) Consequently, the succeeding governors are referred to in these publications as Ukhhotep III (tomb B4) and Ukhhotep IV (tomb C1). It is noted however that the original Ukhhotep’s tomb is unknown, nor is it recorded if he was a governor, so the latter naming scheme is not adopted for this study.

III. Contemporary and Comparative Sites

a) Selection of Comparative Sites: Prior Investigations and Scholarship

Of particular interest in this study are the adjacent nomes to the south, up-river from Qis (13 U.E. with its necropolis at Asyut, 12 U.E. at Qaw el-Kebr and 11 U.E. at Deir el-Rifa) and those down-river to the north (the Hare nome 15 U.E., with the necropolis at Deir el-Bersha and the Oryx nome 16 U.E. at Beni Hasan), although other provinces are also examined as discussed below, along with elite private tombs at the major royal court cemeteries of the Eleventh and early Twelfth Dynasty.

\(^{48}\) See for example WILLEMS (1988), *Chests of Life*, 84-87.
\(^{49}\) BLACKMAN, *Meir I*, pl. 9.
b) Prior Site Work at Adjacent Nomes

**Beni Hasan**

The necropolis of the nomarchs of the sixteenth Upper Egyptian (16 U.E., Oryx) nome is located on the East bank of the Nile approximately 70 km downstream of Meir. The upper terrace nomarchal tombs, were excavated by Newberry in 1893, with publication of the major decorated tombs.\(^{50}\) The lower range shaft tombs, including numerous coffins and assemblages, were published by Garstang in 1907.\(^{51}\) Both these works remain the defining records of the site, although current investigations by Kanawati et al. are re-recording the wall decoration of selected tombs to capture more detail than that recorded in the Newberry publications.\(^{52}\)

In comparison to other sites, the later two governors’ tombs at Beni Hasan are relatively well preserved, and provide solid comparative material for the Meir tombs. As is discussed in chapter four, there three distinct phases of tomb architecture. The first of these consists of tombs BH29, 33, and 27, and is identifiable by the lack of internal columns and plain façade. These early tombs are associated with the Baqet family of nomarchs\(^{53}\) and provide a baseline of artistic styles and content in evidence prior to the construction of the Meir tombs. The second phase tombs BH15, 17, 14, 21 and 23, are outwardly similar to the first group, but are differentiated by the existence of internal columns.\(^{54}\) These tombs may be dated from the end of the Eleventh Dynasty into the early Twelfth Dynasty,\(^{55}\) with tomb BH15 probably being completed around the time of Amenemhat I’s accession or just before. The remainder of this group were most probably completed during the reigns of Amenemhat I and Senusret I, and are therefore placed in the same time period as tombs B1 and B2 at Meir. The two final tombs at the site (BH2 and 3)\(^{56}\) form the third group, immediately identifiable by their twin-columned porticos and four internal columns with longitudinally oriented architraves. The fixed dating

---

\(^{50}\) NEWBERRY (1983), *Beni Hasan I and II.*

\(^{51}\) GARSTANG (1907), *Burial Customs of Ancient Egypt.*


\(^{53}\) NEWBERRY, *Beni Hasan II,* 7 (genealogy), plans pl. 26, 27, 34.

\(^{54}\) NEWBERRY, *Beni Hasan I,* pl. 43, *Beni Hasan II,* pl. 2, 9, 22, 23.

\(^{55}\) Refer to chapter three for the chronological framework.

\(^{56}\) KANAWATI & EVANS, *Beni Hassan III,* pl. 81 (BH2) and *Beni Hassan I,* pl. 105-6 (BH3).
evidenced in these tombs places them as direct comparisons for Meir tombs B4 and C1.

The last two Twelfth Dynasty tombs in particular are constructed on a more imposing scale than those at Meir, and even the more modest first phase tombs are large by the standards of the later Meir tombs, indicating the wealth and prestige available to the Oryx Nome governors in the period prior to reunification and subsequently enhanced through to the end of the era of provincial nomarchal tomb building in the mid Twelfth Dynasty.

**Deir el-Bersha**

Deir el-Bersha was used as a burial site from the Old Kingdom through to Ptolemaic times, although nomarchal tombs are represented only from the late First Intermediate Period and Middle Kingdom, with the first nomarchal tomb established at the site being that of Ahanakh I during the Eleventh Dynasty. Prior to the First Intermediate Period (principally during the Sixth Dynasty), the necropolis of the governors of the fifteenth Upper Egyptian (Hare) nome was located at the site of Sheikh Saïd, four kilometres to the south. The nome capital Ḥmnu.w (Hermopolis, modern el-Ashmunein) lies on the western side of the river in a broad part of the alluvial plain. Besides being the cult centre of Thoth and the Ogdoad, Hermopolis was also a centre for control of access to Nile trade and to the alabaster quarries in the eastern desert at Hatnub.

The Eleventh and Twelfth Dynasty nomarch’s cemetery is located on the upper terrace of the northern escarpment at the mouth of the Wadi Nakhla. It is the most prominent part of a much larger necropolis consisting of lower status Old Kingdom

---


61 Classified as Zone 2 by the current Dayr al-Barsha Project. See map DE MEYER & DILS (2012), *JEA* (98), 56, Fig. 1.
and FIP rock tombs dug into the slope below,62 further Old Kingdom rock tombs on the opposite (southern) escarpment,63 and extensive shaft tombs on the plain at the wadi mouth64 dating predominantly to the early Middle Kingdom. These latter tombs range from shallow surface pit burials to shafts up to six metres deep with southerly oriented burial chambers, originally topped by mud brick mastabas and enclosure walls,65 and show evidence of intensive reuse from the New Kingdom through to the Roman period.66

Of the nomarchal tombs on the upper terrace, the best preserved for the purposes of this study is tomb No. 2 (17L20/1) of Djehutihotep II. Despite earthquake damage including a destroyed portico, much of the wall decoration survives in situ, including texts containing regnal dates, and motifs of fishing and fowling, and a range of marsh, agricultural and other work contexts.67 The iconography of the other tombs at this site is too fragmentary to offer significant information for the thesis, although the relief style in tomb 5 (17K85/1, referred to previously) is briefly discussed in chapter five.

Willems and Brovarski have investigated the dating of the tombs and the relationships of the tomb owners of the el-Bersha tombs and their possible contemporaries from Beni Hasan and come to differing conclusions as to their chronology.68 While the Beni Hasan governors are well documented as to their familial relationships and also for fixed dating from Amenemhat I onward by regnal citation, only the final tomb at el-Bersha (that of Djehutihotep) offers fixed dating (refer to chapter three for a full discussion of these dating criteria in relation to all the tombs in the study with available evidence). Furthermore, due to the poor state of preservation, no specific textual dating evidence can be obtained from the remainder of the el-Bersha tombs. Instead, segments of the Hatnub graffiti69

62 Dayr al-Barsha Project Zone 4. See WILLEMS et al. (2009), MDAIK (65), 395-8, Fig. 7.
63 Dayr al-Barsha Project Zone 7. See WILLEMS et al. (2009), MDAIK (65), 398-400.
64 Dayr al-Barsha Project Zones 8, 9 and 10. Ibid. 401-8, 413-19.
65 DE MEYER, VAN NEER et al. (2006), JARCE (42), 45-71.
67 NEWBERRY, Bersheh I, Pl. 7-13, 15-34.
69 ANTHE (1928), Die Felseninschriften von Hatnub.
quoting the names of the El-Bersha governors have been examined by both authors as primary evidence for construction of a chronology for this nome, as well as using palaeographic, phraseological and archaeological criteria from both Hatnub and the tombs. Brovarski’s view is that the El-Bersha Dynasty can be traced to the Herakleopolitan Period, commencing with Djehutinakht III (who was likely buried at the Old Kingdom governor’s necropolis at Sheikh Said), and who was a probable contemporary of Baqet I at Beni Hasan. According to this theory, his successor Ahanakht I (tomb 5 / 17K85/1) was a contemporary of Baqet II at Beni Hasan and the Theban ruler Intef II or Intef III). 70 Willems, however, places Ahanakht at around the time of reunification under Montuhotep II (or even later, at the beginning of the Twelfth Dynasty), 71 whereas Brovarski states that this position in time is occupied by Neheri I, two generations further on. 72 Both authors are in closer agreement on the dating of the final three governors (Amenemhat, Djehytinakht VI and Djehutihotep), based on fixed dating evidence attested for Amenemhat and Djehutihotep. 73

**Asyut**

The necropolis of the thirteenth Upper Egyptian nome is located on the Gebel Asyut al-Gharbi immediately to the west of the modern city of Asyut. 74 Like Beni Hasan and el-Bersha, the site contains a record of rock cut tombs of the local nomarchs dating from the First Intermediate Period through to the middle of the Twelfth Dynasty.

The mountain is structured into eleven geological levels each comprising a limestone layer between five and fifteen metres in thickness, separated by marle and shale beds up to three metres deep. 75 Tombs of specific periods tended to be constructed on the same level, with the major First Intermediate tombs being located two thirds of the way up the mountain on the terrace of step 6 while the

---

70 BROVARSKI (2010), op. cit., 52.
71 WILLEMS (1983), op. cit., 87, citing palaeographic indicators.
72 BROVARSKI (2010) ibid.
large twelfth Dynasty tombs are found (with one exception) towards the base of the mountain on step 2.

Much of the early work at the site remains unpublished, however, the documentation of the texts from the Twelfth Dynasty tombs of Djefaihapi I and II by Griffith and site documentation by Montet remain as important early work. Current work by the Asyut Project aims to complete a comprehensive survey of the site to address gaps in the existing record. Recent output of this project includes new publications of the wall decorations and inscriptions of the inner passage and transverse hall and the shrine in Tomb 1 (Djefaihapi I, designated P10.1), a detailed description of Tomb 2 (Djefaihapi II, O13.1), publication of a previously unknown major tomb of the governor Iti-ibi-iqer (designated as Tomb N13.1), publication of the extant wall decoration in Tomb 4 (Khety II, N12.2) and Tomb 13 (The Northern Soldiers Tomb, H11.1), with detailed surveys of the other Herakleopolitan Period tombs 3 (Iti-ibi, N12.1) and 5 (Khety I, M11.1) in progress. A second Twelfth Dynasty tomb of similar huge proportions to that of Djefaihapi I is cut into the lower strata of the mountain. Identified as tomb 7 or the ‘Salakhana Tomb’ of Djefaihapi III, it has never been fully documented and is currently inaccessible for research, therefore is excluded from this study.

---

76 Incompletely documented investigations including those by Chassinat & Palanque (1903-04), Hogarth (1906-07) and Schapatrielli (1905-13) are outlined by Marcel ZITMAN in The necropolis of Assiut: a case study of local Egyptian funerary culture from the Old Kingdom to the end of the Middle Kingdom (PhD thesis, Leiden, 2006), 40-57. See also RYAN (1995), “David George Hogarth at Asyut, Egypt, 1906-1907: The History of a ‘Lost’ Excavation”, Bulletin of the History of Archaeology; 5[2], 3-16
77 GRIFFITH (1889), The Inscriptions of Siut and Dér Rîfèh, 9-11, pl. I-XIV and XX-XXI. Texts of the FIP tombs 3, 4 and 5 are also detailed on p11 and pl. XI-XIV.
79 KAHL et al. (Eds, 2012), Seven Seasons at Asyut.
80 EL-KHADRAGY (2007), BACE 18
81 EL-KHADRAGY (2007), GM 212
83 el-KHADRAGY (2007), SAK 36
84 el-KHADRAGY (2008), SAK 37
85 el-KHADRAGY (2006), SAK 35. The owner of the tomb is not known. It was designated as Tomb 13 by MAGEE (1986), II, 36-38, pl. 1.
87 MOSS (1933), JEA 19: 33. A basic plan of Tomb 7 ‘Salakhana Tomb’ is available in PORTER & MOSS IV, p260. See DuQUESNE (2009), The Salakhana Trove for the finds from the tomb (stelae).
88 KAHL (2012), op. cit., p13 notes that the tomb is currently within the perimeter of a military base and is off limits to researchers.
The ancient capital of Ssw.ty (“The Guardian”), lying under eight metres of alluvial strata beneath modern Asyut,\(^9\) was located to take advantage of the local geography of the Nile valley. At this point the Western Desert extends towards the river forming the Gebel Asyut al-Gharbi, while on the Eastern bank the valley is also narrowed by the southernmost point of Gebel Abu Foda.\(^{90}\) This formed a defensible natural barrier for control of passage on the river and access to the Kharga Oasis trade route beginning at the city.\(^{91}\) These geographic factors caused Asyut to be a centre of conflict during the First Intermediate Period, with extensive evidence from the biographical texts of tombs 3,\(^{92}\) 4\(^{93}\) and 5,\(^{94}\) and influenced the common depiction of military themes in the iconography of the Asyut tombs\(^{95}\) (extant in tombs 4,\(^{96}\) 13\(^{97}\) and N13.1\(^{98}\)).

In addition to the military themes, offering scenes are preserved to varying degrees in all the tombs with surviving decoration, as well as cattle, marsh and agricultural scenes in tombs 1 and N13.1. Of primary interest to this study is the composite scene of the tomb owner fishing and fowling in the inner passage of tomb 1, which is included in the seriation study in chapter six, and the desert hunt scene on the south wall of tomb N13.1 discussed in the same chapter (also noted is the remnants of the desert scene in tomb 5).

\(^{89}\) KAHL (2007), *Ancient Asyut. The First Synthesis after 300 Years of Research*, 44, notes that illegal excavations by house owners to this depth have indicated the probable location of the main temple of Wepwawet, although formal excavations are not possible in this built up area.

\(^{90}\) KAHL (1999), *Siut – Theben*, 12. Downstream from Asyut towards Qusiya (Meir), a navigation hazard existed due to unpredictable winds at a sharp bend in the river where it runs under the cliffs of Gebel Abu Foda. This provided a further natural point of defence in ancient times and remained a hazard until the advent of motorized river transport. See WILKINSON (2014), *The Nile, Downriver through Egypt’s Past and Present*, 18.

\(^{91}\) KAHL (2012), op. cit., 3


\(^{95}\) as noted by KAHL (2012), op. cit., 3

\(^{96}\) SPANEL (1988), *Orientalia* [58]3, Fig. 10-15; EL-KHADRAGY (2008), *SAK* 37, Fig. 4, 5.

\(^{97}\) EL-KHADRAGY (2006), *SAK* 35, Fig. 6, 8.

\(^{98}\) EL-KHADRAGY (2007), *SAK* 36, Fig. 3, 4.
Deir el-Rifa

Two nomarchal tombs dating to the Twelfth Dynasty are described at Deir el-Rifa, which is located to the south of the principal necropolis of Asyut and served as the necropolis for the eleventh Upper Egyptian nome. The first of these is Tomb 1 (Khnumnefer), which has been substantially damaged by quarrying, but surviving inscriptions are recorded from the north wall and west wall above a depiction of the seated tomb owner. A false door and large standing figures of the tomb owner and his son are also located on the west wall, with traces of ships and short phrases on the south wall (unfortunately due the absence of recent publications these depictions will not be considered for this thesis). The other, Tomb 7 (Nakhtankh) is one of the largest at the site, featuring a portico with decorative eave supported by two polygonal columns and an inscription on the north side of the entrance hall, but with no further internal decoration. Like the tombs at the neighbouring site of Asyut, they are excavated into the mountain side in a line approximately one third of the way up the escarpment, with tombs from all periods (from the First Dynasty to the later New Kingdom) co-located.

A third significant Middle Kingdom tomb is No. 2 of Khnum-Aa, the forecourt of which also contained the shaft burial of his sons Nakhtankh and Khumnakht (both bearing the title of mayor). This shaft burial and mortuary assemblage was discovered intact, including outer and anthropoid coffins of the two individuals, canopic chests and tomb models. Being undecorated, however, tomb 2 will not be examined further for this thesis.

c) Necropoleis of the Royal Court

Eleventh Dynasty Court: Western Thebes

Prior to the reunification of Egypt under Nebhepetre Montuhotep II, the Eleventh Dynasty rulers of Upper Egypt located their royal necropolis to the west of Thebes.
CHAPTER 1 - Overview and Scope

at el-Tarif including the Saff tombs of Intef I, II and III\(^{103}\) published by Dieter Arnold.\(^{104}\) These tombs date to the final phase of the First Intermediate Period, and their establishment heralded the ascendency of the Theban eleventh Dynasty, coinciding with the decline of Herakleopolitan-aligned nomarchal authority in the southern nomes.\(^{105}\) The characteristic architecture established in the Saff style is carried over to several elite private tombs in the broader Theban necropolis, dating to the period around the re-unification, notably TT386 of overseer of troops Intef\(^{106}\) and TT366 of king’s guard Djari.\(^{107}\) The valley floor location of these tombs below the Asasif predisposed them to the saff style, similar to those at el-Tarif. Construction entailed the excavation of a leveled forecourt into a long low slope, backed by the characteristic full width portico of multiple square rock cut pillars, behind which were cut doorways to the tomb chambers with associated burial shafts. Both tombs contain wall decoration displaying various offering and working scenes, and TT386 also attests fishing and fowling themes to be included in this thesis.

A number of late Eleventh Dynasty tombs are located on the northern side of the Asasif flanking the causeway of the mortuary temple of Nebhepetre Menkhhotep II.\(^{108}\) These are TT311 (belonging to treasurer Khety),\(^{109}\) TT311 (high steward Henenu),\(^{110}\) TT314 (Horhotep),\(^{111}\) TT315 (Ipi),\(^{112}\) TT240 (Meru),\(^{113}\) and TT316 (Neferhotep).\(^{114}\) In addition to these tombs on the Asasif, there is a further tomb, TT280 of the chancellor Meketre\(^{115}\) adjacent to the causeway of the unfinished royal tomb in the valley to the south of Sheikh ‘Abd el-Qurneh (attributed to either

---

\(^{103}\) Intef I: Saff el-Dawba, Intef II: Saff el-Kisasija , Intef III: Saff el-Baqr.

\(^{104}\) ARNOLD (1976), Gräber des Alten und Mittleren Reiches in El-Tarif.


\(^{108}\) For an overview of current site work by the Freie Universität Berlin Mission, see MORALESEt al. (2016), SAK 45, 257-282.

\(^{109}\) WINLOCK (1923) MMAB 18 #12 (Pt 2), 16, fig 6.

\(^{110}\) PORTER & MOSS (1960) Vol 1, Pt. 1, 388-89; MORALESEt al. (2017), SAK 46, 153-190.

\(^{111}\) PORTER & MOSS (1960) Vol 1, Pt. 1, 389.

\(^{112}\) WINLOCK (1922), MMAB 18 #12 (Pt 2), 40, fig 31; MORALESEt al. (2017), SAK 46, 153-190.


\(^{114}\) WINLOCK MMAB 18 #12 (pt 2) (1923): 19-20.

\(^{115}\) WINLOCK (1942), Excavations at Deir el-Bahri (1942): 18, fig 2.
CHAPTER 1 - Overview and Scope

Mentuhotep III Seankhkara, Mentuhotep IV Nebtawyre or Amenemhat I),\(^\text{116}\) and two later tombs on the opposite hill of Sheikh ‘Abd el-Qurneh constructed by the viziers Dagi (TT103)\(^\text{117}\) and Intefiqer (TT60, for the burial of his mother Senet).\(^\text{118}\) The latter contain sufficient remains of the internal decoration for inclusion in this study, but the surviving decorative programmes of the remainder are too fragmentary for meaningful data to be determined. The relief style of fragments recovered from TT311 (Khety), are briefly discussed in Chapter Five, Part II.

Twelfth Dynasty Court: el-Lisht

Following the move of the royal court to 'Ij-t3.wy, initiated by Amenemhat I in the early years of his reign, construction of his pyramid complex was commenced on the high desert to the west of the capital, at what is now referred to as Lisht North.\(^\text{119}\) Subsequently his son Senusret I build his own pyramid complex about 1.5km distant at Lisht South.\(^\text{120}\) These monuments reflected key aspects of their Old Kingdom antecedents in scale and adoption of the pyramidal form as the focus of the complex, and likewise, the elite tombs of the surrounding necropolis were also based on the Old Kingdom mastaba form, although as in the case of the new pyramid complexes, the elite mastabas also incorporated Middle Kingdom design attributes.\(^\text{121}\) Based on the chronology of the respective royal monuments, it is likely that the Lisht North cemetery was occupied from the late reign of Amenemhat I (during the co-regency period) and continued into the sole reign of Senusret I, while the occupancy of Lisht South commenced around the end of the reign of that king (following the completion of the pyramid complex) and continued in use into the reign of Amenemhat II.\(^\text{122}\)

---

\(^{116}\) ARNOLD, Do. (1991), *MMJ* 26, 5-14, maps Fig. 1 & 2. Arnold makes a strong case that the complex is attributable to Amenemhat I.

\(^{117}\) DAVIES (1913) *Five Theban Tombs*.

\(^{118}\) DAVIES (1920) *The Tomb of Antefoker and of his Wife, Senet*.

\(^{119}\) ARNOLD, Do. (1991), *MMJ* 26, 15-16 describes an ink inscription on a stone block dating to year 20 of Amenemhat I as the earliest dateable artifact at the site. For a map of the larger private tombs of Lisht-North in relation to the pyramid complex see ARNOLD (2008), *Middle Kingdom Tomb Architecture at Lisht*, Pl. 114.

\(^{120}\) ARNOLD (1992), *The Pyramid Complex of Senusret I*, 13; see also ARNOLD (2008), *Middle Kingdom Tomb Architecture at Lisht*, Pl. 1 for a map of the major private tombs of Lisht-South in relation to the pyramid complex.

\(^{121}\) As observed by ROBINS (2010), *JSAH* 69(3), 440-1, in her review of ARNOLD (2008), *op. cit*.

\(^{122}\) ARNOLD (2008), *op. cit.*, 13.
Given the poor state of preservation of the tombs at both sites, Arnold has effectively used the available fragmentary evidence to reconstruct their architectural features, however, the loss of material has resulted in only a few vignettes from larger iconographic themes being available for this study. Features of these wall scenes referred to in this work, including fragmentary elements of the fishing and fowling scenes of Mentuhotep\textsuperscript{123} and Rehuerdjesen,\textsuperscript{124} are discussed in chapter six. Other fragments show offering bearers (Rehuerdjesen\textsuperscript{125} and Antefiker\textsuperscript{126}), workshop scenes (Rehuerdjesen\textsuperscript{127} and Nakht\textsuperscript{128}) and the bottom half of the Nakht block contains a cattle herding scene.

d) Other Upper Egyptian Sites

\textit{Qaw el-Kebir}

Qaw is the location of the necropolis of the governors of 10U.E. of which the capital was \textit{Tbw}. Although in use for lower status burials from the pre-dynastic period through to the Middle Kingdom, the site is known for three large elite tombs dating to the first half of the Twelfth Dynasty. These tombs, of the governors Wahka I,\textsuperscript{129} Ibu\textsuperscript{130} and Wahka II\textsuperscript{131} were the largest non-royal funerary monuments constructed in the Middle Kingdom, of a unique architectural style, which was influenced by the valley temple and covered causeway features of the Old Kingdom royal pyramids. With much of the superstructure fronting the rock cut chambers being built of mudbrick, little now remains above the foundations, and the interior decoration of the chapels is also poorly preserved, making these sources of limited usefulness to this study. The fragmentary iconography that survives, consists of female fishers and fowlers and fecundity figures with an offering table in the tomb of Wahka II.\textsuperscript{132}

A fourth governor’s tomb (of Sobekhotep)\textsuperscript{133} is attested at the site, not possessing the

\begin{itemize}
\item\textsuperscript{123} ARNOLD (2008), \textit{op. cit.}, Pl. 80, 81.
\item\textsuperscript{124} ARNOLD (2008), \textit{op. cit.}, Pl. 124a, b.
\item\textsuperscript{125} ARNOLD (2008), \textit{op. cit.} Pl. 120a, b, c, 121a, b, 127b, 128.
\item\textsuperscript{126} ARNOLD (2008), \textit{op. cit.}, Pl. 133a, b.
\item\textsuperscript{127} ARNOLD (2008), \textit{op. cit.}, Pl. 125a, b.
\item\textsuperscript{128} ARNOLD (2008), \textit{op. cit.}, Pl. 144, 145.
\item\textsuperscript{129} PETRIE (1930), \textit{Antaeopolis, The Tombs of Qau}, 1-3, Pl. 3; STECKEWEH (1936), \textit{Die Fürstengräber von Qaw}, 11-22, Pl. 1, 2.
\item\textsuperscript{130} PETRIE (1930), \textit{op. cit.}, 8-9, Pl. 14; STECKEWEH (1936), \textit{op. cit.}, 22-29, Pl. 3, 4.
\item\textsuperscript{131} PETRIE (1930), \textit{op. cit.}, 3-8, Pl. 6, 9; STECKEWEH (1936), \textit{op. cit.}, 30-42, Pl. 5, 6, 19.
\item\textsuperscript{132} PETRIE (1930), \textit{op. cit.}, 14, Pl. 35.
\item\textsuperscript{133} PETRIE (1930), \textit{op. cit.}, 9, Pl. 15.
\end{itemize}
same extensive superstructures as the larger three tombs. As with the three larger tombs, it is excluded from this study as its wall decoration has been insufficiently documented to date.

**el-Kab**

El-Kab is predominantly a New Kingdom site, however, one tomb dating to the Twelfth Dynasty, that of Senwosret, is attested. The tomb is important for this study due to features observed in the recently documented desert hunt, the partial remains of which shows some correspondence with the equivalent scene from Meir tomb B1 (see discussion, chapters six and seven). Also documented in the tomb is a ploughing scene and fragments of an offering motif, which are not discussed further.

**el-Moalla**

The tomb of Ankhtify is the larger and better preserved of two sources at this site dating to the First Intermediate Period. Besides the distinctive iconographic scheme, the tomb is known for the extensive biographical text providing insight into the political and administrative environment of the period. The fishing and fowling scene is included in the analysis conducted in chapter six. The tomb of Sobekhotep is smaller than that of Ankhtify, although of similar layout and artistic styles, including three shafts. A range of hunting, agricultural, workshop and offering scenes are partially preserved, and together with Ankhtify, both tombs represent a local F.I.P. style for inclusion in the study.

**Qubbet el-Hawa**

The Middle Kingdom tombs of Sarenput I (No. 36) and Sarenput II (No. 31) offer varying iconographic themes, with the former presenting scenes of the tomb

---

134 DAVIES and O’CONNELL (2012), *BMSAES* 19, 52, Fig. 2 (desert hunt), 3 (ploughing), 4 (offering). A brief description, without facsimile, was given for these and other scenes by SAYCE and SOMERS CLARKE (1905) *ASAE* 6, 244.
owner spearfishing (discussed in chapter six), as well as a range of workshop scenes depicting subsidiary figures engaged in various professions and activities. By contrast, the iconography of Sarenput II is predominantly focused on offering and ritual scenes with the tomb owner as the central figure.

III. Chapter Summary

The purpose of this chapter is to provide a setting for the historical context for the development of the objectives and major research questions to be addressed in the main body of the work.

An overview is provided for the site of Meir, as well as for the contemporary and comparative tomb sites from provincial Upper Egypt and the Middle Kingdom royal necropoleis of Western Thebes and of Lisht, in the context of prior investigations and scholarship.

Most importantly, the primary research questions and objectives are established, in preparation for the next chapter, which describes the research methodology employed.
CHAPTER TWO

THEORY AND METHODOLOGY

I. Framing the Analysis to the Research Questions

a) Chronological Investigation and the Study of Artistic Transmission

One of the major aims of this thesis is to investigate the pathways of artistic transmission in the iconography of governor’s tombs in provincial Upper Egypt, with specific reference to the roles played by the artists of Meir.

To place it in context, artistic transmission may be seen as a specific aspect of the much broader process of cultural transmission,\(^{139}\) which is itself an established discipline of anthropology.\(^ {140}\) The term describes the process by which information is disseminated and developed through social systems, based on relational systems of interactions within and between groups of individuals.\(^ {141}\) Culture is defined as the collective output of beliefs, value systems and intellectual product that is transmitted through these social systems,\(^ {142}\) of which artistic transmission is one observable manifestation.

In describing the routes of cultural (and therefore artistic) transmission, distinction is made between the definition of society, characterised by stable forms of interaction between individuals or groups,\(^ {143}\) and culture, characterised by collectively shared representations (including artworks which convey these shared ideas and beliefs).\(^ {144}\) In order to exist, culture (which is distributed in nature) must have underlying societal relationships,\(^ {145}\) of which three types may exert influence on artistic transmission. Analysis of the tomb iconography must therefore be structured as far as possible to obtain evidence enabling inferences to be drawn in relation to these three modes of transmission: 1) direct vertical transmission, 2)

\(^{139}\) SCHAEFFER (2013), ‘About Some Forms of Artistic Transmission’, in Escande, Shen & Li (Eds.), Interculturability and Philosophic Discourse, 29-44.
\(^{140}\) EERKENS & LIPO (2007), JArchRes (15) #3, 239-274.
\(^{141}\) KROEBER & PARSONS (1958), AmSocRev (23), 582-3; LIPO et al. (1997), JAnthArch (16), 305-8.
\(^{142}\) KROEBER & PARSONS (1958), op. cit., 583.
\(^{143}\) SCHAEFFER (2013), op. cit., 29.
\(^{144}\) SCHAEFFER (2013), ibid.
\(^{145}\) SCHAEFFER (2013), op. cit., 30.
oblique transmission and 3) horizontal transmission. Direct vertical transmission might be implied by evidence of local origin of artistic traditions with development of themes through successive generations with no observable external influence. Evidence of oblique transmission routes may be seen as development of themes through successive generations of artisans with dissemination of innovations at one site adopted at others in following generations. Horizontal transmission may be implicated when innovation is observed in tomb themes at various sites in the same time period, indicating active interchange between artisans and their peers at other provinces.

Artistic transmission, by whichever of the above routes, cannot be assumed to be a linear process, as it is further affected by the interaction of the dependent dimensions of content and context. Of these, content refers to the form, complexity and structure of the styles and motifs, and as complexity increases a tendency for the introduction of differences (deliberate simplifications or errors) may be observed, leading to local drift where variations on style and themes are evident. Content is in turn mediated by the context of its social and physical setting. It has been noted that artifact styles and themes transmitted within ritual contexts may tend towards conservative rates of change, and evidence is examined in this thesis to support this suggestion. Other contextual factors may include the broadening of adoption of beliefs and practices across social classes, leading to the concept of biased transmissions (in this case prestige-based transmission), where the tomb owner preferentially adopts motifs and symbols formerly restricted to higher social positions (for example, the adoption of coffin texts or royal motifs). A further difficulty in the correct interpretation of artifacts can be due to artistic convergence, where similarities in artistic styles evolve independently due to similar physical conditions or cultural drivers.

From the above discussion, it is apparent that time is a key dimension in the study of the modalities of artistic transmission through the provincial elite cemeteries of

---

146 SCHAEFFER (2013), op. cit., 33.
151 EERKENS & LIPO (2007), op. cit., 243-44.
Upper Egypt. The development of a chronological framework allows the investigation of the course of artistic practices as they are disseminated through the provinces, and facilitates the identification of horizontal transmission processes (where styles and motifs would be expected to appear at various sites quite closely in the archaeological record) from vertical and oblique processes (which would be expected to show a more variable time dimension). Furthermore, in the case of the latter time-dependent processes, a chronological investigation should also assist in differentiating vertical processes (which should show stronger correspondences within tombs of a specific site) from oblique processes, which should show gradual spread of common iconographic attributes to other sites over time.

The analysis is centred around the tombs of Meir, in an attempt to place this site as a locus of replication for transmission of thematic attributes of tomb iconography in provincial Upper Egypt. Questions to be addressed are: whether the artists of Meir were producers (innovators) of iconographic themes that were disseminated to other sites, did they act as a replication point to pass on themes from the royal court to other sites, or were they consumers of innovation from other sites.

The remainder of this chapter is devoted to the development of a dating framework for the study, a review of elite Middle Kingdom tomb owners from Meir and the comparison sites, and defining the analytical technique to apply the typological comparisons to selected subjects from the tombs in the study.

b) Developing a Dating Framework for this Investigation

Typology is a long established technique in archaeological analysis, first being applied in the field of Egyptology by Flinders Petrie. Application of this technique is valid across the broad range of archaeological artifacts, from pottery (as in Petrie’s study), tools and other utilitarian objects to any human work that represents intellectual output of a human culture, and will be employed here to analyse a data in three different domains: (1) architectural features of the governors tombs, (2) features of the external decoration of the Meir coffins (including textual

---

152 BRAINERD (1951), Am. Antiquity (16), 301-4.
153 FLINDERS PETRIE (1899), J.Anthropolopical Inst. (29), 295-301.
attributes for interpolation of the Meir tombs into the coffin seriation), and (3) iconographic attributes of selected wall art.

The starting point of this process is the creation of a chronological framework, which is a two-stage process in this study, first identifying reliable fixed dating points (those which are associated with an external event or person with a known date), and secondly using supporting relative dating evidence to fill in the spaces between fixed dating points, for those tombs where fixed dating evidence is not attested.

**Analysis of Texts**

The advantage of utilising tomb texts for both fixed and relative dating criteria is that most of the tombs with sufficient surviving artwork also have significant surviving texts. Of these, several key tombs contain regnal dates or references to specific kings,154 allowing these to be placed with certainty on a fixed time line.155 When attested in the tomb owner’s biographical texts, the context of the reference generally makes it clear that the mentioned king is a contemporary of the tomb owner, and even when there is reference to an earlier king, the text typically associates the reference with an ancestor of the tomb owner.156 Ten of the tombs discussed in chapter three have regnal citations in the tomb texts, while the owners of a further six tombs can be identified with inscriptions containing kings’ names from other contexts (such as royal mortuary temples or expedition inscriptions). For those without regnal citations, references to kinship (which is more commonly attested than regnal references) allow the relative order of the tombs at a site to be established by reconstructing their genealogies from this information. In only a few occurrences, discussed in chapter three, insufficient surviving relative dating information prevents a reliable placement of a tomb in a sequence with tombs dated by fixed dating evidence.

156 As is the case in the biography of Khnumhotep II (Tomb BH3, Beni Hasan), where Amenemhat I is cited as appointing the tomb owner’s maternal grandfather (line 29, see NEWBERRY, *Beni Hasan I*, 58.
Epigraphic and palaeographic analyses of the texts provide supporting evidence for relational dating, completing the textual analysis and providing an additional level of confidence in the constructed time line. The most significant set of data in this regard are the analyses of the phrases of the hetep-di-nesu offering formulas, which have been demonstrated in prior studies to show variations associated with different time periods. These wish formulas are more commonly attested in the tomb corpus than are the biographical texts (the sources of many of the regnal references and family citations), and being an essential part of the ritual function of the tomb, are more likely to show a close correspondence in form to contemporary tombs. To round out the analysis of the texts, the titles and epithets of the tomb owner are investigated for chronological changes.

**Review of Physical Evidence.**

The physical evidence of the Meir tombs examined in this work includes the architectural features of the governors’ tombs, stylistic features and techniques of execution of their decorative programmes, and inscribed mortuary objects (principally coffins) from shaft tombs of the subsidiary officials and elite families of Meir.

Tomb architecture is analysed to determine elements of commonality for sources of comparable time periods, within and between sites. Features examined include layout/floorplan, number of chambers, chamber geometry, processional axis and orientation, internal columns and architraves (and their orientation), porticos, shafts and their geometry. A seriation is carried out on the data set to visualise the pattern of common architectural elements across sites, and to assess the degree to which architectural styles are influenced by local factors.

The two aspects of the wall decoration studied are the art style and execution (evaluating how the scenes were created), and their iconography (analysing what is

---

158 FRANKE (2003), *JEA* (89), 39-57; BENNETT (1941), *JEA* (27), 77-82.
represented in the scenes). The examination of art styles, including the use of relief or painted representations, begins with the established conventions for control of the medium (including observed canonical restrictions and proportionality). This part of the study focuses specifically on the representation of human subjects, as these figures are the most suitable for comparison between tombs, with both large and small scale figures being universally present, and being executed to the same set of canonical conventions. Observed stylistic features of individual traits are tabulated for comparison between the sites, concentrating on differences in detail of how facial features, torsos and limbs are executed.

Stylistic execution of individual and personal traits tends to overlap with the iconographic content of specific motifs for features including posture, clothing and adornment (wigs, kilts, collars, bracelets and specialised kit such as hunting attire) worn by both the tomb owner and subsidiary figures, and these are therefore examined in the iconographic analysis of the desert hunt and fishing/fowling scenes.

Techniques used to control the compositional workspace include features intended to remain as a permanent part of the artwork (registers and ground lines), and temporary features employed in the drafting stage (such as remnant artists’ grids). These techniques for maintaining conformance with canonical styles are examined for changes in use over time at the site of Meir, with an overview on the systems of registers as observed in all tombs, and a case study in which key measurements from artists’ grids in tombs B2 and C1 are tabulated to highlight differences.

In close proximity to the governors’ tombs are numerous shaft tombs from which substantial mortuary assemblages have been recovered. These subsidiary burials for the most part belong to extended family members and officials of the provincial court, and the most significant artifacts for the purpose of this study are the coffins bearing texts, which allow comparison with features of the tomb texts above. A seriation is performed on the exterior decoration of the coffins from the Meir corpus to arrange them into typological groups. Common features of the texts

---

are used to interpolate the governors’ tombs into the seriation, to establish which groups of officials/family members are most closely associated with particular governors.

c) Case Studies of Specific Aspects of Tomb Decoration at Meir

Artistic Style and Innovation by the Meir Artists
The first two Middle Kingdom tombs at Meir exhibit a high degree of artistic competence in their decoration, and this is particularly evident in the reliefs of the second tomb (B2 of Ukhhotep I). A case study of this tomb provides a detailed discussion of the basis of stylistic features as they conform to the early Twelfth Dynasty style, and identifies the achievements of the artist in taking the art form beyond established conventions in his depiction of movement, mastery of facial expression, and other divergences from the canon. Similarities (and differences) are evaluated at other sites to assess the degree of transmission of these innovations from Meir.

Compositional Control at Meir using Artists’ Gridlines
Two Middle Kingdom tombs at Meir attest significant surviving artists gridlines, offering a unique opportunity to study differences in application of grid systems for compositional control at a single site from the early to mid- Twelfth Dynasty. A case study of the grid systems observed in tombs B2 (Ukhhotep I) and C1 (Ukhhotep III) tabulates grid dimensions in a range of locations within tomb B2, and compares them to the well-preserved grids in the statue recess of tomb C1 (where the most obvious differences are evident), with the objective of analyzing changes in usage at Meir from a chronological perspective.

II. Design of Comparative Analysis using Seriation

a) Review of Middle Kingdom Elite Tomb Owners
Elite tomb owners are identified from Meir and the comparison sites outlined in Chapter One, for inclusion in one or more analyses of this study according to the
availability of surviving evidence. The great majority of these tomb owners held the office of provincial governor or its equivalent, except for the royal court cemeteries of Western Thebes and Lisht, where the tomb owners were high officials of the central administration. For the purposes of this investigation I have adopted the convention of using the term ‘nomarch’ for individuals identified by their inscriptions as ‘h.r.y-tp s (great overlord) of a specific nome, and using the more generic term of ‘governor’ for the majority of individuals who held what Willems describes as ‘nomarchal responsibilities’, identified by the titles of ‘h3.ty-‘, ‘im.y-rs h.m.w-nfr (count and overseer of priests). In terms of duties and authority, the two are essentially similar, with a possible exception based on the observation from Beni Hasan that those persons with ‘h.r.y-tp s in their titles included extensive military themes in their tombs, whereas the decorative programme of tomb BH3 of Khnumhotep II (mayor of Menat-Khufu) focused more on agricultural and workshop scenes. This observation suggests that those identified as nomarch may have an additional scope for military authority, whereas the latter (an equally important individual even though the title of ‘h.r.y-tp s is not attested, given the size of tomb BH3) mainly held civil responsibilities. The tomb owner’s titles are examined in chapter three.

b) Comparison of Meir Tomb Architecture with Other Sites

A comparative analysis tabulates key architectural features of the Meir governors’ tombs with those at Qubbet el-Hawa, Moalla, Western Thebes, Asyut, El-Bersha and Beni Hasan. The tombs are listed chronologically, with one-third pre-dating the Meir tombs. Features assessed include, chamber geometry, presence of columns and architraves, number of rooms, ceiling profiles, shaft geometry, exterior porticos, and axis of orientation. The data set (with the addition of attributes indicating a raised cult focus) is processed into a seriation plot, to identify attributes common to the later tombs at the respective sites, and to visualise the degree to which local influences and traditions prevail upon architectural styles.

163 The surviving wall decoration in many of the tombs is incomplete and in some cases is fragmentary or destroyed.
164 WILLEMS (2013), op. cit., 380-381.
165 WILLEMS (2013), ibid.
c) Typology of Meir coffins and Chronological Alignment with Governors’ Tombs

A substantial corpus of coffins and other items of mortuary assemblage from Meir are available for study in a chronological investigation of the subsidiary tombs. While the majority are known to have been recovered from the general area of the B-group tombs, the exact location of the source shaft tombs was not recorded at the time of excavation. This study attempts to align groups of coffin owners to specific governors within the sequence of Twelfth Dynasty governors at Meir. Thirty-five of the most complete coffins are grouped typologically according to their exterior decoration, using the technique of unconstrained seriation. Because the coffin texts exhibit comparable hetep-di-nesu wish forms to those attested in the governors’ tomb texts, the groupings of coffins are aligned to the closest matching governors’ tombs by interpolation of the tombs into the seriation plot, based on their concordance with the textual attributes. Four inscribed canopic chests are also noted in the recovered assemblage, however, these are not included in the analysis as their respective coffins provide the primary source for the tomb owner.

d) Iconographic Analysis

Tomb iconography is not merely decoration in the contemporary sense, but is executed in both the public (chapel, portico) and private (burial apartment) areas of the tomb to fulfil specific ritual functions. It is commonly understood to exhibit iconographic polyvalence, where different meanings are conveyed by the artwork at different levels. At the most basic level is the representational, or literal view, consisting of the primary or natural subject matter of motifs in which a human activity or natural scene familiar to the tomb owner from daily life is displayed. Behind the representational depiction, however, is commonly accepted to be one or more symbolic meanings, which convey the ritual meaning of the motif in coded form. For the purpose of establishing a chronological sequence of artistic styles,

---

168 PANOFSKY (1972), Studies in Iconology, 14
169 see WOODS (2014), Relief, in Hartwig (Ed.), A Companion to Egyptian Art, 235, for background in relation to these issues in specific themes of Egyptian tomb iconography. In the generic case, PANOFSKY (1972), ibid., describes two levels of underlying meaning – a secondary level in which a conventional interpretation of the subject matter may be imposed by reference to commonly
however, discussion and interpretation of the chosen themes at the symbolic level is beyond the scope of this study, and these are henceforth exclusively interpreted at the representational level.\textsuperscript{170}

As a basis for selection of themes for typological analysis, a classification scheme is presented here for the decorative programs observed in the Meir tombs and those of the comparison sites. The major iconographic themes may be classified into three broad representational areas, covering rituals, offerings and aspects of daily life.

\textit{Overview of Iconographic Classification in the Meir Tombs}

\textit{Ritual Scenes}

Two categories of scenes depicting rituals may be classified in the Meir tombs: those involving funerary rights, which are carried out at interment to ensure a good afterlife of the tomb owner, and those involving cult and temple rights (most notable at Meir depicting Hathoric rituals).

\textit{Offering Scenes}

Offering scenes represent specific rituals that are performed on an ongoing basis post interment, providing magical provisioning for the offering cult. These themes are always major representations in the tomb, with the tomb owner depicted before an offering table (seated) or standing facing one or more registers of offering bearers.

During the Middle Kingdom, offering table scenes were ‘the most central iconographic feature’\textsuperscript{171} in the decorative program of court and provincial elite tombs, and form major compositional elements of the decoration in the Meir tombs and those at the comparison sites. The essential elements of the scene consist of the major figure of the tomb owner seated (or sometimes standing) before an offering

\textsuperscript{170} referred to by PANOFSKY (1972), \textit{ibid.}, as the pre-iconographical description of the subject matter.

\textsuperscript{171} KOHLER & JONES (2009), \textit{Helwan II}, 34.
table upon which reed-shaped loaves of bread are stacked in upright rows, with other food and associated offerings (linen and other commodities) arranged around.\textsuperscript{172} Middle Kingdom representations are preceded by offering table motifs on Slab stelae (Helwan, Dynasties I – III\textsuperscript{173} and Giza, Dynasty IV\textsuperscript{174}), and the central panels of false doors.\textsuperscript{175} By Dynasty V, the scene is found on chapel west wall iconography in the court necropolis at Saqqara, providing examples for future representation of the scene in provincial tombs.\textsuperscript{176}

As a complementary scene to the offering table, the tomb owner (sometimes accompanied by family members or officials) is depicted standing, observing the offerings being brought to his presence. Frequently the same figure is also shown inspecting various scenes of daily life depicted in adjacent registers to the offering bearers.\textsuperscript{177} Like that of the offering table, the tomb owner is represented as a major figure, and this depiction typically forms the subject or focus of a wall scene occupying a compositional height of two or three registers.\textsuperscript{178} For example, in tombs B1 and B2 at Meir, the standing representation of the tomb owner is depicted on the south wall immediately below his seated representation before the offering table, facing two registers of offering bearers.\textsuperscript{179} The bringing of offerings are single register representations of lines of offering bearers as minor figures (and objects of the combined scene), typically stacked two or three registers high, facing towards the major figure of the tomb owner, who is the subject of the scene.\textsuperscript{180} These compositional elements of the combined scene have antecedents in the Old Kingdom.\textsuperscript{181}

\textsuperscript{172} O’NEILL (2015), \textit{Offering Table Imagery}, 19, 41.
\textsuperscript{173} KOHLER & JONES (2009), \textit{op. cit.}, 93.
\textsuperscript{174} DER MANUELIAN (2003), \textit{Slab Stelae of the Giza Necropolis}, 133.
\textsuperscript{175} SNAPE (2011), \textit{Ancient Egyptian Tombs}, 39; DER MANUELIAN (2003), \textit{op. cit.}, 80.
\textsuperscript{176} BROVARSKI (2006), \textit{False Doors and History}, in Barta (Ed.) \textit{Old Kingdom Art and Archaeology}, 71.
\textsuperscript{177} O’NEILL (2015), \textit{op. cit.}, 41.
\textsuperscript{178} HARTWIG (2014), \textit{Style}, in Hartwig (Ed.), \textit{A Companion to Egyptian Art}, 50.
\textsuperscript{179} BLACKMAN (1912), \textit{Meir I}, Pl. 9 and (1915), \textit{Meir II}, Pl. 6.
\textsuperscript{180} HARTWIG (2015), \textit{ibid.}
\textsuperscript{181} ALTENMULLER (2006), \textit{Presenting the ngt-\textit{hr} offerings to the tomb owner}, in Barta (Ed.), \textit{op. cit.}, 25-35.
Offerings represented in the tombs under study typically include various food offerings (vegetables, fish and cuts of meat and poultry), livestock, live fowl, and desert animals.

*Scenes of Daily Life*

Scenes of daily life comprise the broadest group of theme subcategories covering all aspects of every day activities carried out by the tomb owner’s workforce, as well as major scenes of the tomb owner engaged in various pastimes and activities.

In the Meir tombs, two daily life theme categories are commonly represented as major compositions depicting the tomb owner engaged in outdoor pastimes, and these are both covered in detail in the iconographic analysis as described below:

*Pastimes and Entertainment involving the Tomb Owner.*

The scene of the tomb owner fishing and fowling is a major theme in the majority of tombs in the study, with the origins of the theme attested in royal funerary monuments of the Fifth Dynasty at Abusir. Due to the importance of this scene to the decorative programme of the Meir tombs and those at the comparison sites, the role of the Meir artisans in its transmission through the sites of Upper Egypt is analysed by seriation and discussed in detail in chapter five. The scene may be attested in several different variations, however, all involve a large scale figure of the tomb owner holding a fishing harpoon or a fowling throw-stick while standing on a reed skiff and facing a marsh thicket. Orientation of the two images of the tomb owner varies, but common depictions show his two figures facing towards each other on either side of the central papyrus thicket. The composition is normally filled with formulaic motifs which are discussed in the analysis.

The Desert Hunt scene is the other non-ritual major scene involving the tomb owner commonly depicted in the tombs of the study. Like the Fishing and Fowling scene, its thematic antecedents can be traced back to Fifth Dynasty royal monuments. The theme is analysed and discussed in chapter six, particularly with regard to innovations observed in the Meir tombs show some evidence of transmission to other sites. The common element of this scene is the desert tableau, on which a variety of game animals are represented. The typical scene depicts an enclosure
fence containing the game animals, sometimes with the minor figures of
gamekeepers enclosed within. The tomb owner is usually depicted in large scale
outside the enclosure, either actively hunting with a bow or standing and observing
the hunt. The main variable motifs discussed in chapter six consist of details of the
desert tableau and the representation of the game animals.

In addition to the two above major themes included in the iconographic analysis,
the tomb owner is frequently depicted as a major figure watching minor figures
engaged in various activities for his entertainment. These include bull fighting,
watching musicians, dancers, acrobats and games, and watching wrestling (see also
military occupations below).

**Scenes involving Subsidiary Figures**

A wide range of subsidiary scenes, depict minor figures involved in their
occupations. Invariably they are single register scenes and are typically small
motifs involving several figures in small scale compositions. Although not the
subject of the main analysis of this study, some scenes are described in the context
of the case study of artistic styles of tomb B2, and are included here in overview.

**Crafts, Professions and Workshops:** Scenes of artisans and tradesmen at work are
common and varied, these tend to be smaller single register compositions involving
small groups of subsidiary figures down to individual workers. Motifs include
butchers, bakers, carpenters, stonemasons, jewellers, potters, weavers, kitchens,
winemakers and brewers.

**Agricultural Activities:** Along with river and marsh activities, agricultural scenes
depict work contexts that are central to Egyptian life. Themes such as ploughing,
sowing, harvesting, threshing and winnowing of grain,182 and transportation to
granaries are widespread in the tombs under study, and are well attested at Meir,
although they occupy relatively less wall space than livestock themes as discussed
below. Also frequently depicted are other vegetable crops183 and vines.184

---

182 MURRAY (2000), *Cereal Production and Processing*, in Nicholson & Shaw (Eds.), *Ancient
Egyptian Materials and Technology*, 505-536.
577-608.
Livestock and Herdsmen: Cattle and oxen are the most common forms of livestock depicted, and are particularly prominent in the Meir tombs. Other livestock such as goats are often included in the decorative programme, either being managed by herdsmen or depicted by themselves eating leaves from bushes or climbing trees. Livestock scenes are included in the analysis by seriation due to the importance of the theme in the iconography at Meir, and the relative abundance of similar scenes at the comparison sites.

River and Marsh Activities: Due to the centrality of the river to Egyptian life, the activities of river and marsh workers are common themes in tombs at all of the sites in the study. Frequently, they appear as subsidiary motifs to the major theme of the tomb owner fishing and fowling (a recreational activity noted above), however, they are also observed in separate registers not directly connected to the tomb owner’s major scene. Recurring themes include boatmen fighting (or ‘duelling’, which may also be considered under the category of entertainment), transportation of goods via boat, gathering of papyrus and flax, fishing with handline, fishing by handnet, fishing with large seine net (from boat or bank) and fowling with clapnet. The seine net and clapnet scenes invariably depict teams of men required for handling the net, and therefore tend to be amongst the larger and more complex of the subsidiary workers scenes.

Animals: Includes wild animals such as desert animals (oryx, hares, hyena etc), river animals (hippopotami, crocodiles), birds (waterfowl and those found in fields), and domestic animals (cats, dogs, mice, monkeys, baboons, donkeys in natural postures or transporting goods). Mythical animals are represented at some sites, although not attested at Meir (although the depiction of a giraffe in the

---

184 MURRAY et al. (2000), Viticulture and Wine Production, in Nicholson & Shaw (Eds.), op. cit., 609-655.
186 BREWER & FRIEDMAN (1989), Fish and Fishing in Ancient Egypt.
188 ARNOLD, Do (1995), An Egyptian Bestiary, 7-23.
190 HOULIHAN (1986), op. cit.
191 JANNSEN & JANNSEN (1989), Household Animals.
desert tableau of tomb B2 raises questions as to whether such animals were really seen in Upper Egypt in the Middle Kingdom).

**Warfare and Military Occupations:** These themes are present at contemporary sites, although not at the same scale at Meir, where depictions of wrestling may represent training of the governor’s troop of bodyguards. Common scenes include ranks of marching soldiers, scenes of warfare including siege of fortifications, and wrestling as military training as opposed to entertainment as described above). Although more common in Eleventh Dynasty tombs at Beni Hasan and Asyut, reflecting the prominence of military activity around the time of reunification, these themes are also attested in the Mid Twelfth Dynasty tomb No 2 at Beni Hasan. As the site of Meir evidently played no role in the transmission of these themes through provincial tomb decorative programmes, they are not included in the seriation.

**Foreigners:** Depictions of foreigners in the decorative program is highly variable and dependent on the site for context. Asiatics depicted in tomb No 3 at Beni Hasan show a foreign trade delegation, while in Meir tombs B1 and B2 Beja are shown taking a prominent role in herding activities. The motifs are therefore dependent on local political, social or environmental factors, which will be considered in the general discussion but excluded from the analysis by seriation.

**III. Techniques for Chronological Analysis**

**a) Establishing attribute definitions for seriation**

A typology is a classification scheme constructed for the purpose of ranking or ordering the sources into a sequence, typically with a chronological basis. Conceptually, the system is formulated by partitioning a specified group of sources

---

192 SCHULMAN (1982), *JSSEA (12)*, 165-83.
195 SORENSEN (2015), ‘Paradigm Lost – On the State of Typology within Archaeological Theory’, in Krisiansen et al. Eds., *Archaeological Theory – Present, Past and Future*, 90. Sorensen argues that the dimensions of time and change are interrelated, therefore a core concept of typology is determining change over time, more than merely sorting objects.
into a set of mutually exclusive types, based on a defined set of common identifying characteristics\textsuperscript{196} (hereafter referred to as type attributes).

For the purposes of typology, the classifications are based on a consideration of key features (termed essential attributes) of the art or object under study selected from the wider range of all features observed in the sources, so as to systematically narrow the typology to those elements suitable for input to the procedural analysis.\textsuperscript{197} The essential attributes for seriation are those that show clear variations within the corpus.\textsuperscript{198} Taking the example of the seriation of wall scenes, essential attributes are selected by dividing the overall theme into specific motifs, and identifying singular elements of each motif and assigning them to attribute numbers (see Appendix C for occurrence matrices identifying motif attributes by number, and the tombs in which the attribute for that motif is observed). The process of deriving the essential attributes of an architectural or textual seriation is essentially the same, whereby the work as a whole is divided into singular features, which are assigned attribute numbers for recording of those observations against the sources in an occurrence matrix.

The analysis is essentially a mathematical technique applied to the occurrence matrix (described below), the end result of which associates particular essential elements into coherent clusters, so that a group of characteristics can be used to establish a sequence position for a particular source. If the seriation is demonstrated to have a chronological dimension, (by the application of external fixed dating criteria), then the derived position of a source in the series may be termed a sequence date. The elements that tend towards coherent clusters are the primary attributes of the sequence.\textsuperscript{199}

Conversely, there are many characteristics that are present in all (or most) instances of an iconographic theme (or any other group of sources) under study, and hence have no (or limited) value in establishing a typology for a chronological or any other

\textsuperscript{196} ADAMS & ADAMS (1991), \textit{op. cit.}, 91 – 96.
\textsuperscript{197} ADAMS & ADAMS (1991), \textit{op. cit.}, 169.
\textsuperscript{198} CLARKE & CHAPMAN (1978), \textit{Analytical Archaeology}: 70-72, 155, 209-10
\textsuperscript{199} CLARKE & CHAPMAN (1978), \textit{op. cit.}: 212
dimension. These characteristics are termed inessential attributes and are readily evident from the seriation as having broad occurrences along an attribute line.

b) Overview of Seriation

For the investigation of the Meir tombs, the technique of seriation is used as the primary analytic method, as it allows the motifs of each theme to be classified into component attributes for direct comparison against other tombs in the local sequence and at comparison sites. The method also provides for a uniform treatment of the evidence without the introduction of human bias, due to its mathematical basis. The underlying technique was pioneered by WMF Petrie, who first applied it to pottery, slate palettes, flint and copper implements on the observation that they could be ordered into a series of gradual changes in the development of form and style, although he used a manual card-based sorting method which was used prior to the application of mathematical algorithms to the technique.

Willems has previously applied the technique to a subset of the Meir coffins, those with internal decoration he defined as ‘standard class coffins’, along with similar coffins from the comparison sites examined in this study for their nomarchal tombs. The complete corpus of Meir coffins, including those not covered in Willems’ study are also examined in Chapter Four, primarily for their texts for epigraphic comparison purposes with the texts of the nomarchal tombs.

Assumptions for validity of the technique

The key assumption that underlies the ordering of objects (in this case iconographic motifs) is historical continuity, that comparable sources produced around the same time will resemble each other, where those produced at progressively greater time intervals will show increasing differences. There is an inferred chronological dimension in the sequence of objects derived from the sorting process, however, the technique in reality does nothing more than order the objects according to their relative similarity, which may also reflect a functional dimension or social status.

200 CLARKE & CHAPMAN (1978), op. cit.: 70-72
203 O’BRIEN & LYMAN (1999), Seriation, Stratigraphy and Index Fossils
Validation of the chronological dimension of the sequence is achieved by cross referencing dating criteria for objects in the series which can be dated by other criteria, particularly known or fixed dates, with their relative positions in the sequence. As explained above, this is accomplished by the establishment of a chronological framework based primarily on an analysis of the tomb texts, key examples of which provide fixed dating points for each comparison site. A potential source of error in the technique could arise where artistic motifs change over time, but for cultural reasons older motifs are reintroduced into the decorative program (a process observed in the archaisms of the Twenty-sixth Dynasty, outside of the scope of this study). Alignment with alternative fixed dating criteria for the same sources is essential in avoiding these errors.

The Meir tombs and coffins are suited to correlation by this method because the following criteria are fulfilled:

1) The sources belong to the same long-standing cultural tradition of funerary custom, in which both historical and heritable continuity are observed. This extends both prior and post Middle Kingdom, with changes to mortuary practices along this timeline, and also exhibits a strong degree of uniformity (with some local variation) across contemporary sites in Upper Egypt.

2) The artifacts (rock-cut tombs, wooden coffins, textual inscriptions and iconographic motifs) being compared were in common and widespread use at elite cemeteries throughout provincial Upper Egypt as well as at the court cemeteries, hence are abundant in the archaeological record (although less well preserved at the court cemeteries), and reflected changes in mortuary practices. The sources to be compared were constructed over comparable lengths of time covering the entirety of the active period of the Middle Kingdom provincial necropoleis.

3) The sources included in the seriation are considered to be representative examples of the sources found at Meir and the comparison sites. This assumes that the lost and destroyed examples of tomb architecture and iconography would be comparable to the subset of surviving sources included in the study.

---

205 O’BRIEN & LYMAN (1999), *op. cit.*: 80-91
Mathematical algorithm and procedure (unconstrained seriation)

For the correlation, the method of incidence (also known as contextual or occurrence) seriation is employed. This is accomplished by defining a scheme of attributes based on typological indicators as described above. A spreadsheet identifying tombs in the columns (along the x axis) and attributes in the rows (along the y axis) is used to construct a binary occurrence matrix, with the data value in each cell being set to 1 if the attribute is present in the motif under study, and 0 if the attribute is absent or the datum is missing due to an incomplete source. For an unconstrained seriation (used in the coffin seriation and for comparison purposes in the desert hunt and fishing/fowling seriations) the matrix is mathematically ordered along both x and y axes, so that the presences are arranged along the diagonal with embedded absences minimised. A palaeontological statistics software package is used to apply the mathematical ordering and produce the seriation plot according to the following algorithm:

1) The mean position of the presences for each source (row) of the matrix is calculated by averaging all column numbers with a value of 1.
2) The source rows are sorted according to the mean value, so that the attribute with the lowest mean is moved to the top row and that with the highest mean is moved to the bottom row (i.e., the matrix is sorted in the first dimension).
3) The same process is carried out for each tomb column (means are calculated for the rows with presences).
4) The columns are then ordered from lowest to highest mean, thus sorting the matrix in the second dimension, resulting in an ordered series of tombs.
5) The software repeats the algorithm over successive iterations until there is no change of position of the rows and columns from the previous iteration. At this point the data has stabilized with the tombs and their attributes sorted into a statistically optimum and inferred chronological order.

As a check to the validity of the derived seriation plot, a test coefficient is calculated which measures the degree of concentration of presences along the diagonal of the data matrix and the degree to which the diagonal is interrupted by embedded absences. The test value is expressed as a ratio, where 1.0 represents a “P-matrix”

---

(Petrie matrix) with perfect alignment of presences along the diagonal and no embedded absences, and a ratio of 0.0 represents entirely random data with no correlation.

_The constrained seriation technique as applied in this study_

As the chronological order of the governors’ tombs can be fixed by reference to a combination of fixed and relative textual dating indicators, it is appropriate to fix the order of the tombs in the seriation plots accordingly. The chronological framework is established in Chapter Three, and is used as the basis for the fixed positions of the tombs along the top row of the seriation plots (the x axis) in the subsequent analyses of tomb architecture and iconography. This second form of seriation is known as a constrained seriation procedure,\(^\text{208}\) where the iconographic attributes in the plot rows (the y axis) are seriated to their optimal order against the fixed tombs. This is achieved by executing only the first two steps of the algorithm above.

_IV. Chapter Summary_

This chapter discusses theoretical aspects pertaining to the research questions, and provides background information on methods of analysis to be applied to the data to address them. Art is defined as a collectively shared representation of a culture, with three principal modes of transmission between culturally related groups: vertical (direct), oblique, and horizontal. The characteristics of these modes are discussed, along with the related concepts of local drift, artistic convergence, and biased transmission (such as seen with prestige bias). The importance of establishing a chronological framework in the study of routes of transmission is stated.

The rationale for basing the chronological framework on an analysis of texts is presented, for both the setting of fixed dating points within the framework and for filling in the framework by relative dating information obtained from the tomb texts.

\(^{208}\) BROWER & KYLE (1988), _op. cit._, 80.
Case studies are proposed for the detailed examination of early Twelfth Dynasty artistic style and innovation at Meir, and the use of artist’s grids through the early to mid Twelfth Dynasty by the Meir tomb artists.

An overview of the technique of seriation is presented, as used in the study for:
1) the architectural comparison of the governors’ tombs at Meir with those of other sites;
2) a chronological alignment of the governors’ tombs at Meir with the subsidiary coffin corpus at that site; and
3) the iconographic analysis of motifs involving the tomb owner in scenes of daily life (fishing and fowling in the marshes and the desert hunt).
Hieroglyphic texts form an integral part of the decorative program of the elite Middle Kingdom tombs at all sites covered by the study. Broadly, the texts can be divided into three categories, these being biographical texts, ritual formulas and descriptive captions integrated into individual vignettes of wall scenes.

As a medium of communication, texts are capable of conveying information that is more specific about the tomb owner and other thematic subjects than is possible with the visual medium of wall art alone. This information will typically include the names of the tomb owner and selected members of his family, along with his titles and appointments. In a significant minority of cases, information relating to specific dates are included. For this reason, tomb inscriptions establish the foundation of a chronological investigation of a related group of tombs, and are used in this study as the principal dating methodology. Fixed dating is possible when reference is attested to an external entity of known date (most commonly regnal references) and sequences of succession can in most cases be reliably established based on family members attested in the texts (particularly fathers, grandfathers and sons).

The formulaic texts, particularly the $htp-di$-nsw, due to their standardised nature, are valuable for establishing a relative chronology for the tombs in the study given that fixed dating criteria such as regnal dates are not common. Likewise, palaeographic and orthographic conventions as discussed below change over time, and are therefore useful in a relative dating scheme. Such relative data provides additional

---

210 Primarily the $htp-di$-nsw offering formula: FRANKE, JEA (89): 39-57; LAPP, Opferformel.
211 Use of captions was widespread in Old Kingdom elite tombs, see STRUDWICK (2005), Texts from the Pyramid Age, 401-22. Similar conventions continued in Middle Kingdom tomb art.
212 The dating of a king’s reign would be more correctly described as ‘generally accepted’ rather than ‘known’. See SCHNEIDER (in Ancient Egyptian Chronology, Ed. Hornung et al.:170-5) for an overview of the issues in regnal dating and chronology of the 12th Dynasty.
supporting evidence for the ordering of a sequence of tombs based on references to family members.

These dating criteria are discussed in detail below, with reference to prior scholarship in the respective areas, and applied to the texts in the corpus of tombs in the study. The derived fixed and relative dating criteria are taken together to form a suggested chronology for the tombs across all comparative sites. This chronology will be used as the foundation of the analyses of iconographic themes in Part III.

I. Regnal Citations and Regnal/Nomarchal Dates in Tomb Texts

Some of the tombs in the study contain biographical texts, although these are restricted to particular sites and nomarchal dynasties. Besides providing a known dating point within a series of tombs at the same site, regnal citations also enable firm dating correspondence to be established between tombs at Meir and the comparison sites, thus validating the comparison of relative dating features discussed below and the comparative analysis of iconographic features of the wall decoration in Part III of the thesis.

a) Meir

The only tomb at the site of Meir that contains a regnal citation is tomb B4 of Ukhhotep II. This is a reference to the reigning king attesting his titulary on the architrave over the entrance to the statue recess in the outer room. The inscription is located under a winged sun disk and was first dated by Chassinat to Amenemhat II.213 It was subsequently published by Blackman, who used it as a key data point in his chronology of Ukhhotep’s family.214 The text is located on the second and third registers of the architrave as follows:

Second Register:
[LHS] from centre: "nh nfr nfr nb ir.t ih.t nsw bi.ty Nbw-k3.w-R.w mr.y Hw.t-Hr
[RHS] from centre: "nh nfr nfr nb ts.wy nsw bi.ty Nbw-k3.w-R.w mr.y Hw.t-Hr

213 CHASSINAT (1900) Rec. Trav. 22: 73-77. See specifically Tomb No. 4 on p75.
214 BLACKMAN, Meir III: 26, pl.19 for layout of the architrave. For Blackman’s genealogy see Meir I: 11-13.
“(Long) Live the good god, [LHS = lord of ceremonies | RHS = lord of the two lands], king of U. & L.E. Nubkaure, beloved of Hathor.”

Third Register:
[LHS incomplete] from centre: ʾnh nṯr nfr ṭm[=s ʿs Rʾ.w] ḫmn-m-ḥs.t dl ʾnh ḏḏ mi Rʾ.w
[RHS] from centre: ʾnh nṯr nfr nb ṭwšt ss Rʾ.w ḫmn-m-ḥs.t dl ʾnh ḏḏ [mi Rʾ.w]
“(Long) Live the good god [LHS = the strong one | RHS = lord of gifts] son of Re Amenemhat, given life and stability like Re.

Although no regnal dates are attested in the inscription, it confirms that Ukhhotep II cannot be dated prior to the third reign of the Twelfth Dynasty, and served under Amenemhat II, with the probability of interment during this reign.

b) Deir el-Bersha
At the site of Deir el-Bersha, Tomb Be2 of the nomarch Djehutihotep contains texts on the jambs of the chapel entrance recording that he was a child under Amenemhat II and smr wʿty under Senusret II. Originally recorded by Newberry in 1893, the texts read as follows:215

Inner Right Jamb (excerpt): ḫṛd nsw.t hr Nbw-Kš.w-Rʾ
“Child of the King under Nubkaure”.

Outer Right Jamb (excerpt): smr wʿty hr ḫʾi-hpr-Rʾ
“Sole Companion under Khaihepererre”

As at Meir, the inscriptions quote the throne names without references to regnal years. Timeframes are indicated, however, with Djehutihotep clearly recorded as a child under Amenemhat II (Nubkaure, the same king under whom Ukhhotep II officiated at Meir), thus confirming Djehutihotep as being a part or full generation younger than Ukhhotep II. The other reference provides a lower level ranking title216 (Sole Companion) held by Djehutihotep in adulthood under the following king, Senusret II (Khaihepererre). Given that his major title of Great Overlord of the Hare Nome is attested elsewhere in the tomb217 but is not associated with a regnal

215 NEWBERRY, Bersheh I, pl. 5
217 see for example right jamb of doorway to statue recess (Bersheh I, Pl. 16) and its ceiling (Pl. 6c).
reference, Brovarski has postulated the possibility that he may have outlived Senusret II to serve as nomarch and great overlord under the following reign of Senusret III.218 This view cannot be verified by the textual evidence however, as the name of this latter king is not mentioned at all in the tomb.

c) Beni Hasan

Biographical texts are absent from the series of tombs from the Baqet Family Dynasty219 at Beni Hasan, however lengthy biographies are characteristic of the tombs of the successors to this dynasty at that site.220 Each of these biographies attest the names of the reigning king in the context of the tomb owner’s relationship to him, with two of the three also citing regnal dates. The incorporation of biographies in these later tombs may be part of broader changes to the decorative program at Beni Hasan, however, this is not reflected at other sites, where biographical texts remain absent from contemporaneous tombs.221

The key importance of attested regnal dates and titulary is that these citations provide a definitive *terminus post quem* according to the standard chronology of the independently referenced king list. The Beni Hasan tombs provide the following attestations and consequent fixed dating:

Tomb BH2 of Amenemhat – The biographical inscription is found on five horizontal and eight vertical lines of text on the southern jamb to the entrance doorway, and continues in a further eight vertical lines on the opposite northern jamb.222 The first horizontal line on the southern jamb carries the regnal year (43) in which the inscription was made, followed by the prenomen and nomen of the reigning monarch Senusret I (Kheperkare) continuing to the second line. The third line gives the corresponding nomarchal year indicating Amenemhat’s time in office as Great

---

218 BROVARSKI (2010) The Hare and Oryx Nomes: p51. Brovarski inadvertently transposes the order of Amenemhat II and Senusret II in his discussion of this inscription.
219 Tombs BH29 (Baqet I), BH33 (Baqet II), BH27 (Remushenti), BH15 (Baqet III) and BH17 (Khety). See NEWBERRY, Beni Hasan II, 26-62.
220 Tombs BH14 of Khnumhotep I, BH2 of Amenemhat and BH3 of Khnumhotep II. See NEWBERRY, Beni Hasan I, 9-86; KANAWATI, EVANS et al. (2014) Beni Hassan Vol. I.
221 Significantly for this study, biographical texts are not attested in any of the Middle Kingdom tombs at Meir: B1 (Senbi I), B2 (Ukhhotep I), B4 (Ukhhotep II) or C1 (Ukhhotep III). Biographies were not a Middle Kingdom innovation, coming into use in elite tombs of the Fifth and Sixth Dynasties. ALLEN (2000, p298) also notes that the majority of extant Middle Kingdom biographical inscriptions are found on stelae rather than tomb walls, having first appeared in this form in the First Intermediate Period.
222 NEWBERRY, Beni Hasan I, pl. 8
Overlord of the Oryx Nome (see Fig.3.1 for text excerpt): (line 1) \( \text{rnp\_t-sp 43 hr hm n.y Hr.w 'nh.t ms.wt nsw-bi.ty Hpr-k3-R'\_w 'nh d.t (2) Nb.ty 'nh.t ms.wt Hr.w-nbw 'nh.t ms.wt ss R'\_w S-n-wsr.t 'nh d.t r nhh (3) h\_f.t rnp.t 25 m Mh\_d m ir.y-p\_t h3.ty-\_e im3-\_e } \text{Imn.\[y\] m\_s\_\_haw.} \) ‘Regnal year 43 under the majesty of Horus born to life, the king of Upper and Lower Egypt Kheperkar, living forever, the Two Ladies born to life, the Golden Horus born to life, the Son or Re Senusret may he live forever to eternity. Corresponding to year 25 in the Oryx nome as hereditary prince, Count, gracious of arm, Ameny, justified.’

Tomb BH3 of Khnumhotep II – The biography consists of 222 vertical lines and runs anticlockwise around the base of the four walls of the tomb chapel below the wall scenes. At lines 76 to 79 the text describes the appointment of the tomb owner by king Amenemhat II (Nubkaure) to his governorship in regnal year 19 (see text excerpt Fig.3.2): (line 76) \( \text{Itm pw Ds=f Nbw-\_kA.w-\_Ra.w D.t} \) (77) \( \text{Dd wAs Aw-ib=f mi Ra.w D.t Di.n=f w}(78)i r HA.ty-\_a m rnp.-sp 19 m (79) M\_n\_e.Hw-fw. \) “This Atum himself (King) Nubkaure, given life, stability, dominion and happiness like Re forever, appointed me as Count in regnal year 19 in Menat-Khufu”. There are two other references to kings Amenemhat I and Senusret I in relation to family members mentioned in the text, to be discussed further in the appropriate section below.

Tomb BH14 of Khnumhotep I – The biographical text of Khnumhotep is located on the chapel’s west wall on the southern side of the entrance doorway. It is now effectively unreadable, being painted only and not incised. The text was recorded by Newberry who was able at the time of his work to make it out with some difficulty. The cartouches of \( nsw\_b\_t y Shtp-ib-R'\_w ss R'\_w Imn-m-hs.t \) (Sehetepibre Amenemhat I) are attested on line five, thus placing Khnumhotep I as a contemporary of this king and his tomb near the beginning of the Twelfth Dynasty. No regnal dates are recorded. According to Newberry, line seven describes the appointment by the king of Khnumhotep as Count of Menat-Khufu. The content of this text is therefore important as the first king of the new dynasty is seen as appointing a new local ruler who is not from the direct lineage of the Baqet family.

223 NEWBERRY, Beni Hasan I, pl. 25
224 NEWBERRY, Beni Hasan I, pl. 44
225 ibid, p84
and this timeframe is also marked by broader changes in tomb architecture and decorative programme.

From the tomb owner’s perspective, the intention of the biography is to record notable achievements of the tomb owner and appointments by the king for a ritual purpose, rather than as an historical document, and thus to validate the position of the tomb owner as imnḫ.y (venerated one) in the afterlife. In the case of the Beni Hasan tombs, the recording of the king’s appointments may also have served to legitimize the succession of the later nomarchs over the earlier Baqet Dynasty.

d) Asyut

Tomb As1 (P10.1) of Djefaihapi I – On the east wall of the great hall south of the doorway, a large scale standing figure of the tomb owner is depicted inset above a lengthy biographical text. Djefaihapi faces a similarly-sized block of large scale text enclosed at the top by the symbol for p.t and on each side by wēs staves. The enclosed text consists of two cartouches and a serekh of king Senusret I:

\[ Hr.w \ 'nh ms.wt, nṯr nfr nsw bi.ty Hpr-ḫ3-Rˁ.w, sỉ Rˁ.w Snu-wēsrt, \]
\[ ḏr 'nh ḏd wēs mỉ Rˁ.w ḏt \]

“Horus name: Long Live the Renaissance, the good god, King of U. & L. E. Kheperkare, son of Re Senusret, given life stability dominion like Re forever”.

Tomb No. 4 (N12.2) of Khety II – The long biographical text on the western part of the north wall contains the cartouche of king Merikare: [line 22] ḫḫš.t wēs-nsw-bīt.y Mṛy-ḫ3-Rˁ.w. (Ruler of the Two Lands, King of U & LE, Merykare).

---

226 ALLEN (2000): 297
227 The biography in BH3 (Khnumhotep II) is typical, including explicit references to the purpose of the inscription, for example lines 4-5 (see NEWBERRY, Bershah 1, Pl. 25): sp-f tpy m smnh ntw.t f srw[f rnt n nḏḥ “his foremost deed was embellishing his city so that he may perpetuate his name for eternity”.
228 GRIFFITH (1889), Siut & Rifeh: Pl. 4
229 See LEPROHON ‘The programmatic use of the Royal Titulary’ JARCE 33: 167. GARDINER originally translated the Horus name as “Life of Births” (see Egyptian Grammar: 71, Excursus A).
230 EL KHADRAGY (2008), SAK (37), 235. See also SPANEL (1989), Orientalia 58(3), 301-14, fig. 1-2.
e) Moalla

In cases where there are no royal attestations, the narrative of the tomb owner’s achievements can however yield useful information about events that prompted the tomb owner’s actions. In the tomb of Ankhtify at Moalla, a long biographical text covers much of the inscribed surface on seven of the pillars in the rectangular tomb chapel. The description of events is in line with societal discord associated with the First Intermediate Period, and provides supporting evidence for the dating of this tomb to the period prior to the Eleventh Dynasty reunification under Nebhepetre Mentuhotep II. Ankhtify’s tomb does however contain a single instance of a royal cartouche, that of a king Neferkare, in a small caption-like text associated with the tomb owner inspecting riverine activities at the southern end of the west wall, located on the bottom register under the figure of Ankhtify inspecting a boating scene.\(^{231}\) The text reads \textit{lni Hr.w h’py n s2-f Nfr-k3-R} “Horus brings a Nile flood to his son Neferkare”. Although similar to a caption for the boating scene, the content and positioning of this inscription does not conform closely to conventions for this type of text set in the Old Kingdom. The royal cartouche is also missing the conventional prenomen introductory \textit{nsw bi.ty}, which may be deliberately omitted, consistent with the king not exercising reign over a unified Egypt (the omission may also simply be an indicator of less adherence to artistic and ritual conventions following the fall of centralized authority at the end of the Old Kingdom). There are two possibilities for the identity of the Neferkare referred to in the inscription, the first being the Sixth Dynasty king Neferkare Pepy II,\(^{232}\) which would place the tomb at the transition of the Old Kingdom and the First Intermediate Period. The second, more likely possibility is the Ninth Dynasty Herakleopolitan king Neferkare.\(^{233}\) Although there is no conclusive evidence to prove either of these possibilities beyond doubt, the latter king is suggested by the content of the biography indicating conflict with the Thebans, and supporting palaeographic features have been identified\(^{234}\) (to be discussed below).

\(^{231}\) VANDIER, \textit{Mo`alla}, pl. 60
\(^{232}\) SNAPE (2011), \textit{op. cit.}, 111
\(^{233}\) HAYES (1971) \textit{Cambridge Ancient History II}: 465. The king is identified with the third Herakleopolitan ruler, Turin Canon IV, 20. See also SPANEL (1984) \textit{GM} 78: 87-94.
\(^{234}\) SPANEL (1984) \textit{GM} 78: 87-8
f) Qubbet el-Hawa

The nomarch Sarenput I (tomb 36)\textsuperscript{235} records the throne name of king Senusret I in his biography:

\begin{quote}
'Iri.n-i is m ĥši.t nsw bi.ty Ḥpr-k3 -R'w.'\textsuperscript{236}
\end{quote}

“I have built my tomb as a favour of the King of U. & L. Kheperkare”

The nomarch Sarenput II (tomb 31), whose second name is Nubkaure-Nakht, incorporates the cartouche of the reigning king Amenemhat II (Nubkaure) in the inscription of his own name on the rear wall of the statue recess in the second pillared hall, located above Sarenput II before an offering table.\textsuperscript{237} The use of this device in the inscription indicates that Sarenput II served under the reign of Amenemhat II and is therefore a contemporary of Ukhhotep II.

As previously mentioned, at the site of Meir the single instance of the citation of the cartouches of Amenemhat II firmly places Ukhhotep II as a contemporary of Djehutyhotep at El-Bersha and Khnumhotep II at Beni Hasan. Given the relative chronological sequence arising from the analysis of family names (see next section), this fixed dating criterion also allows the entire Meir sequence of tombs to be fixed with reasonable precision, as discussed in the following section of this chapter.

II. Regnal Citations in Other Contexts

The tombs of various individuals mentioned in this section do not contain fixed dating evidence in the form of regnal citations, however the tomb owners can be identified from inscriptions in external contexts as described, along with corresponding regnal citations which are used here to infer the fixed dating of their respective tombs. This is particularly the case for the tomb owners from the Eleventh Dynasty royal court at Thebes and the governors of Deir el-Bersha, whose tombs are in a poor state of preservation.

\textsuperscript{235} MÜLLER (1940), \textit{Felsengräber}: 15-51; biographical inscription: GARDINER (1908), \textit{ZÄS} 45: 123-140, pl. VIII.

\textsuperscript{236} SETHE (1935) \textit{Urkunden VII}: 2, line 9

\textsuperscript{237} MÜLLER (1940), \textit{op. cit.}: 62-82, Tafel XXXIII
a) Shatt er-Rigal

The Shatt er-Rigal is a small wadi in the western plateau of the Nile valley about 8 kilometres downstream of Gebel Silsileh. It is important for the rock inscriptions naming many of the senior officials of Nebhepetre Mentuhotep II who are buried at Deir el-Bahri and Sheikh ‘Abd el-Qurna. The major inscriptions of interest here are the large and small reliefs of Mentuhotep II accompanied in both by the Chancellor Khety (owner, TT311), and a group of textual inscriptions about 8 metres long, between the two Mentuhotep reliefs on the southern cliff face.

The large inscription shows the near life-sized figure of the king identified as:

\[ Hr.w\ smn\ t3.wy\ nsw\ bi.ty\ Nb-hp.t-R\ w\ ‘nh\ d.t \]

(Horus, Uniter of the Two Lands, King of Upper and Lower Egypt, Nebhepetre, may he live for eternity). The three other figures (a woman behind and two males before him) are about two thirds his size and are identified left to right as:

\[ mw.t\ nsw\ mrr.t\ f\ i\h \]

(The mother of the King, whom he loves, Iah)

\[ mrr\ nfr\ ss\ R\ w\ 'lni.t.f\ ‘nh\ d.t \]

(Childloved of the God, the Son of Re Intef, may he live for eternity). This is taken to refer to his father and predecessor Intef III.

\[ htm.ty\ bi.ty\ im.y-39\ htm.t\ H.ty \]

(Royal Seal-bearer, Treasurer, Khety).

The small relief depicts abbreviated versions of the king’s and Khety’s titulary, along with the regnal date \( hs.t-sp\ 39\) (year 39).

The following officials are also mentioned in the texts between the large and small inscriptions:

Text C naming Henenu (owner, TT313), also identified as Chief Steward under the following reign at Wadi Hammamat (below): \( im.y-r3\ pr.w\ Hnn.(w) \)

Steward, Henenu – name partly erased).

---

238 WINLOCK (1940), AJSL (57)#2, 137-161; PETRIE (1888), A Season in Egypt, 1887, 14-16.
239 PETRIE (1888), op. cit., pl. 16, no. 489.
240 PETRIE (1888), op. cit., pl. 15, no. 443.
241 Note however that CALLENDER (2003) in Shaw (Ed.) Oxford History, questions the conventional interpretation and suggests that the representation may not reflect family connections, but may be an attempt to validate the reign in opposition to the Herakleopolitan House of Khety.
242 WINLOCK (1940), op. cit., 143.
CHAPTER 3 - Chronological Framework: Analysis of Texts

Text D naming two officials, Meketre (owner, TT280) and Dagi (owner, TT103):

\[ mrr \ nb-f m3\ M-k.t-rw \ im.y-rs \ hw.t \ 6 \ wr.w \ Dsg \ msi \ n \ Nm.t(i) \]

(True loved of his lord, Meketre. Overseer of the Great Enclosure of Six, Dagi, born of Nemti).²⁴³

Text G naming Meru (owner, TT240):

\[ htm.t-\ bi.ty \ smr \ w.r. \ im.y-rs \ hss.wt \ isb.twt \ iw \ nsf \ wr.w \ m \ ksw \ r.w \ tr.w-nsw \ mr.y-nb-f \ im.y-rs \ htm.tyw \ Mr.w \]

(Royal Sealbearer, sole companion, Overseer of the Eastern Deserts, the great ones come to him bowing at the gate of the royal palace, beloved of his lord, Overseer of Sealbearers, Meru).²⁴⁴

b) Deir el-Bahri, Mortuary Temple of Nebhepetre Mentuhotep II

The officials named in the Shatt er-Rigal inscriptions are also attested on mortuary temple relief fragments or on linen marks from tomb contents of subsidiary burials of the queens and retainers, as follows:

Chancellor Khety (owner, TT311) is identified from linen marks from the rear ambulatory tombs of queens Aashayt and Henhenit,²⁴⁵ and from tomb 23 in the temple’s triangular northern forecourt, which also yielded linen dated to year 40 of the reign.²⁴⁶

Tomb 23 linen marks: \[ im.y-rs \ htm.t \ H.ty \] (Treasurer Khety); \[ hsb.t \ 40 \] (40th count). In addition, there are three fragments of temple relief which refer to Khety, but with incomplete titulary:²⁴⁷ Fragment 82: \[ [. . . .] htm.t \ H[.t]y \ [. . . .]; \] Fragment 660: \[ [. . . .] htm.t \ H.ty; \] Fragment 3078: \[ [. . . .] htm.t \ H.ty. \]

Steward Henenu (TT313) is definitively identified from linen marks from the burial of princess Mayt at the rear of the ambulatory:²⁴⁸ \[ im.y-rs \ pr.w \ Hnn.w \] (The Steward Henenu), and from an inconclusive fragmentary relief.²⁴⁹

²⁴³ WINLOCK (1940), ibid.; ALLEN (1996), Some Theban Officials of the Early Middle Kingdom in Der Manuelian (Ed.), 13.
²⁴⁴ WINLOCK (1940), ibid.
²⁴⁵ WINLOCK (1923), MMAB (18)#12 (pt 2), 12, fig 2; ALLEN (1996), “Some Theban Officials of the Early Middle Kingdom” in Der Manuelian (Ed.): 6 (cites unpublished MMA Theban tomb cards: No. 61 for Aashayt and No. 31 for Henhenit).
²⁴⁶ WINLOCK (1940), AJSL (57), 146; ALLEN (1996), op. cit., 6 (cites unpublished MMA Theban Tomb Cards, No. 93 for Khety’s title and No. 94 for the year 40 dating).
²⁴⁷ ALLEN (1996) op. cit., 7, no. 22
²⁴⁹ ALLEN (1996) op. cit., 12 no. 55
Fragment 646: [. . .] hmr.[t] Hnn.w (....of the Harim, Henenu). This latter is an otherwise unattested title, most likely indicating an early phase of Henenu’s career.

Treasurer Meketre (TT280) is well attested in a number of relief fragments from the mortuary temple, including one with a depiction of him presenting a collar\textsuperscript{250} in this role. These include:

Fragment 5342 (BM 1398) depicting Meketre bearing the collar, with the caption:\textsuperscript{251} ir.y-p[t]'[t] htm.ty-bi.ty smr-w'[y] im.y-r[3] htm.t Mk.t-r'[w] (Hereditary prince, royal sealbearer, sole companion, Treasurer Meketre).

Fragment 5344 (BM 1452):\textsuperscript{252} smr-w'[y] im.y-r[3] htm.t Mk.t-r'[w] (Sole companion, Treasurer Meketre).

Other fragments bearing the same or partial titles are 881, 1464 and 5346.\textsuperscript{253}

Vizier Dagi (owner, TT103) \textsuperscript{[8]} is attested on fragment 471:\textsuperscript{254} ha.t(y)-\textsuperscript{c} im.y-r[3] niw.t mr t[3](y.ty) ssb ts.ty-\textsubscript{zg}(i) (Count, overseer of the pyramid town, vizier, chief justice,\textsuperscript{255} Dagi); fragment 5352:\textsuperscript{256} [. . .] ssb ts.ty-\textsubscript{zg}(i) ( . . ., chief justice, Dagi); fragment 1097:\textsuperscript{257} [. . .] ts r drf-\textsubscript{zg}(i) ( . . . in the entire land, Dagi); and fragment 5333 (BM 43123):\textsuperscript{258} im.y-r[3] rw.yt-(\textsubscript{A})g(i) (Overseer of the portal, Dagi). This last relief shows a smaller figure “standing in an attitude of respectful attention”\textsuperscript{259} and may represent a lower ranking man of the same name, however, it is more likely to attest an earlier title of the vizier Dagi, as the same title is known from his sarcophagus.


\textsuperscript{251} ALLEN (2003), ibid.; GRAJETSKI (2000), Die höchsten Beamten der ägyptischen Zentralverwaltung zur Zeit des Mittleren Reiches, 46.

\textsuperscript{252} GRAJETSKI (2000), op. cit., 45.

\textsuperscript{253} ALLEN (2003), op. cit., 19.

\textsuperscript{254} ALLEN (1996) op. cit., 12-13 and no. 59; GRAJETSKI (2000) op. cit.: 10, text 1.2(f)

\textsuperscript{255} WARD (1982), Index, title 1276.

\textsuperscript{256} ALLEN (1996) op. cit., 13, no. 59

\textsuperscript{257} ALLEN (1996), ibid.

\textsuperscript{258} ALLEN (2003) op. cit., 22; DAVIES (1913) Five Theban Tombs, 39.

\textsuperscript{259} DAVIES (1913) op. cit., 39. Davies took this as evidence of a second, lower ranking Dagi who was related to the Vizier Dagi and was also buried in TT103 (as the same title occurs there on the sarcophagus), however ALLEN (2003) ibid. believes it is a lower ranking title from earlier in his career.
c) Wadi Hammamat

During the Middle Kingdom Wadi Hammamat remained an important region for mining expeditions as well as a trade route from Qift to the Red Sea, originally established in the Old Kingdom. Numerous rock texts along its route attest to these activities from all periods. Inscription No. 114 of Chief Steward Henunu (owner, TT313) describes an expedition to the Red Sea for opening of trade to Punt, quoting year 8 of Sankhkare Mentuhotep III.\(^\text{260}\) It should be noted that four stelae (Inscription Nos. 110, 113, 191, 192) by Vizier Amenemhat quoting year 2 of Nebtowyre Mentuhotep IV are also attested.\(^\text{261}\) It is generally accepted that this vizier usurped the throne following this expedition and founded the Twelfth Dynasty as Amenemhat I Sehetepibre.\(^\text{262}\)

d) Hatnub

The alabaster quarries at Hatnub contain a large number of rock-carved graffiti commemorating expeditions attesting at least four of the governors from the tombs of Deir el-Bersha. The most numerous of the graffiti date to the governorship of Nehri I\(^\text{263}\) (owner, tomb 4; 17L12/1), with other texts attributed to the provincial rules of Ahanakht I\(^\text{264}\) (owner, tomb 5; 17K85/1) and Djehutinakht V\(^\text{265}\) (probable owner, tomb 10A; 17L04/1).

The most important text from the standpoint of regnal dating, however, is GR49,\(^\text{266}\) which attests the overseer of priests im.y-r3 hm.w-nfr (later governor) Amenemhat (owner, tomb 3; 17L22/1) along with the regnal year 31 of Senusret I: (line 1) ḫs.t-sp 31 tp ḫb-sd nsw bl.ty ḫpr-kt-R.m.w. Although Amenemhat is attested as overseer of priests, the title of governor is absent from the inscription, indicating that it dates prior to his accession to this position. His tomb can therefore be definitively dated

\(^{260}\) COUYAT & MONTET (1912), Les inscriptions hiéroglyphiques et hiératiques du Ouádi Hammâmât, no. 114, p; see also SCHENKEL (1965), Memphis, Herakleopolis, Theben 253-58; SEYFRIED (1981), Beitrage zu den Expeditionen, 243-5.

\(^{261}\) COUYAT & MONTET (1912), op. cit., 77-8, 79-81, 97-100.

\(^{262}\) SIMPSON (1959), JNES (18), 27.

\(^{263}\) BROVARSKI (2010), The Hare and the Oryx Nomes, in Woods et al. (Eds.), 32. The Nehri I texts are documented in ANTHES (1928), Die Felsinschriften von. Hatnub, GR14-29, pp 32-66.

\(^{264}\) ANTHES (1928), op. cit., GR10-13, 25-31.

\(^{265}\) ANTHES (1928), op. cit., GR31-32, 67-8.

\(^{266}\) ANTHES (1928), op. cit., GR49, 76-8.
to the end of the reign of Senusret I and no later than early in the following reign of Amenemhat II.

Many of the other inscriptions contain what are generally accepted as local nomarchal dates,\textsuperscript{267} which do not have direct correspondence to a royal regnal date. More recent interpretations have argued that the \textit{mp.t-sp} dates in the texts refer instead to royal reigns,\textsuperscript{268} however, without explicit citation of the kings’s name the dating for these remain unresolved. Either way, these texts therefore cannot be used for the fixed dating framework in this study, although the inclusion of family members in the texts provides evidence for the dynastic order of the El-Bersha governing family (discussed below).

e) Wadi el-Hudi

Intefiqer (the builder of his mother Senet’s tomb TT60 at Western Thebes) is recorded on a stela in the Wadi el-Hudi as conducting an amethyst mining expedition in regnal year 20 of Senusret I.\textsuperscript{269}

\textsuperscript{267} WILLEMS (2014), \textit{op. cit.}, 80; BROVARSKI (2011), \textit{A Phantom Debate?}, 25-30.
\textsuperscript{268} GESTERMANN (2008), \textit{ZAS (135)}, 1-15. Gestermann states that the three regnal dates of the Ahanakht graffiti refer to Mentuhotep II and those of Nehri to Amenemhat I. Of the two dates in the Djehutinakht graffiti, she believes the year 20 reference is to Amenemhat I and the year 2 reference is to Senusret I. While these dates do fit with the length of the respective reigns, the theory must remain speculative as the names of the kings are not attested, and each date is clearly followed by the governor’s name.
\textsuperscript{269} SADEK (1980), \textit{The Amethyst Mining Inscriptions I}, 22-4.
III. Fixed Dating Framework based on Regnal Citations

To summarise the findings of the analysis of regnal dates and citations in the abovementioned tombs and other contexts, the fixed dating points can be established in the dating framework as follows:

| Regnal Reference | Tomb Attribution (Fixed Dating) | Other contextual references are noted where appropriate.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Neferkare</td>
<td>[IX]?</td>
<td>Ankhify (Mo1)</td>
</tr>
<tr>
<td>Merykare</td>
<td>[X]</td>
<td>Khety II (As4)</td>
</tr>
<tr>
<td>Mentuhotep II</td>
<td></td>
<td>Dagi (TT103)(^{271}) Meketre (TT280)(^{272})</td>
</tr>
<tr>
<td>Sankhkare</td>
<td>[XI.5]</td>
<td>Henunu (TT313)(^{273})</td>
</tr>
<tr>
<td>Mentuhotep III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amenemhat I</td>
<td>[XII.1]</td>
<td></td>
</tr>
<tr>
<td>Sehetepibre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senusret I</td>
<td>[XII.2]</td>
<td>Intefiquer (TT60) - yr 20(^{274}) Sarenput I (QH36)</td>
</tr>
<tr>
<td>Kheperkare</td>
<td></td>
<td>Djefaihapi I (As1) Amenemhat (Be3)(^{275}) yr 31</td>
</tr>
<tr>
<td>Amenemhat II</td>
<td>[XII.3]</td>
<td></td>
</tr>
<tr>
<td>Nubkaure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amenemhat III</td>
<td>[XII.4]</td>
<td></td>
</tr>
<tr>
<td>Ninnaatre</td>
<td>[XII.5]</td>
<td></td>
</tr>
</tbody>
</table>

\(^{270}\) Shatt er-Rigal inscription. See PETRIE (1887), *A Season in Egypt*. Also attested from linen marks from the Mentuhotep II mortuary complex, see ALLEN (2003), *ibid.* Note: Regnal reference is not attested in tomb TT311.

\(^{271}\) Shatt er-Rigal and Mentuhotep II mortuary complex (see PETRIE, *ibid*).

\(^{272}\) Ibid.

\(^{273}\) Wadi Hammamat inscription, COUYAT & MONTET *op. cit.*, No. 114. No surviving attestation in tomb TT313.

\(^{274}\) Wadi el-Hudi Stela (see SADEK, *ibid*.)

\(^{275}\) Hatnub GR49 (see ANTHES, *ibid*.)

70
IV. Family Members Attested

a) Family of Ukhhotep / Senbi at Meir

The sequence of the first three tombs of the Twelfth Dynasty nomarchs at Meir can be constructed with certainty, based on inscriptions clearly identifying the line of succession of the owners. The order has been understood since the initial publication of the relevant texts by Chassinat, and confirmed by Blackman. References to family members in the three later tombs indicate possible lines of succession, however, the evidence is insufficient for definitive conclusions to be established, and sequencing of these tombs is also dependent on an analysis of textual and artistic features in the following chapter.

The key evidence occurs in tomb B3 of Senbi II on the doorway to the inner room:
Left Jamb: 276 *Ir.y p.t H.A.ty - a im.y - rA Hm.w - nTr 4nbi sA Wx - Htp sA mAa x rw* (Member of the Elite, Governor, Overseer of Priests, Senbi son of Ukhhotep, son of Senbi, justified).
Lintel, third register: 279 *Snbi msi Dhw ty-Htp* (Senbi, born of Djehutihotep).
Stela No. 1 records Mersi as his sister (left border): *sA.t H.A.ty - a 4nbi sA Wx - Htp (Mersi daughter of Ukhhotep son of Senbi, justified).*

The mother and grandfather of Senbi II above are consistent with the wife and father of Ukhhotep I in the texts of tomb B2:
South and West Walls: 281 *Hm.t=f mry.t=f n.t s.t ib-f nb.t pr.w Dhw ty-Htp* (his wife, his beloved, his favourite, mistress of the house Djehutihotep).
Statue recess, north and south jambs: 282 *h3 ty-s Snbi ss Wh-htp* (Governor, Senbi’s son Ukhhotep).

276 CHASSINAT (1899) Rec. Trav. 22: 74-75, specifically the statue recess text of Tomb No 2 and the doorway and stelae texts of Tomb No 3.
277 BLACKMAN Meir I, II, III and VI. Blackman’s proposed family tree and chronology is detailed in Meir I (1912): 11-13.
278 Ibid. 278 BLACKMAN & APTED, Meir VI, 7, pl. 8.
279 Ibid. 279 Ibid.
280 BLACKMAN & APTED, Meir VI, pl. 6. Bottom or right jamb.
281 BLACKMAN, Meir II, pls. 6 & 9.
282 BLACKMAN, Meir II, pl 12.
Senbi I names his father as Ukhhotep (tomb unknown) and wife as Mersi in the texts of tomb B1:

South wall (above figure of Senbi):\(^{283}\) *hs.ty*-\(^{\circ}\) *Wl-htp ss Snbi nb imshy* (Governor, Ukhhotep’s son Senbi, possessor of honour).

North wall (fowling scene, above wife on skiff):\(^{284}\) *hm.t-f s.t ib-f Mrs(i) nb.t imshy* (his wife, his favourite, Mersi, possessor of honour.)

The probable line of succession indicates that Ukhhotep II of tomb B4 may be the nephew of Senbi II, by Senbi’s sister Mersi (although the identity of Mersi cannot be further confirmed):

Inner room, west wall, north of false door:\(^{285}\) *mw.t-f s.t *hs.ty*-\(^{\circ}\) *Mrsi ms\(^{\circ}\) hrw* (his mother, the daughter of the elite, Mersi, justified).

Also noted are figures 8 and 9 on the north wall of the inner room (bottom register), both recorded as: *sn-f Wl-htp* (his brother Ukhhotep). It is possible (but not proven) that one of these brothers may provide the line of succession to Ukhhotep III of tomb C1.\(^{286}\)

Ukhhotep III records his father as Ukhhotep and mother as Heniheryib in tomb C1, however, in the absence of definitive identification of these individuals the line of succession is not clear:

West wall, above Ukhhotep standing:\(^{287}\) *hs.ty*-\(^{\circ}\) [*im.y-rs.w lm.w-ntr*] *Wl-htp msi n.y Hn.y-hr.y-ib* (governor, [overseer of priests], Ukhhotep, born of Heniheryib).

Lintel of statue recess:\(^{288}\) *im.y-rs lm.w-ntr* *Wl-htp ss Wl-htp nb imshy* (overseer of priests Ukhhotep’s son Ukhhotep).

The position in the line of succession of the owner of tomb A3 (Iam’s son Ukhhotep) is unclear (if he even belongs in it), however, Blackman speculated that he may be identified with the father of Ukhhotep II, Mersi’s husband Ukhhotep identified in

---

285 BLACKMAN, *Meir III*, 34, pl. 27.
286 WILLEMS (1988), *Chests of Life*, 87, see Genealogy 2.
tomb B2 as ḫt.f ḥṣ.ty.f (his father, son of the elite). Given the number of minor court officials and family members bearing the name of Ukhhotep (as evidenced by the number of coffin owners of this name), this assertion should be considered possible but relatively unlikely. The statue recess, (possibly carved into an earlier tomb chamber) is dedicated by a Governor, Ukhhotep’s son Ukhhotep, and while it is unmistakeably a Twelfth Dynasty construction (probably by Ukhhotep II), more recent authors consider it to be a dedication to an ancestral Ukhhotep.

Based on the above texts, the order of the Meir tombs can be constructed as follows: [B1], Senbi I -> [B2], Ukhhotep I -> [B3], Senbi II --- [A3, Iam’s son Ukhhotep] --- [B4], Ukhhotep II (temp. Amenemhat II) --- [C1], Ukhhotep III.

b) Baqet Family Dynasty at Beni Hasan

With one exception, the sequence of the Family Dynasty of Baqet I can be established from family references in the respective tombs.

In tomb BH29, Baqet I records his son (name now lost) and wife Djehuti-ka as follows:

Eastern end of north wall: The tomb owner Baqet is depicted standing on a skiff spearfishing accompanied by his wife, with the caption:

hm.t.f mry.t.f ḥm.t ḥw.t-Hr nbw Dhw.ty-kṣ (his wife, his beloved, the priestess of golden Hathor, Djehuti-ka)

His son in smaller scale is standing on the same skiff in front of Baqet, however, the accompanying text has been destroyed by the later excavation of a doorway.

Despite the loss of the son’s name with the cutting of the doorway, Baqet II of tomb BH33 is confirmed as the son and successor of Baqet I in his own inscription on the top row of the east wall in BH33, with the identification of both his father and

---

289 BLACKMAN, Meir III, 3, pl. 27, suggested pedigree p35. Note ḫt.f ḥṣ.ty.f has been translated as son of a governor, and while it is possible that this may have been the case, a more conservative rendering of the title would be ‘son of the elite’, indicating he is from the governor’s family.
290 BLACKMAN & APTED, Meir VI, 2. Blackman identifies this governor to be his son Ukhhotep II.
292 NEWBERRY (1893), Beni Hasan II, pl. 29.
mother as follows:293 [Text Section C] ımš.t.y msi n.(y) Đhw.ty-kš Bšk.t ss hš.ty-ꜥ hr.y-tp ɛz n.(y) Mš-hḏ mr.y wr.w n.(y) htf ımš.t.y ḫr nfr ɛz Bšk.t
(the revered one, born of Djehu-t-ka, son of Baqet, nobleman, great overlord of the Oryx Nome, beloved and eldest of his body, revered before the great god, Baqet (II)).

The tomb of a third Baqet (BH15) records his father as Remushenti (owner of BH27):
ımš.t.y Rmwšn ss Bšk.t msi n.(y) ḫtw-rw (the venerated one, Remushen’s son Baqet, born of Hetep-ra).294 Unfortunately BH27 family members are not attested in the surviving texts, so that the line of succession from Baqet II to Remushenti is undocumented.

The final tomb in the sequence is BH17 of Khety, confirmed as the son and successor of Baqet III by the inscription on the top register of the north wall:
ḥrw-tp-ɛz n.y Mš-hḏ Bšk.t ss H.ty (great overlord of the Oryx nome, Baqet’s son Khety).295

The order of the tombs can be placed as follows, based on family relationships attested:
[BH29], Baqet I → [BH33], Baqet II …[BH27], Remushenti → [BH15], Baqet III → [BH17], Khety

c) Khnumhotep Family Dynasty at Beni Hasan

Because the three decorated Twelfth Dynasty tombs included in this study are securely dated by royal cartouche, a relative dating estimate by family succession is not required. It is worth noting however that the biographical inscription of Khnumhotep II (tomb BH3) suggests a family relationship with Khnumhotep I of BH14. Although not named, the grandfather is probably identified as the owner of BH14 as it states that he was appointed [19-20] r īw.t t šrw.t-i “to the inheritance of my mother’s father”, and his territory was established [25-26] mi ir.yt n it šrw.t-i “like was done for my mother’s father” by [29] šhrw-šr R.w ss R.w šm-n-m-hš.t

293 NEWBERRY, Beni Hasan II, 39, pl. 36.
294 NEWBERRY, Beni Hasan II, pl. 7, top register, left side.
295 NEWBERRY, Beni Hasan II, pl. 13. Top register, far right.
This statement is in concordance with the biographical inscription in BH14. The text also mentions that Khnumhotep I was succeeded by his eldest son Nakht (probable owner of tomb BH21, not included in this study due to its incomplete and poorly preserved state) under Senusret I and that his father was Neheri, who has been identified with Neheri I of Deir el-Bersha, owner of Be4, however, could equally be identified with Neheri II of Be7 which would provide a better fit within the timeframe of Senusret I.

d) Ahanakht / Djehutinakht Family at Deir el-Bersha

The nomarch Ahanakht (tomb Be5 (17K85/1)) is accepted as the first governor to establish his large rock cut elite tomb at the site. In comparison to some later tombs in the series, Be5 is relatively well preserved and contains surviving inscriptions identifying his father as a Djehutinakht (whose tomb is not known). Two sons are known from other sources however, the first being Hatnub GR42, mentioning Ahanakht’s son Djehutinakht (identified with Djehutinakht IV, a possible owner of tomb Be10A (17L04/1)), and the second being an offering table mentioning Ahanakht’s son Ahanakht (identified with Ahanakht II of tomb 17K84/1). Due to the lack of inscriptive evidence in these latter two tombs, however, the line of succession in terms of family relationships between Ahanakht II / Djehutinakht IV and the next known governor Neheri I is unclear.

Tomb Be4 (17L12/1) of Neheri I contains the following fragments of inscription which form the basis of a possible family lineage that can be inferred for the remaining el-Bersha tombs:

\[ s¹f \text{ wr. w-f } mr.y-f \text{ htm.ty-bi.ty } Kṣy \text{ (his eldest son, his beloved, the royal sealbearer Kay) } \]

296 NEWBERRY, Beni Hasan I, 58-9, pl. 25, lines 19-29.
297 NEWBERRY, Beni Hasan I, 84.
298 NEWBERRY, Beni Hasan I, 60, lines 54-62.
300 NEWBERRY, Bersheh II, pl. 13, horizontal register 3 on lintel above entrance.
301 ANTHES (1928), Hatnub, GR42, 101-2.
303 BROVARSKI (1981), Studies Dunham, 22, citing the offering table: Hildesheim 1891.
304 WILLEMS (2014), Historical and Archaeological Aspects of Eg. Funerary Culture, 90.
The text identifies two sons of Neheri I, Djehutinakht and Kay. The first has been associated with Djehutinakht V, possible owner of tomb Be10A. The other son Kay is the likely father of Neheri II (in accordance with the grandfather Kay and father Neheri of the governor Amenemhat attested in GR49, as discussed below).

In the tomb of Neheri II (Be7 (17K77/1)) nothing remains of texts or decoration, apart from partial titulary and religious texts on the ceiling. The similarity of these texts to the religious texts on the ceiling in Be1 (17L30/1) suggest that Neheri II may be identified as the father of tomb Be1 owner Djehutinakht VI, as cited on the lintel of its statue recess (see below).

In tomb Be1, Djehutinakht VI’s father Neheri and Mother Sat-hadj-hotep are recorded on the statue recess lintel horizontal registers, associated with the tomb owner as recipient of offering formulas:

**top register:** Nhri ss Dhw.ty-nį.t (Neheri’s son Djehutinakht).

**2nd register:** Dhw.ty-nį.t msi Ss.t-ḥd-ḥtp (Djehutinakht born of Sat-hadj-hotep).

Although Amenemhat’s tomb (Be3 (17L22/1)) is largely destroyed, his lineage is recorded at Hatnub in GR49:

(inscription on the image) htm.ty-bi.ty ḫmn-m-ḥs.t msi n.y Ss.t-ḥd-ḥtp (royal sealbearer Amenemhat born of Sat-hadj-hotep).

(text line 2) ḫr.y p.t ḫs.ty- )); htm.ty-bi.ty smrö W.ty Kṣy ss Nhri ss ḫmn-m-ḥs.t (hereditary noble, count, royal sealbearer, sole companion, Kay’s son Neheri’s son Amenemhat).

The text identifies Amenemhat’s grandfather Kay, father Neheri, and mother Sat-hadj-hotep. It is significant not only in that it confirms that Amenemhat is a brother of Djehutinakht VI, but that it also goes back a further generation from their father Neheri to name their grandfather Kay. These individuals can be respectively

---

305 NEWBERRY, Bersheh II, pl. 11, fragment 4.
306 This connection has been suggested by BROVARSKI (1981), Studies Dunham, 22.
307 NEWBERRY, Bersheh II, pl. 7.
308 ANTHES (1928), Hatnub, GR49, 76-8.
identified with reasonable confidence as Neheri II (Be7) and Kay, the son of Neheri I as recorded in Be4 (see above).

In the statue recess of Be2 (17L20/1), the tomb owner captioned Kzy ss Dhw.ty-htp (Kay’s son Djehutihotep) stands facing his father captioned Nhri ss Kzy (Neheri’s son Kay). The probable identification of Djehutihotep’s grandfather is Neheri II of tomb Be7, who is also the probable father of Djehutinakht VI and Amenemhat. Djehutihotep is therefore the nephew and a successor of these two governors.

Based on the family relationships attested in the tomb texts and those from Hatnub, two sequences for the el-Bersha tombs can be inferred, with an unclear line of succession from the first to the second:

First sequence:  
Dyn 11: Ahanakht I (Be5) → Ahanakht II (17K84/1), Djehutinakht IV (possible Be10A)

Second sequence:  
Dyn 12: Neheri I (Be4) → Djehutinakht V (possible Be10A) → Neheri II (Be7) → Djehutinakht VI (Be1), Senusret I, yr31: Amenemhat (Be3) → Senusret II: Djehutihotep (Be2).

e) Khety/Iti-ibi Family at Asyut

As noted in the previous section, the cartouche of Merykare in the tomb of Khety II (As4 (N12.2)) provides a definitive dating point in the Tenth Dynasty (Herakleopolitan period), an observation which is supported by the biographical text and the military themes of the wall decoration in the tomb. This dating point provides a reference for sequencing two other Siutian tombs based on references to family members.

The adjacent tomb As3 (N12.1) is attributed to the governor Iti-ibi, who is the probable father of Khety II based on line 23 of the biographical text in As4:

(23) m hrp.t rh nsw 'Iti-ib-i ss Hty hry-tp £r n.(y) Šm$n$.w [under the direction of the king’s acquaintance, Iti-ibi’s son Khety, great overlord of Upper Egypt].

309 NEWBERRY, Bersheh I, pl. 33.
310 EL KHADragy (2008), SAK 37, fig. 3.
The recently discovered tomb N13.1 of the Priest of Wepwawet (and probable governor of Sw.ty) Iti-ibi-iqer\(^{311}\) contains fragmentary remains of texts and decoration, also depicting military themes similar to those in As4.\(^{312}\) Another depiction on the south wall of the tomb, accompanied by caption text, is dedicated to an overseer of priests of Wepwawet (and thus likely predecessor and governor) Khety:

\[
\text{[partially preserved: imy-rs hm.w-nfr n.(w) Wp-wsw.t nb Sw.ty...]} \text{ im.f.y [ ] mr.y nb r-krr.t [ ] [hs.y n.(y) nfr-f niw.ty H.ty-ikr ms-f-hrw} \text{ [overseer of priests of Wepwawet lord of Asyut, the venerated one...beloved of the lord of Ra-queret, favoured by his city god, Khety-iqer, justified].}\(^{313}\)
\]

The most likely candidates to be identified with this inscription are Khety I (As5) or Khety II (As4). Of these, the similarity of the military scenes in both tombs makes Khety II his most probable predecessor (although no attestation survives to confirm it, the possibility exists of a familial relationship between Iti-ibi-iqer and Khety II).\(^{314}\)

In the same tomb, the top two lines of horizontal text on the northern wall identify his son Mesehti-iqer as the builder of the tomb for Iti-ibi-iqer: (1)...in ss-f sms.w mr.y-f ivr.w-f nb n.y i.f-r-f nbt hs.ty-c im.y-rs hm.(w)-nfr (2) n Wp-wz.wt nb Sw.ty lnp.w nb r-krr.t qdm qdm.t w-f m [is.l] [im.y]-rs hm.(w)-nfr ms-f n.(y) Wp-wz.wt Msh.ti-iqr [it is his eldest son, his beloved, his heir, owner of all his possessions, the count, overseer of priests of Wepwawet, lord of Asyut and Anubis lord of Ra-queret, he who hears what one alone hears in the palace, the true overseer of priests of Wepwawet, Mesehti-iqer].\(^{315}\) Given his title of Priest of Wepwawet, his son Mesehti-iqer likely followed Iti-ibi-iqer as governor, however, there is no direct evidence to support his identification with the known governor Mesehti.\(^{316}\)

The tomb of Khety I (As5) is largely destroyed, however parts of a biographical text are recorded,\(^{317}\) along with fragmentary scenes of offering bearers and a desert scene.\(^{318}\) No texts indicating family relationships survive, so the tomb cannot be

---

\(^{311}\) EL KHADRAGY (2007), SAK 36, 105-135.

\(^{312}\) Ibid., fig. 4, pl. 3.

\(^{313}\) Ibid., fig. 8, south wall; transliteration p. 113.

\(^{314}\) EL KHADRAGY, ibid. 114, argues for the possibility of Iti-ibi-iqer being Khety II’s son.

\(^{315}\) EL KHADRAGY (2007), SAK 36, fig. 2, pl. 3. Transliteration p. 107.

\(^{316}\) Known from coffins CG 28118-9 (LACAU, Cat. Gen. du Caire, Sarcophages II, 101-33), and wooden models of soldiers CG 257-8 (BORCHARDT, Cat. Gen. du Caire, Statuen I, 164-5).

\(^{317}\) Griffith, Siut, pl. 15.

placed in sequence with certainty based on the inscriptions. It is generally accepted to predate As3 and As4 based on the absence of military themes from both the surviving decoration and texts.\textsuperscript{319}

The Siutian sequence of tombs therefore can be established as follows, based on family relationships in texts:

\textit{Dyn 9/10}: Khety I (As5) \text{\rightarrow} \textit{Dyn 10}: Iti-ibi (As3) \text{\rightarrow} Merykare: Khety II (As4) \text{\rightarrow} \textit{Dyn 10/11}: Iti-ibi-iquer (N13.1). As noted previously, tomb As2 of Djefaihapi I is securely dated much later than this Heracleopolitan sequence of tombs to the Twelfth Dynasty by royal cartouche.

\textbf{V. Titles and Epithets of the Tomb Owner}

\textbf{a) Functional and Ranking Titles}

Functional titles provide the primary evidence of the duties and roles carried out by the tomb owner, while ranking titles indicate his relative position in elite social hierarchy (both court and provincial).\textsuperscript{320}

Further classification of functional titles have been proposed into the following sub-categories:\textsuperscript{321}

\textit{Official title} – denotes the area of responsibility and position within this area.

\textit{By-title} – provides further explanation of an official role or function and can include honorary titles.

\textit{Signal title} - defines the scope of activity of the holder, as opposed to precisely defined roles.

\textit{Function title} - denotes a certain activity or function at a special event, including ritual titles.

\textit{Epithets} – some epithets (see below) can be treated as a title where they describe a specific responsibility or function of the tomb owner (typically in a ritual or honorary capacity).

\textsuperscript{319} See for example EL KHADRAGY (2007), SAK36, 114.

\textsuperscript{320} GRAJETSKI (2009), \textit{Court Officials of the Egyptian Middle Kingdom}, 5; WILLEMS (2013), in Moreno Garcia (Ed.), 361-4, 372.

\textsuperscript{321} FRANKE (1984), \textit{GM 83}, 124.
From a chronological perspective, strict classification of titles is less important however, as not only are there cross-over points between some titles and epithets, but in the course of time specific functional titles, such as hry-tp z n.y “N” (great overlord of Nome “N”) may be considered to have transformed into a ranking title and a ranking title hs.ty-ε (count, baron) may become functional (with the title holder taking on the function of Mayor).322

In the Middle Kingdom, the key titles in the provincial administration are as follows, as attested at Meir and at the comparison sites:

<table>
<thead>
<tr>
<th>Functional Title</th>
<th>Attested at Meir</th>
<th>Concordance at other sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>hry-tp z n.y “N” (great overlord of Nome “N”).324</td>
<td>B2</td>
<td>BH29, BH33, BH27, BH15, BH17, BH14, BH2, Be5, Be1, Be2, As1, As2, DR1, DR7, QH31</td>
</tr>
<tr>
<td>hs.ty-ε im.y-rs hm.w-nfr (governor and overseer of priests).</td>
<td>B1, B2, B3, B4, C1</td>
<td>BH14, BH2, BH3, As4, As5, As1, As2</td>
</tr>
<tr>
<td>hs.ty-ε n.y “N” (mayor/governor of town “N”).</td>
<td></td>
<td>BH14, BH3</td>
</tr>
</tbody>
</table>

As noted by Franke,325 the last governor to hold the title hry-tp z is Djehutihotep (Be2) securely dated by regnal citation at an intermediate stage of his career to Senusret II (thus likely governing the Hare nome into the reign of Senusret III). At other sites, the last governors to hold the title held office under Amenemhat II (Sarenput II [QH31], Djefaihapi II [As2]) or his predecessor Senusret I (Ukhhotep I [B2], Amenemhat [BH2]).

322 WILLEMS (2013), op. cit., 364, citing HELCK (1958), Zur Verwaltung des Mittleren und Neuen Reichs, 200-206. Helck bases this on the assumption that by the Middle Kingdom the administrative centres are based on towns rather than districts, thus the title of Great Overlord of a nome is essentially non-functional, a view that Willems disputes (see p 365-75). Willems does agree with the transformation of some titles from functional to ranking (see p373).


324 As previously established in chapter 1 part I(a), the the term ‘nomarch’ is restricted in this study to hry-tp z title holders, while the broader generic term ‘governor’ is applied to holders of both hry-tp z and hs.ty-ε im.y-rs hm.w-nfr.

325 FRANKE (1991), in Quirke (Ed.), 53.
It is evident, as long understood,\textsuperscript{326} that the title \textit{hry-tp ʿṣ} serves as a dating criterion where conferring of the title holder can not post-date Senusret III. The criterion is not useful for tombs at Deir el-Bersha, however, where all the tomb owners whose full lists of titles are extant hold it. The same holds true for the Beni Hasan tombs, where all but the last tomb attest the title. Recent studies have illustrated that the situation regarding the title \textit{hry-tp ʿṣ} is more complex than is generally recognized. It is clear from the above table that the title is strongly attested prior to the Twelfth Dynasty at Deir el-Bersha and Beni Hasan. Both centres were well within the Heracleopolitan sphere of influence prior to reunification under Mentuhotep II, and it has been suggested that this reflects a less centralized, less authoritarian mode of rule than was apparent in the Theban sphere of influence at the time, where this title (and the authority it entailed) was suppressed.\textsuperscript{327} The former perpetuated the provincial administrative system of the later Old Kingdom, which was apparently retained in the north by the Theban Dynasty following reunification, and expanded it to the point that by the second reign of the Twelfth Dynasty governors of Asyut, Aswan and Cusae (Meir)\textsuperscript{328} also assumed the title of \textit{hry-tp ʿṣ}.

The other trend that is apparent from the above table is that the Baqet family of nomarchs at Beni Hasan did not assume the role of overseer of priests, indicating that in that nome the responsibilities of \textit{hry-tp ʿṣ n.y Mš-hd} was grounded in the civil administration without a substantial religious component (by the Twelfth Dynasty, however, the duties of nomarch Amenemat had expanded to incorporate the role of \textit{im.y-rṣ hm.w-ntr}).

\textbf{b) Epithets of the Tomb Owner}

In a study by Doxey\textsuperscript{329} of non-royal epithets from the Middle Kingdom, from sources in tombs, stelae and rock inscriptions, it was shown that epithets regarding the character and conduct of the official were particularly common in the early Middle Kingdom, following a trend established prior to unification in the Eleventh

\textsuperscript{326}FRANKE (1991), \textit{op. cit.}, 51-3.
\textsuperscript{327}WILLEMS (2013), \textit{op. cit.}, 384.
\textsuperscript{328}Djefaihapi I, Sarenput I and Ukhhotep I (although Ukhhotep I was the only Cusite governor to hold the title of nomarch, all his successors reverting to the titles of governor and overseer of priests).
Dynasty. These themes become considerably less popular in the second half of the Twelfth Dynasty, supplanted by the resumed Old Kingdom tradition of a focus on the king and various gods (both mortuary and local).

These trends are a result of the interplay between local custom and the influence of the royal court on a particular region, where a tendency towards cultural unification under the influence of court custom is mitigated at most sites by the ongoing influence of long standing local practices (possibly extending back to the predynastic period in some cases).330

Many of the epithets documented in Doxey’s work date from the reigns of Amenemhat I through Senwosret III, and are sourced primarily from Abydene stelae and provincial tomb inscriptions characterised by a developed literary style of self-descriptive epithets and, in some cases, biographical texts.

A general rule was established that at no period during the Middle Kingdom were epithets relating to administrative duties as common or widespread as those referring to the king or the gods.331 This is supported by an analysis of the epithets of the Meir tomb owners presented below, which indicates a relatively high occurrence of royal and deity references in comparison to those related to character and conduct of the official (an attribute of the local scriptural tradition at Meir, perhaps due to the important cult centre of Hathor at Cusae).

c) Typological Classification of Non-royal Epithets

Following is an adaptation of Doxey’s classification scheme whereby classification numbers have been added to the original categories to facilitate the construction of a typology to be applied to the Meir tombs. Doxey’s defined attribute set and corpus of data for each category is referenced in the footnotes for each group below:

330 BOURRIAU (1991) “Patterns of Change in Burial Customs during the Middle Kingdom”, pp 3-20, in Middle Kingdom Studies. (S. Quirke Ed.) SIA, Surrey, 1991: 5
331 DOXEY (1998) op. cit.: 31
### Group 1: Character and Conduct of the Official

<table>
<thead>
<tr>
<th>Cat</th>
<th>Description</th>
<th>Epithets cited in the Meir tomb texts</th>
<th>Attested in Meir tombs</th>
<th>Concordance at other sites. (same or generally similar phrase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Individual authority and responsibility</td>
<td>(not attested)</td>
<td>BH17; As1, As2, As5: building of monuments</td>
<td>(not attested) Mo1; Be1; BH3; As1, As2: prosperity &amp; wealth, provision for subjects</td>
</tr>
<tr>
<td>1.2</td>
<td>Justice</td>
<td>(not attested)</td>
<td>As1; BH2: maat</td>
<td>(not attested) Be5; BH3: precision</td>
</tr>
<tr>
<td>1.3</td>
<td>Skills for success</td>
<td>spd-ns 'sharp of tongue'</td>
<td>B4</td>
<td>As1; Be5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ir m ḫps-f 'one who acts with a strong arm'</td>
<td>C1</td>
<td>(no other attestation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ir nh.t 'one who acts strongly'</td>
<td>C1</td>
<td>(no other attestation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ir ḫṣ. ṭp. ṭy-ṣ. ṭw 'one who surpassed his ancestors'</td>
<td>C1</td>
<td>(no other attestation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wṣḥ-ḥb 'attentive one'</td>
<td>C1</td>
<td>BH2, BH13, Be5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ḥḥ-ḥb 'capable one'</td>
<td>C1</td>
<td>(no other attestation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ṭḥḥ 'efficient one'</td>
<td>C1</td>
<td>As1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ṣṣ ḳṣ.t ṭyst 'skilled in his planning'</td>
<td>C1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ṭms-ḥc 'strong of arm'</td>
<td>C1</td>
<td>(no other attestation)</td>
</tr>
<tr>
<td>1.4</td>
<td>Humility</td>
<td>(not attested)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Ritual and cult practice</td>
<td>mn ṭb. ṭw m s.t ḍṣ.r.t 'firm soled in the sacred place'</td>
<td>B2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>wḥ. ṭw ṭy 'with pure hands'</td>
<td>C1</td>
<td>Be5</td>
</tr>
<tr>
<td>1.6</td>
<td>Freedom from vice</td>
<td>(not attested)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Events in the official’s career</td>
<td>(not attested)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Metaphors likening the official to gods</td>
<td>(not attested)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

333 BLACKMAN, Meir III, pl. 12.
334 NEWBERRY, Bersheh II, pl. 13.
335 BLACKMAN & APTED, Meir VI, pl. 13.
336 BLACKMAN & APTED, Meir VI, pl. 13.
337 BLACKMAN & APTED, Meir VI, pl. 13.
338 BLACKMAN & APTED, Meir VI.
339 NEWBERRY, Beni Hasan I, pl. 15.
340 NEWBERRY, Beni Hasan I, pl. 41.
341 NEWBERRY, Bersheh II, pl. 15.
342 BLACKMAN, Meir VI, pl. 13. Blackman incorrectly interprets this epithet as ‘sportsman’.
343 BLACKMAN, Meir VI, pl. 13.
344 BLACKMAN, Meir VI, pl. 13.
345 BLACKMAN, Meir VI, pl. 13.
346 BLACKMAN, Meir II, pl. 11.
347 BLACKMAN, Meir II, pl. 11.
348 NEWBERRY, Bersheh II, pl. 13.
### Group 2: Interaction with Superiors (gods and the King)\textsuperscript{349}

<table>
<thead>
<tr>
<th>Cat</th>
<th>Description</th>
<th>Epithets cited in the Meir tomb texts</th>
<th>Attested in Meir tombs</th>
<th>Concordance at other sites. (same or generally similar phrase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Epithets referring to superiors (honour or veneration before gods or the king)</td>
<td>$im\text{sh}$.y, $im\text{sh}$.y $hr$</td>
<td>All tombs - B1, B2, B3, B4, A3, C1</td>
<td>Universally attested.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘venerated one’ also</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘venerated before (deity)’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ms^2$-$hrw$ ‘justified’</td>
<td>All tombs - B1, B2, B3, B4, A3, C1</td>
<td>Universally attested.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(also ..$hr$ – before (deity))</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$nb$ $im\text{sh}$ ‘possessor of honour’</td>
<td>All tombs - B1, B2, B3, B4, A3, C1</td>
<td>Universally attested.</td>
</tr>
<tr>
<td>2.2</td>
<td>Admittance to the afterlife\textsuperscript{350}</td>
<td>$hr$ $k\text{s}$ ‘possessor of a ka’</td>
<td>B2, B4\textsuperscript{359}</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$ds$ $im$.y $sh$.w ‘the Ba that is among effective spirits’</td>
<td>B2\textsuperscript{351}</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td>2.3</td>
<td>The deceased as Osiris</td>
<td>$W\text{sr}$ ‘the Osiris’</td>
<td>B2\textsuperscript{352}</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$W\text{sr}$ $h^3$.ty-$\text{t}^5$ $NN$ $pn$ ‘the Osiris, the governor, this [NAME]’</td>
<td>B2, B4\textsuperscript{354}</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td>2.4</td>
<td>Interaction with gods</td>
<td>$s\text{m}$ $n$ $b\text{n}$. $T$s.$w$y ‘Sem priest of the Mistress of the Two lands’</td>
<td>B2, B3, B4\textsuperscript{355}</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$d\text{sr}$ $m$ $s\text{m}$ $m$ $p\text{r}$. $w$ $w$r.$w$ ‘splendid of guidance in the great house’</td>
<td>B2\textsuperscript{357}</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$hr$.y-$s\text{s}\text{i}3$ $n$.y $W\text{sd}$.yt ‘master of secrets of Nekhbet and Buto’</td>
<td>B4\textsuperscript{358}</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$hr$.y-$h\text{b}$.t $P\text{sd}$.t ‘$s$.t ‘lector-priest of the Great Ennead’</td>
<td>B4\textsuperscript{359}</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$s\text{br}$. $w$r.$t$-$h\text{k}$.w ‘one who adorns the Uraeus’</td>
<td>B4\textsuperscript{360}</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{349} DOXEY (1998), op. cit., 80-151.

\textsuperscript{350} This category is essential to the observance of funerary ritual and is universally attested (absence from a source is assumed to be due to incomplete survival of the record).

\textsuperscript{351} BLACKMAN, Meir II, pl. 11, and Meir III, pls. 8, 21.

\textsuperscript{352} BLACKMAN, Meir II, pl. 8.

\textsuperscript{353} BLACKMAN, Meir II, pl. 8

\textsuperscript{354} BLACKMAN, Meir II, pl. 8.

\textsuperscript{355} BLACKMAN, Meir III, pl. 13.

\textsuperscript{356} DOXEY lists this religious title as an epithet (op. cit., 381) under the category of epithets referring to the official’s role in cult practice (op. cit., 104-8), demonstrating the overlap between the definitions for titles and epithets as discussed. It is recorded in the three Meir tombs by BLACKMAN, Meir II, pl. 11; Meir VI, pl. 13; Meir III, pl. 9.

\textsuperscript{357} BLACKMAN, Meir II, pl. 11.

\textsuperscript{358} BLACKMAN, Meir III, pl. 9.

\textsuperscript{359} Another religious title listed by Doxey as an epithet (see above). Attested in BLACKMAN, Meir III, pl. 9.

\textsuperscript{360} BLACKMAN, Meir III, pl. 9.
<table>
<thead>
<tr>
<th>Cat</th>
<th>Description</th>
<th>Epithets cited in the Meir tomb texts</th>
<th>Attested in Meir tombs</th>
<th>Concordance at other sites. (same or generally similar phrase)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>wr ʿ, wy m s.t šḥkr.t ‘strong of arms in the place of adornment’</td>
<td>C1³⁶¹</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>lnk nbw ‘one who offers gold’</td>
<td>C1³⁶²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>šwr lnk.t šš.t wt ‘one who increases the abundant drink offerings’</td>
<td>C1³⁶³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dwf Psq.t iw·sn ‘one who summons the Ennead that they come’</td>
<td>C1³⁶⁴</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hrpt is·wt nb·t nfr·t ‘controller of every divine office’</td>
<td>B4³⁶⁵</td>
<td>As1, Be2³⁶⁶</td>
</tr>
<tr>
<td>2.5</td>
<td>Epithets referring to the King</td>
<td>(not attested)</td>
<td>(not attested)</td>
<td>As1, BH2: [great of praise</td>
</tr>
<tr>
<td>2.6</td>
<td>Love and favour from a superior</td>
<td>hs·yf·wn mw·r ‘one whom he truly favours’</td>
<td>B2³⁶⁶</td>
<td>As1, BH15, Be8, BH17, BH21³⁶⁸</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hs·f m br·t·hr·w n.t r· nb ‘one whom he favours in the course of every day’</td>
<td>B4³⁶⁹</td>
<td>BH15, BH17³⁷⁰</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lm·y·ib Hr·w nb·t·wy ‘Favourite of Horus lord of the two lands’</td>
<td>B4³⁷¹</td>
<td>As1, Be2; also ‘favourite of his lord’ Be8, BH27²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mr·y nfr ‘beloved of the god’</td>
<td>B4³⁷³</td>
<td>BH3, BH14, BH15, DR1, DR7, As4, Be8³⁷⁴</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hs·y m šḥ.t ‘favoured in the marshlands’</td>
<td>C1³⁷⁵</td>
<td>(no other attestations)</td>
</tr>
<tr>
<td>2.7</td>
<td>Obedience</td>
<td>mḥ·ib nswt ‘confidante of the king’</td>
<td>B2, B4³⁷⁶</td>
<td>Be5, Be8, BH17, As1, As2, As5, QH31, TT60³⁷⁷</td>
</tr>
</tbody>
</table>

³⁶¹ BLACKMAN & APTED, Meir VI, pl. 13.
³⁶² BLACKMAN & APTED, Meir VI, pl. 13.
³⁶³ BLACKMAN & APTED, Meir VI, pl. 13.
³⁶⁴ BLACKMAN & APTED, Meir VI, pl. 13.
³⁶⁵ BLACKMAN, Meir III, pl. 18.
³⁶⁷ BLACKMAN, Meir II, pl. 10.
³⁶⁸ DOXEY (1998), op. cit., 349; NEWBERRY, Beni Hasan II, pls. 4, 7, 16, 22a; Bersheh II, pl. 21.
³⁶⁹ BLACKMAN, Meir III, pl. 9.
³⁷⁰ NEWBERRY, Beni Hasan II, pls. 7, 14.
³⁷¹ BLACKMAN, Meir III, pl. 19.
³⁷² DOXEY (1998), op. cit., 264; NEWBERRY, Bersheh I, pl. 16; Bersheh II, pl. 21; Beni Hasan I, pls. 7, 15.
³⁷³ BLACKMAN, Meir III, pl. 19.
³⁷⁵ BLACKMAN & APTED, Meir VI, pl. 13.
³⁷⁶ BLACKMAN, Meir II, pl. 12.; Meir III, pl. 9.
### CHAPTER 3 - Chronological Framework: Analysis of Texts

<table>
<thead>
<tr>
<th>Cat</th>
<th>Description</th>
<th>Epithets cited in the Meir tomb texts</th>
<th>Attested in Meir tombs</th>
<th>Concordance at other sites. (same or generally similar phrase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8</td>
<td>Selection by the King</td>
<td>(not attested)</td>
<td></td>
<td>As1, As2: promotion or honour by the King over the tomb owner’s peers.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Cat</th>
<th>Description</th>
<th>Epithets cited in the Meir tomb texts</th>
<th>Attested in Meir tombs</th>
<th>Concordance at other sites. (same or generally similar phrase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Terms for fellow officials and administrative departments</td>
<td>sꜣh špšs ‘illustrious noble’</td>
<td>B3³⁸³</td>
<td>BH2 (noble great of years/reputation), As1 (efficient noble), DR1 (worthy noble)³⁹⁴</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ḫr.y-tp wr.w n.y Šmꜣw ‘chief of the great ones of U.E.’</td>
<td>B4³⁸⁵</td>
<td>As4³⁸⁶</td>
</tr>
<tr>
<td>3.2</td>
<td>Common epithets referring to fellow officials</td>
<td>ḫwl ᵃ w ᵃ iw.ty sn.wy-f ‘sole protector without his equal’</td>
<td>B²³⁸⁷</td>
<td>Be2, BH2 (protector)³⁸⁸</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wr.w m is.t(f) ²z m sẖt(f) ‘one great in his office, great in his rank’</td>
<td>C¹³⁸⁹</td>
<td>As1, As2, Be1, Be5³⁹⁰</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shn.ty s.t.f m ḫrd ‘one whose position was advanced in childhood’</td>
<td>C¹³⁹¹</td>
<td>As5³⁹²</td>
</tr>
<tr>
<td>3.3</td>
<td>Administrative responsibilities</td>
<td>ḫr.y-sšš ꜣ n y mšꜣ.t ᵃ ‘master of secrets that only one sees’</td>
<td>B², B⁴³⁹³</td>
<td>As1, BH2, BH3, BH13, Be2³⁹⁴</td>
</tr>
</tbody>
</table>

---

³⁷⁸ BLACKMAN, Meir III, pl. 19.  
³⁸⁰ BLACKMAN, Meir III, pl. 19; & APTED, Meir VI, pl. 13.  
³⁸³ BLACKMAN & APTED, Meir VI, pl. 8.  
³⁸⁴ NEWBERRY, Bersheh I, pl. 7; DOXEY (1998), op. cit., 367; MONTET, Kêmi 6, 140.  
³⁸⁵ BLACKMAN, Meir III, pl. 9.  
³⁸⁷ BLACKMAN, Meir II, pl. 15.  
³⁸⁸ NEWBERRY, Bersheh I, pls. 6, 9; Beni Hasan I, pl. 17.  
³⁸⁹ BLACKMAN & APTED, Meir VI, pl. 13.  
³⁹¹ BLACKMAN & APTED, Meir VI, pl. 13.  
³⁹³ BLACKMAN, Meir II, pl. 15; Meir III, pl. 9.  
³⁹⁴ DOXEY (1998), op. cit., 346-7; NEWBERRY, Beni Hasan I, 12, 42, pl. 41; Bersheh I, pl. 6.  

86
An examination of the distribution of epithets across the above groups demonstrates that the greatest range and number applied to the Meir tomb owners fall into the second group indicating interaction with superiors (the gods and the king). This is in line with Doxey’s findings for the use of this group of epithets on a society-wide basis, given that they play a fundamental role in the mortuary ritual, establishing the tomb owner’s place in the afterlife and perpetuating the mortuary cult. Typical examples include imsh.y (venerated one), msr-hrw (justified) and nb imsh (possessor of honour/veneration), fundamental attributes for admission to the

395 BLACKMAN, Meir II, pl. pl. 8.
396 BLACKMAN, Meir II, pl. pl. 12.
397 BLACKMAN, Meir III, pl. pl. 18.
400 BLACKMAN, Meir VI, pl. 8.
401 BLACKMAN, Meir VI, pl. 11.
402 DOXEY (1988) op. cit.: 27, 80-81.
afterlife and a standard inclusion in the *htp-di-nsw* formula. These specific epithets are most commonly found in the introduction of the recipient or beneficiary of the request, which, while highly formulaic, has been found to exhibit chronological significance in its usage over time (see the discussion in the following section). Also found in the Meir tombs are epithets belonging to this group describing the tomb owner’s interaction with the gods (generally related to religious functions carried out by the individual, these can sometimes be synonymous with religious titles) and those expressing love and favour from a superior. At Meir the only instances of epithets referring directly to the king are those emphasising the obedience of the tomb owner, for example *mḥ-ib nswt* “trusted by the king”.

The epithets of group two reinforce the position of the tomb owner within the Egyptian worldview, and those describing the tomb owner as venerated and justified are prerequisites for admittance to the afterlife.

Group three epithets, indicating interactions with peers (other officials), are relatively less represented in comparison to the previous group, although they are attested in most of the tombs and like the group two epithets are consistently attested through the date range of the tomb series. Group four epithets, indicating interactions with subordinates, are the least encountered at Meir, with only one instance each in a mid-sequence tomb (B3) and a later tomb (C1).

The epithets in group one are the only examples in the Meir tombs that indicate a change in style in the texts across the chronological sequence of the tombs. These epithets place emphasis on the character and conduct of the tomb owner, and show an increasing range of usage in the last tomb in the series (C1), with a single example each for the earlier tombs B2 and B4. This evidence suggests a local departure from Doxey’s findings, which cover a wider set of sources including a large corpus of stelae. While Doxey’s suggestion was that themes around the character and conduct of the official tended to be more common early in the Middle Kingdom on these sources, the evidence from Ukhhotep III’s epithets indicate the opposite trend during the reign of Senusret III at Meir, when compared to the

---

403 B2 north jamb of statue recess, right (outer) column, BLACKMAN (1915a) Meir II: pl.12[3]; B4 Outer Room, west wall doorway to inner room, on inner column of right jamb, BLACKMAN (1915b) Meir III: 16 & pl.9.

epithets of the earlier governors’ tombs, which are strongly reflective of interactions with gods and superiors.

In terms of the comparison sites, several tombs from the First Intermediate Period (Ankhtify at Moalla and Khety I at Asyut) and early Middle Kingdom (Ahanakht and its subsidiary tomb of Iha at Deir el-Bersha) are represented in the group describing the character and conduct of the official, as might be expected from Doxey’s findings. There are however mid-Twelfth Dynasty tombs in this group, including near contemporaries of Ukhhotep III (such as Djefaihapi I at Asyut, Amenemhat and Khnumhotep II from Beni Hasan), indicating the trend was more widespread than the site of Meir.

VI. Offering Formulas: the $htp$-$dnsw$

The $htp$-$dnsw$ or ‘An Offering which the King Gives’ is a fundamental component of the funerary ritual of all periods. During the course of the Middle Kingdom, a number of changes to the formula are attested. It is the most common text found in tombs, on stelae and coffins, and is highly formulaic, exhibiting similar attributes across each type of artifact produced during a given period. The text normally consists of four parts: (1) the King’s formula, (2) the god’s formula which shares the same verbal construction as the King’s formula, (3) the request, and (4) the recipient (or beneficiary of the request, ie. the tomb owner). Besides its ubiquity, changes in orthography and phraseology over time, makes this formula a good candidate for a relative dating study.

The King’s formula, which introduces the text, is the most invariant phrase, and shows no appreciable variation over the course of the Middle Kingdom (although orthographic variation is noted at the end of the Middle Kingdom and the Hyksos period). The gods formula shows more variation than the king’s formula, with

\[\text{FRANKE (2003), JEA [89]: 39-45.}\]
\[\text{ibid.}\]
\[\text{FRANKE (2003), JEA [89]: 46-54.}\]
\[\text{FRANKE (2003), JEA [89]: 54.}\]
\[\text{The general observation is that the word arrangement of } htp-di-nsw \text{ changes during the Hyksos period to the orthography prevalent in the New Kingdom and later, see VERNUS (1991) in Quirke (Ed.) Middle Kingdom Studies: 145-8; SMITHER (1939), JEA [25]: 34-37; Early exceptions to this rule exist however, prior to the Hyksos period where both variations coexisted, see BENNETT (1941b), JEA [27]: 157.}\]
the most frequently encountered gods being Osiris and Anubis, usually mentioned singly. In exceptional cases, other gods are invoked and occasionally more than one are invoked in the same formula. An essential element of the gods formula are the epithets, which have been shown on stelae to vary in different periods, as the associated funerary texts are re-interpreted over time. Subsequent investigations on Middle Kingdom coffins have demonstrated that similar changes to gods epithets, as well as orthographic and grammatical variations, apply to gods formula from these sources as well. As demonstrated below, these conventions are also observed in the texts of the governor’s tomb chapels at Meir and at the comparison sites.

The Gods Formula (phrase 2): the Epithets of Anubis and Osiris

The epithets of Osiris, and to a lesser extent, Anubis, have been shown to vary in usage through the course of the Middle Kingdom and are thus potential chronological indicators.

<table>
<thead>
<tr>
<th>Osirian Epithet</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nb Ddw (Lord of Busiris)</td>
<td>B3⁴¹₃, B4⁴¹⁴, C1⁴¹⁵</td>
<td>Be1,⁴¹⁶ Be4,⁴¹⁷ Be5,⁴¹⁸ BH2,⁴¹⁹ BH3,⁴²⁰ BH13,⁴²¹ BH14,⁴²² BH15,⁴²³ BH33,⁴²⁴ As1,⁴²⁵ As13,1⁴²⁶</td>
</tr>
<tr>
<td>Nb ḫḏw (Lord of Abydos)</td>
<td>B3⁴²⁷, B4⁴²⁸</td>
<td>Be5,⁴²⁹ BH2,⁴³⁰ BH3,⁴³¹ BH15,⁴³² BH33,⁴³³ As1,⁴³⁴ As13,1⁴³⁵</td>
</tr>
</tbody>
</table>

410 BENNETT (1941a), JEA [27]: 77-82 and BENNETT (1958), JEA [44]: 120-21.
411 LAPP (1993), Typologie, Tab. 13-16; Willems (1988), Chests of Life: 89-101
412 BENNETT (1941a), JEA [27]: 77-82
413 BLACKMAN & APTED, Meir VI, pl. 6, stele 1, eastern side. Also pl. 8, on lintel of door to inner room.
414 BLACKMAN, Meir III, pl. 9 & 19, on lintels of inner room doorway and statue recess.
415 BLACKMAN & APTED, Meir VI, pl. 17, north wall of statue recess.
416 NEWBERRY, Berhseh II, pl. 7, lintel to statue recess.
417 NEWBERRY, Berhseh II, pl. 11, fragment.
418 NEWBERRY, Berhseh II, pl. 17, inner chamber front wall.
419 NEWBERRY, Beni Hasan I, pl. 7, on north jamb of entrance.
420 NEWBERRY, Beni Hasan I, pl. 24, on north jamb of entrance.
421 NEWBERRY, Beni Hasan I, pl. 41, on exterior north jamb.
422 NEWBERRY, Beni Hasan I, pl. 46, north wall.
423 NEWBERRY, Beni Hasan II, pl. 4, north wall; pl. 5; pl. 7, south wall.
424 NEWBERRY, Beni Hasan II, pl. 36, east wall.
425 EL KHADRAY (2007), GM 212, 48-9, Fig 4, western wall; GRIFFITH, Siut & Deir Rifeh I, pl. 1.
426 EL KHADRAY (2007), SAK 36, 108-9, Fig 3, northern wall.
427 BLACKMAN & APTED, Meir VI, pl. 6, stele 1, eastern side.
428 BLACKMAN, Meir III, pl. 27, on south jamb of inner room false door.
429 NEWBERRY, Berhseh II, pl. 17, inner chamber front wall.
430 NEWBERRY, Beni Hasan I, pl. 7, on north jamb of entrance.
431 NEWBERRY, Beni Hasan I, pl. 24, on north jamb of entrance.
CHAPTER 3 - Chronological Framework: Analysis of Texts

<table>
<thead>
<tr>
<th>Osirian Epithet</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>xnt.y imn.tyw (Foremost of the Westerners)</td>
<td>Not attested</td>
<td>Be1,436 Be5,437 BH15,438 BH33,439 As13,1440</td>
</tr>
<tr>
<td>ntr ss, (The Great God)</td>
<td>B2441 B3442 A3443 B4444, C1445</td>
<td>Be5,446 BH2,447 BH3,448 BH13,449 As1450</td>
</tr>
<tr>
<td>xnt.y sbgw, (The Foremost of Abydos)</td>
<td>B2451 A3452</td>
<td></td>
</tr>
<tr>
<td>nb imn.t, (The Lord of the West)</td>
<td>B2453 A3454</td>
<td></td>
</tr>
<tr>
<td>nb nhh, (The Lord of Eternity)</td>
<td>B2455</td>
<td></td>
</tr>
<tr>
<td>m s.wtr-f nb.t (He who is in all his places)</td>
<td>Not attested</td>
<td></td>
</tr>
<tr>
<td>nb nHH-tt-wy, (The Lord of the Two Living Lands)</td>
<td>Not attested</td>
<td></td>
</tr>
</tbody>
</table>

According to Bennett’s study, Nb Ddw is universally used in the Eleventh Dynasty, and remains very common through to the end of Amenemhat II, reducing in frequency under Senusret III and Amenemhat IV and declining thereafter.456 This is also associated with a changing orthography, to be discussed in the following section. The evidence at Meir however shows it to be used only in the last three tombs of the series, with the epithets xnt.y sbgw, nb imn.t and nb nhh used

432 NEWBERRY, Beni Hasan II, pl. 4, north wall; pl. 5; pl. 7, south wall.
433 NEWBERRY, Beni Hasan II, pl. 36, east wall.
434 EL KHADRAGY (2007), GM 212, 48-9, Fig 4, western wall; GRIFFITH, Siut & Deir Rifeh I, pl. 1.
435 EL KHADRAGY (2007), SAK 36, 108-9, Fig 3, northern wall.
436 NEWBERRY, Berhseh II, pl. 7, lintel to statue recess.
437 NEWBERRY, Berhseh II, pl. 17, inner chamber front wall.
438 NEWBERRY, Beni Hasan II, pl. 4, north wall; pl. 5; pl.7, south wall.
439 NEWBERRY, Beni Hasan II, pl. 36, east wall.
440 EL KHADRAGY (2007), SAK 36, 108-9, Fig 3, northern wall.
441 BLACKMAN, Meir II, pl.12, on south jamb of statue recess.
442 BLACKMAN & APTED, Meir VI, pl. 6, stele 1, eastern side.
443 BLACKMAN & APTED, Meir VI, pl. 5, on lintel of statue recess.
444 BLACKMAN, Meir III, pl. 27, on south jamb of inner room false door.
445 BLACKMAN & APTED, Meir VI, pl. 17, north wall of statue recess.
446 NEWBERRY, Berhseh II, pl. 17, inner chamber front wall.
447 NEWBERRY, Beni Hasan I, pl. 7, on north jamb of entrance.
448 NEWBERRY, Beni Hasan I, pl. 24, on north jamb of entrance.
449 NEWBERRY, Beni Hasan I, pl. 41, on exterior north jamb
450 EL KHADRAGY (2007), GM 212, 48-9, Fig 4, western wall; GRIFFITH, Siut & Deir Rifeh I, pl. 1.
451 BLACKMAN, Meir II, pl.12, on south jamb of statue recess.
452 BLACKMAN & APTED, Meir VI, pl. 5, on lintel of statue recess.
453 BLACKMAN, Meir II, pl.12, on south jamb of statue recess.
454 BLACKMAN & APTED, Meir VI, pl. 5, on lintel of statue recess.
455 BLACKMAN, Meir II, pl.12, on south jamb of statue recess.
456 BENNETT (1941a), op. cit.: 78-79
preferentially in the earlier tombs of Ukhhotep I and Ukhhotep son of Iam (but not observed at the comparison sites). Only nṯr ḫḥ is found in all the Meir tombs.

Bennett states that ḫnt. ṭy inṃ.tyw is common from the Eleventh Dynasty through to the end of Senusret III, and gradually reduces in frequency after this reign. Like the orthography of the god’s name Osiris, it is accompanied by a seated god determinative in early usage.\(^{457}\) While it is not attested at Meir, its usage in the tombs at Asyut, Beni Hasan and El-Bersha tend to support this finding, being more predominant in the above table in the earlier tombs at the respective sites (the tomb of Dje hustinakht VI being the notable exception).

Neither epithets nb ṭnb-ts.wy, which is more frequently encountered from the end of the reign of Amenemhat III,\(^{458}\) or m s.wt-f nb.t, which is reported to be a strong characteristic of Eleventh Dynasty inscriptions,\(^{459}\) are attested at Meir or the comparison sites. As the majority of tombs in the study fall in between the periods of major usage of these epithets the findings are to be expected, although their absence is noted from the earlier tombs at Beni Hasan and Asyut.

The use of specific epithets of Osiris is clearly also subject to local customs or rituals, with ḫnt. ṭy inṃ.tyw being absent at Meir, while at the same site a broader range of epithets are attested than are observed at the comparison sites, specifically the three discussed above which are observed in the early tombs at Meir but are not attested in the comparison tombs.

Epithets of Anubis do not exhibit the same clear patterns of use within a chronological dimension, however, some small variability is observed within the Meir corpus involving the following:

<table>
<thead>
<tr>
<th>Anubian Epithet</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫnt. ṭy šḫ-nṯr, (Foremost)</td>
<td>Not attested</td>
<td>BH2,(^{460}) BH13,(^{461}) BH17,(^{462}) BH33(^{463})</td>
</tr>
</tbody>
</table>

\(^{457}\) BENNETT (1941a), op. cit.: 78
\(^{458}\) BENNETT (1941a), op. cit.: 80
\(^{459}\) BENNETT (1941a), op. cit.: 80
\(^{460}\) NEWBERRY, Beni Hasan I, pl. 15, on south jamb of statue recess. Also pl. 19, recess north wall.
\(^{461}\) NEWBERRY, Beni Hasan I, pl. 41, on exterior south jamb.
\(^{462}\) NEWBERRY, Beni Hasan II, pl. 7, Architrave. Also on north & west walls, pls. 12, 13.
\(^{463}\) NEWBERRY, Beni Hasan II, pl. 35, north wall.
CHAPTER 3 - Chronological Framework: Analysis of Texts

<table>
<thead>
<tr>
<th>Anubian Epithet</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>of the God’s booth)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>tp.y dwfr</em> (He who is upon his mountain)</td>
<td>B2404, B3405, A3466, B4467, C1468</td>
<td>Be5, 460, BH2, 470, BH3, 471, BH13, 432, BH15, 473, BH17, 474, BH33, 475, As1, 476</td>
</tr>
<tr>
<td><em>im.y-wt</em> (He who is in the embalming place)</td>
<td>B3477, A3478, C1479</td>
<td>Be5, 460, BH2, 453, BH3, 482, BH13, 482, BH15, 484, BH17, 485, BH33, 486, As1, 487</td>
</tr>
<tr>
<td><em>nb t3-dsr</em> (Lord of the sacred land)</td>
<td>B3468, A3489, B4493, C1491</td>
<td>Be1, 498, BH2, 495, BH3, 494, BH4, 495, BH15, 496, BH17, 497, BH33, 498, As1, 497, AsN13, 100</td>
</tr>
<tr>
<td><em>nb r-krr.t</em> (Lord of the tomb chamber)</td>
<td>Not attested</td>
<td>As1, 501, AsN13, 102</td>
</tr>
<tr>
<td><em>snm ts.wy</em> (Mighty)</td>
<td>B2503, A3304</td>
<td>Not attested</td>
</tr>
</tbody>
</table>

464 BLACKMAN, *Meir II*, pl.12, on north jamb of statue recess.
465 BLACKMAN & APTED, *Meir VI*, pl. 6, on stele 1, western side. Also pl. 8 on lintel, inner room door.
466 BLACKMAN & APTED, *Meir VI*, pl. 5, on north jamb of statue recess.
467 BLACKMAN, *Meir III*, pl. 9 & 19, on lintels of inner room doorway and statue recess.
468 BLACKMAN & APTED, *Meir VI*, pl. 15, south wall of statue recess.
469 NEWBERRY, *Berhseh II*, pl. 13, left side of statue recess.
470 NEWBERRY, *Beni Hasan I*, pl. 7, on south jamb of entrance.
471 NEWBERRY, *Beni Hasan I*, pl. 24, on south jamb of entrance.
472 NEWBERRY, *Beni Hasan I*, pl. 41, on exterior south jamb.
473 NEWBERRY, *Beni Hasan II*, pl. 7, south wall.
474 NEWBERRY, *Beni Hasan II*, pl. 7, Architrave. Also on north & west walls, pls. 12, 13.
475 NEWBERRY, *Beni Hasan II*, pl. 35, north wall.
477 BLACKMAN & APTED, *Meir VI*, pl. 6, on stele 1, western side.
478 BLACKMAN & APTED, *Meir VI*, pl. 5, on north jamb of statue recess.
479 BLACKMAN & APTED, *Meir VI*, pl. 15, south wall of statue recess.
480 NEWBERRY, *Berhseh II*, pl. 13, left side of statue recess.
481 NEWBERRY, *Beni Hasan I*, pl. 7, on south jamb of entrance.
482 NEWBERRY, *Beni Hasan I*, pl. 24, on south jamb of entrance.
483 NEWBERRY, *Beni Hasan I*, pl. 41, on exterior south jamb.
484 NEWBERRY, *Beni Hasan II*, pl. 7, south wall.
486 NEWBERRY, *Beni Hasan II*, pl. 35, north wall.
488 BLACKMAN & APTED, *Meir VI*, pl. 6, on stele 1, western side.
489 BLACKMAN & APTED, *Meir VI*, pl. 5, on north jamb of statue recess.
490 BLACKMAN, *Meir III*, pl. 27, on north jamb of inner room false door.
491 BLACKMAN & APTED, *Meir VI*, pl. 15, south wall of statue recess.
492 NEWBERRY, *Berhseh II*, pl. 7, left side of statue recess.
493 NEWBERRY, *Beni Hasan I*, pl. 7, on south jamb of entrance.
494 NEWBERRY, *Beni Hasan I*, pl. 24, on south jamb of entrance.
495 NEWBERRY, *Beni Hasan I*, pl. 41, on exterior south jamb.
496 NEWBERRY, *Beni Hasan II*, pl. 7, south wall.
497 NEWBERRY, *Beni Hasan II*, pl. 7, Architrave. Also on north & west walls, pls. 12, 13.
500 EL KHADRAY (2007), *SAK 36*, 108-9, Fig 3, northern wall.
503 BLACKMAN, *Meir II*, pl.12, on north jamb of statue recess.
Anubian Epithet | Attested in Meir Tomb | Attested at Comparison Sites
---|---|---
One (Sceptre) of the Two Lands | | 

The most important observation from the results is that epithets of Anubis are more subject to local variation than chronological variation, with *shm ts.wy* only attested in the Meir tombs, *ḥnt.y sh-nṯr* only attested at Beni Hasan and *nb r-ḥrr.t* being a characteristic of the Siutian tombs. At Meir, only *tp.y ḏwšf* is observed in all the tombs, while the other epithets *im.y-wt* and *nb ts-ḏsṛ* are only attested in tombs later than that of Ukhhotep I. The general observation however is that with these minor exceptions, the usage of the Anubian epithets remains fairly constant at all sites under study over time.

**The Offering/Request (phrase 3): Variations in introduction and forms of the request**

Following the gods formula is the request, which (depending on the context of the source text) is usually an invocation offering (*pri.t-ḥrw*), a request for a good burial (*krs.t nfr.t*) or (primarily on coffins) a wish that the deceased may travel on the good ways (*ḥpy=f hṛ wꜣwt nfrwt*). In the case of the Meir coffins, the invocation offering is normally associated with the Osiris formula on the East side horizontal text, while the request for a good burial is found on the West side horizontal text with the Anubis formula. This is particularly so for the coffins displaying a more complex outer decoration scheme, although on some of the simpler coffins, the invocation offering and good burial requests have switched sides, so that the Osiris formula on the East requests a good burial while the Anubis formula on the West asks for an invocation offering. The wish that the deceased travel on the good ways is associated with an Anubis formula and is common on the lid texts, particularly for those coffins with three or less vertical text columns on the long sides (see chapter four, part two for a text-based analysis of the Meir coffins).

<table>
<thead>
<tr>
<th>Attribute of the Request</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct introduction</td>
<td>B1,505 B2,506 B4507</td>
<td>BH33, BH15, BH17, BH14, Be5, TT60, As1508</td>
</tr>
</tbody>
</table>

504 BLACKMAN & APTED, *Meir VI*, pl. 5, on north jamb of statue recess.
### CHAPTER 3 - Chronological Framework: Analysis of Texts

<table>
<thead>
<tr>
<th>Attribute of the Request</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced by $dl$-$f$</td>
<td>B3,508 A3,510 C1$^{511}$</td>
<td>BH2, BH3, Be1</td>
</tr>
<tr>
<td>Invocation offerings in the form of $pri$-$t$-$hrw$</td>
<td>B3,512 A3,513 B4,514 C1$^{515}$</td>
<td>BH33, BH15, BH17, BH2, BH3, Be5, Be1, TT60, As1$^{516}$</td>
</tr>
<tr>
<td>Offerings as $h3$ $m$ ...(a thousand of...)</td>
<td>B1,517 B2,518 A3$^{519}$</td>
<td>TT60</td>
</tr>
<tr>
<td>Basic list of bread, beer, fowl and beef</td>
<td>B1520</td>
<td>BH33, BH15, BH17, Be5, Be1, TT60</td>
</tr>
<tr>
<td>Elaboration of basic list to include oil, linen and alabaster and incense</td>
<td>B2,521 B3,522 A3,523 B4,524 C1$^{525}$</td>
<td>BH2, BH3, As1$^{526}$</td>
</tr>
<tr>
<td>Inclusion of $lh.t$ $nb.t$ $nfr.t$ $w$/$b.t$ $\chi nh.t$ $nfr$ $im$ (every good and pure thing upon which a god lives) or variation thereof</td>
<td>B2,527 B3,528 A3,529 B4,530 C1$^{531}$</td>
<td>BH2, As1$^{532}$</td>
</tr>
<tr>
<td>$krs.tw=f$ $nfr.t$ $smi.t$ (that he may be buried well in the necropolis) – <em>Anubis formula</em> in verbal construction.</td>
<td></td>
<td>BH33</td>
</tr>
</tbody>
</table>

---

510 BLACKMAN & APTED, *Meir VI*, pl. 5.
513 BLACKMAN & APTED, *Meir VI*, pl. 5.
519 BLACKMAN & APTED, *Meir VI*, pl. 5.
520 BLACKMAN, *Meir I*, pl. 9.
523 BLACKMAN & APTED, *Meir VI*, pl. 5.
525 BLACKMAN & APTED, *Meir VI*, pl. 15.
529 BLACKMAN & APTED, *Meir VI*, pl. 5.
531 BLACKMAN & APTED, *Meir VI*, pl. 15.
Differences exist in the form of these requests, which may infer a chronological variation. The most obvious of these is the tendency of the invocation offering to be introduced on Twelfth Dynasty inscriptions (post B3 at Meir ~ Senusret I) by a prospective *di=f*: ‘may he (*the god*) give’. It has been shown elsewhere that the requests are commonly introduced by this prospective element during the reign of Amenemhat I, although the earliest isolated usage is from the Sixth Dynasty.

Prior to the Twelfth Dynasty, however, it was usual to encounter the invocation offering as a ‘bare’ *pri.t-hrw*, without the introduction. In rare cases, the phrase *pri.t-hrw* is replaced by the wording: *hḥ m *(a thousand of…*) bread, beer etc., as seen in Meir tombs B1, B2 and A3, reflecting a style which echoes the typical Old Kingdom offering formula. In other examples, the *hḥ m* construction follows *pri.t-hrw*, also in the Eleventh and early Twelfth Dynasties. The tendency towards more elaborate writings increases in the Twelfth Dynasty, so that orthographic features such as the use of expletive and plural strokes, although found on Eleventh Dynasty sources, become more common, and additional words and phrases are added to emphasise *pri.t-hrw*. These include the commodities of oil, linen and alabaster and incense being added immediately thereafter, and/or the phrase *ḥḥ ṭ nb.t nfr.t w£b.t ṭnh.t nfr im* (every good and pure thing upon which a god lives), or its variations being included. Both of these elaborations are attested in all the Meir tombs except for B1.

The request for a good burial shows minor change from an initial verbal construction *krš.tw=ḥ f nfr.t* in the Eleventh Dynasty to a nominal form *krš.t nfr.t* in the

<table>
<thead>
<tr>
<th>Attribute of the Request</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>krš.t nfr.t m smt.t</em> (a good burial in the necropolis) ~ Anubis formula nominal form.</td>
<td>C1</td>
<td>BH15, BH2, Be1, As1</td>
</tr>
</tbody>
</table>

533 BLACKMAN & APTED, Meir VI, pl. 15.
534 EL KHADAGARY (2007), GM 212, 48-9, Fig 4, western wall; GRIFFITH, Siut & Deir Rifeh I, pl. 1.
535 SPANEL (1996), *op. cit.*: 768 & Appendix C, 779-86
536 FRANKE (2003), *op. cit.*: 46, citing the false door of Nefershesemre, Saqqara
537 FRANKE (2003), *op. cit.*: 49, citing stele Louvre C166, dated Senusret I, year 17. See also this form on Meir coffins JE42949, Rerut and MMA12.182.132A-B, Ukhhotep.
538 FRANKE (2003), *op. cit.*: 49, citing Turin cat. no. 1513; SPANEL (1996), *op. cit.*: 774, 780 (stelae Brooklyn 54.66 and Brooklyn 37.1346E).
539 SPANEL (1996), *op. cit.*: 771
540 SPANEL (1996), *op. cit.*: 768
Twelfth, and in the latter case may also be introduced by the prospective di=f, similar to the invocation offering.541

The Recipient of the Request (phrase 4): the Introduction of the Beneficiary

The final element of the htp-di-nsw formula is the introduction of the recipient or beneficiary of the request. Until late in the first decade of Senusret I, the beneficiary was invariably introduced by n or n im3h[y/w] (“for NN” or “for the venerated one, NN”). Following this point however, the introduction was often to the ks of the beneficiary, n ks n.y NN.

<table>
<thead>
<tr>
<th>Recipient of the request</th>
<th>Attested in Meir Tomb</th>
<th>Attested at Comparison Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>The tomb owner as beneficiary – n (im3h[y/w]) ‘NN’</td>
<td>B1542</td>
<td>BH33, BH15, BH17, Be5, Be1,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TT60, As1543</td>
</tr>
<tr>
<td>The tomb owner’s ks as beneficiary – n ks n.y ‘NN’</td>
<td>B2,544 B3,545 A3,546 B4,547 C1548</td>
<td>BH2, BH3</td>
</tr>
<tr>
<td>Tomb owner ‘justified’ (true of voice) – ms’ hrw</td>
<td>B2,549 B3,550 A3,551 B4552</td>
<td>BH2, BH3, TT60, Be1</td>
</tr>
<tr>
<td>Tomb owner ‘possessor of honour’ – nb im3h</td>
<td>B1553</td>
<td>Be1</td>
</tr>
</tbody>
</table>

Although offerings to the ks of the tomb owner was encountered in tomb relief as early as the Sixth Dynasty, and on stelae from the Eleventh Dynasty, this was never within the context of the htp-di-nsw formula, which retained its archaic usage until Senusret I.554 Even after this new form came into usage in the offering formula, direct introduction to the beneficiary (rather than to his ks) remained commonplace, so this feature can not be taken as key dating criterion on its own,555 and if not

541 LAPP (1993), op. cit.: 117
542 BLACKMAN, Meir I, pl. 9.
544 BLACKMAN, Meir II, pl. 12.
545 BLACKMAN & APTED, Meir VI, pl. 6.
546 BLACKMAN & APTED, Meir VI, pl. 5.
547 BLACKMAN, Meir III, pl. 19.
548 BLACKMAN & APTED, Meir VI, pl. 15.
549 BLACKMAN, Meir II, pl. 12.
550 BLACKMAN & APTED, Meir VI, pl. 6.
551 BLACKMAN & APTED, Meir VI, pl. 5.
552 BLACKMAN, Meir III, pl. 19.
553 BLACKMAN, Meir I, pl. 9.
554 FRANKE (2003), op. cit.: 54, citing Ankhmahor and Neferseshemptah (Saqqara, 6th Dynasty) and 11th Dynasty stelae Moscow 25, 26, Cairo CG20543, Turin 1447, BM EA614 and EA 152.
555 FRANKE (2003), op. cit.: 54
present on a source, can not infer that the source is prior to Senusret I. From the late Eleventh to early Twelfth Dynasty, the name of the beneficiary would occasionally be followed by the epithet \( ms^r-hrw \) ("justified"), and from the mid Twelfth Dynasty an additional epithet \( nb-im\tilde{n}h \) ("possessor of honour") came into use on some sources.\(^{556}\) Like the previous case, an absence of these epithets does not preclude the source from being dated to either Dynasty on other grounds. This is supported by the observations above, where \( ms^r-hrw \) is commonly seen in the Meir tombs and the comparison tombs, however \( nb-im\tilde{n}h \) is only attested in a single tomb each at Meir and el-Bersha (both earlier than the mid Twelfth Dynasty).

VII. Palaeographic and Orthographic Indicators

Several palaeographic and orthographic indicators may add additional relative dating evidence when present, although the usage of older forms generally persists on some sources. Palaeographic indicators of note include the mud seal on the book roll determinative and the form of the \( im\tilde{n}h \) sign. The book roll, which up to the end of the Eleventh Dynasty included no ties on the mud seal, may often be observed from the time of Amenemhat I with one or two string ties.\(^{557}\) Notwithstanding, two ties are attested in the Sixth Dynasty tomb of Niankhpepi/Henikem at Meir.\(^{558}\) In the case of the \( im\tilde{n}h \) sign, the usual vertically descending tail may occasionally be observed with near horizontal tails,\(^{559}\) as is observed in Meir tomb B1\(^{560}\) dating to late Amenemhat I, and more pronounced on the statue recess of B2\(^{561}\) (dated to Senusret I).

General orthographic changes to be noted are the increased use of expletive and plural strokes from the beginning of the Twelfth Dynasty onward.\(^{562}\) In the Eleventh Dynasty, the inclusion of a seated god determinative in the writing of the name of Osiris was commonplace.\(^{563}\) The writing of the place name \( \text{Dd}w \) is also

---

\(^{556}\) LAPP (1993), op. cit.: 118
\(^{558}\) BLACKMAN, Meir I, pl. 6, 8; this is also noted by Spanel, who mentions the same is attested in the adjacent tomb of Pepiankh-Henikem, see BROVARSKI (2010) in Studies Kanawati (Woods et al. Eds.), 53.
\(^{559}\) WILLEMS (1988), Chests of Life, 89.
\(^{560}\) BLACKMAN, Meir I, pl. 9.
\(^{561}\) BLACKMAN, Meir II, pl. 12.
\(^{562}\) SPANEL (1996), op. cit., 766.
\(^{563}\) BENNETT (1941), op. cit., 78; WILLEMS (1988), op. cit., 90.
observed to undergo changes in sign order over time, with the usual form showing
the Djed pillar as the initial sign being common through the Twelfth Dynasty up to
the time of Senusret III. During the Eleventh Dynasty, a writing with two ‘d’ (hand)
signs was sometimes employed, while from late Amenemhat III two Djed pillars
were frequently written.\footnote{BENNETT (1941), \textit{op. cit.}, 78-9; WILLEMS (1988), \textit{op. cit.}, 90.} This is observed at Meir, with the usual orthography of
Djedu being observed in tombs B2, B3, A3 and B4, while the late form with two Djed
pillars can be seen as part of the name \textit{Wsr-Ddwd} in an Isis wish formula in the statue
recess of C1.\footnote{BLACKMAN & APTED, \textit{Meir VI}, pl. 17.} In the Heracleopolitan period tomb BH33 the usual orthography of
Djedu is observed, however, the writing of the god’s name Osiris does include the
determinative symbol,\footnote{NEWBERRY, \textit{Beni Hasan II}, pl. 36.} as does the early Twelfth Dynasty tomb B2 at Meir\footnote{BLACKMAN, \textit{Meir II}, pl. 12.} (with
this not being observed in the later tombs of the sequence B3, A3, B4, C1).

\textbf{VIII. Chapter Summary}

A chronological framework has been established with fixed dating points provided
by tombs with regnal citations in the text. Only one tomb at Meir (B4 of Ukhhotep
II) exhibits such a reference, however all three decorated Twelfth Dynasty tombs at
Beni Hasan (BH14 of Khnumhotep I, BH2 of Amenemhat and BH3 of Khnumhotep
II) can be dated by this method, along with the most prominent Twelfth Dynasty
tombs at Deir el-Bersha (Be2 of Djehuthihotep), Asyut (As1 of Djefaihapi I), Western
Thebes (TT60 of Senet/Intefiqer) and Qubbet el-Hawa (QH31 of Sarenput II).

Using these fixed dating points as a reference, relative dating of the remaining
tombs are established as far as possible by ordering the sequences of tomb owners
at each site based on lines of succession documented in the texts. Where no fixed
dating point exists for a sequence of tombs (for example, the Baqet Family Dynasty
at Beni Hasan and the Ahanakht family sequence at Deir el-Bersha), features of
tomb architecture, art style and execution examined in the next chapter will add
additional evidence to place the tomb sequences in the appropriate time period.
The consolidated dating framework based on the combination of fixed and relative
textual data is presented in table 3-1.
### Table 3-1 Consolidated Dating Framework

<table>
<thead>
<tr>
<th>Reign</th>
<th>Dynasty</th>
<th>Meir Tombs</th>
<th>Comparison Tombs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neferkare</td>
<td>[IX]?</td>
<td></td>
<td>Ankhify (Mo1)</td>
</tr>
<tr>
<td>Unspecified Heracleopolitan/Theban Intef Dynasty</td>
<td>[XI]/pre-unified [XI]</td>
<td>Khety I (As5) Baqet I (BH29) Iti-ibi (As3) Ahanakht I (Be5) Baqet II (BH33) Ahanakht II (17K84/1)</td>
<td></td>
</tr>
<tr>
<td>Merykare</td>
<td>[X]</td>
<td></td>
<td>Khety II (As4)</td>
</tr>
<tr>
<td>Nebhepetre Mentuhotep II</td>
<td>[XI.4]</td>
<td>Iti-ibi-iqer (Siut N13-1) Remushenti (BH27) Neheri I (Be4) Khety (TT311) - yr 40. Dagi (TT103) Meketre (TT280) Baqet III (BH15)</td>
<td></td>
</tr>
<tr>
<td>Sankhkare Mentuhotep III</td>
<td>[XI.5]</td>
<td>Henenu (TT313) Khety (BH17)</td>
<td></td>
</tr>
<tr>
<td>Amenemhat I Sehetepibre</td>
<td>[XII.1]</td>
<td>Senbi I (Meir-B1) Khety (BH17) continued Neheri II (Be7) Khnumhotep I (BH14)</td>
<td></td>
</tr>
<tr>
<td>Senusret I Kheperkare</td>
<td>[XII.2]</td>
<td>Ukkhopot I (Meir-B2) Senbi II (Meir-B3) Intefqer (TT60)- yr 20 Sarenput I (QH36) Djefaihapi I (As1) Amenemhat (Be3) - yr 31 Amenemhat (BH2) - yr 43 Djehutinakht VI (Be1)</td>
<td></td>
</tr>
<tr>
<td>Amenemhat II Nubkaure</td>
<td>[XII.3]</td>
<td>Construction of A3 statue recess. Ukkhopot II (Meir-B4) Sarenput II (QH31) Djehutihiotep (Be2) Khnumhotep II (BH3) - yr 19</td>
<td></td>
</tr>
<tr>
<td>Senusret II Khaikheperre</td>
<td>[XII.4]</td>
<td>Ukkhopot III (Meir-C1) Djehutihiotep (Be2) continued</td>
<td></td>
</tr>
<tr>
<td>Senusret III Khakaure</td>
<td>[XII.5]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amenemhat III Ninnaatre</td>
<td>[XII.6]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To round off the analysis of the tomb texts, two aspects of texts common to all tombs were studied for testing against the findings of prior scholarship in their respective areas, these being (1) the titles and epithets of the tomb owner and (2) a detailed breakdown of the *Htp-di-nsw* funerary formula. The results of this analysis indicate that caution should be observed when applying the established paradigm for relative dating to a relatively small corpus of elite tombs such as those of the provincial governors, given the more diverse data sets used for tomb owner’s epithets\(^{568}\) and the *Htp-di-nsw* formula\(^{569}\).

\(^{568}\) DOXEY (1998), Epithets.
In the case of the Meir tombs, the analysis of the tomb owner’s epithets indicated contrary findings to those of Doxey, whose report concluded that epithets in tomb texts focusing on the tomb owner decrease in frequency post reunification. In the first of the Meir tombs (Senbi I, B1) epithets refer exclusively to the tomb owner’s relationship to gods, while epithets relating to the character and conduct of the tomb owner appear gradually in the later tombs, and are prominent in the final tomb of the sequence (Ukhhotep III, C1). In this respect the usage pattern of epithets in the Meir tombs is a precursor of Doxey’s findings for expedition inscriptions, where she describes a resurgence in official self presentation in the second half of the Twelfth Dynasty (from the reign of Senusret III). In the case of the comparison tombs, the results were more equivocal, with epithets focusing on the tomb owner’s positive attributes attested in both early and late tombs at Beni Hasan and Deir el-Bersha.

---

569 BENNETT (1941) JEA 27, 77-82 & (1958), JEA 44, 120-121, on stelae inscriptions only; LAPP (1986), Opferformel; FRANKE (2003), JEA 89, 39-57.
570 DOXEY cites the Asyut tombs as an example, due to the range of Heracleopolitan and Middle Kingdom tombs with fixed dating criteria (see op. cit. p 218).
CHAPTER FOUR

THE MEIR TOMBS: ARCHITECTURE AND ARCHAEOLOGY

The purpose of this chapter is twofold:

(1) To review the physical evidence of the governors’ tombs at Meir with specific emphasis on tomb architecture, comparing the features observed within the sequence of tombs at the site and also with the elite tombs at comparison sites. The aim of this comparison is to identify physical attributes of the tombs at each site that might indicate a chronological basis, and to assess the degree of commonality across sites of those chronological attributes.

(2) To establish a common chronological comparison between the governors’ tombs at Meir and dateable items of mortuary assemblage (specifically coffins) recovered from associated shaft tombs at the same site.

In the first part of the chapter, a typological scheme is suggested for the Meir tombs, taking into account architectural innovations and features that are influenced by prior examples from tombs at the comparison sites. The focus of this part of the study is the comparison of the governors’ monuments with those of their peers.

The second part of the chapter addresses an equally important aspect of a chronological investigation: the comparison of the governors’ tombs at Meir with the mortuary remains of their direct subordinates at the same site. A dating framework is proposed to identify which persons of the provincial court (who may be members of the extended ruling family, senior officials, or both) are likely to be associated with each governor. The subjects in this part of the study are identified by named coffins previously excavated from shaft tombs situated in close proximity to the governors’ tombs, and for which common text formulae in both coffins and tombs allow for a valid comparison to be made.
I. The Tombs of the Governors

a) General Description of the Meir Tombs

Four of the large rock tombs of the Middle Kingdom governors are located along a terrace on the B group ridgeline of the Meir necropolis (from the northernmost tomb B1 to southernmost B4, of Senbi I, Ukhhotep I, Senbi II and Ukhhotep II respectively). A further large tomb (C1 of Ukhhotep III, the last of the sequence) is situated slightly higher on its own terrace about one hundred meters to the south, on the adjacent ridge of group C. The B and C ridge lines into which the tombs are excavated are located approximately two thirds of the way up the escarpment towards the high Western Desert, and are separated by a small wadi. In addition to these, the smaller tomb A3 attributed to Ukhhotep son of Iam is located on ridge A to the north, on the upper terrace directly above the Sixth Dynasty tombs of Niankh-Pepy-kem (A1) and Pepyankh-Heni-kem (A2). While the dating of the actual tomb chamber of A3 can’t be determined (and given its location it may have been excavated during the Sixth Dynasty), the statue recess and associated lintel and jamb texts are definitively dateable to the Twelfth Dynasty in style and content. In this study only the statue recess is considered to be a Middle Kingdom component of the tomb.

The Middle Kingdom tombs represent a simpler architectural style than those of the Sixth Dynasty governors located in group A on the adjacent northerly ridge (also separated from the B group by a wadi), and the internal chambers of the B group tombs are correspondingly smaller than their old kingdom counterparts at Meir. Three of the five Middle Kingdom tomb chapels consist of a single square or rectangular room, and are also generally smaller than contemporary tombs at the comparison sites. Two of the tombs (B3 and B4) contain a second chamber,

571 The ridge outcrops, separated by small wadis, are described here as designated by BLACKMAN (1914), Meir I, 5. See the Geographical Overview and Organisation of the Site in Chapter One of this study.
572 A map showing the relative positions of the tombs of the three groups was prepared during the 2011 site visit to collect data for this thesis, see Appendix A, Map A-1.
573 A position also established by WILLEMS (1988), op. cit., 85.
574 Specifically, the principal comparison tombs A1 (P10.1, Djetfaiapei I) at Asyut (KAHL (2012), in Seven Seasons at Asyut, pl. 32), Be2 (17L20/1, Djeuthhotep) at El-Bersha, (NEWBERRY, Bersheh I, pl. 2) and BH2 (Amenemhat) and BH3 (Khnunhotep II) at Beni Hasan (NEWBERRY, Beni Hasan I, pls. 4 & 22, KANAWATI & EVANS, Beni Hassan Vol I, pl. 105-6 and III, pl. 81), all of which attest substantially larger chamber dimensions. The chambers of the earlier tombs at Beni Hasan (BH29, 33, 27, 15 and 17) of the Baqt Family Dynasty and the early Twelfth Dynasty tomb BH14.
although in the case of tomb B4, this represents a small subsidiary side room away from the main axis of the tomb.

As is common with governors’ tombs at the other sites, the Meir tombs are surrounded by shaft burials of family members and minor officials of the provincial court. In the case of group B, many of these subsidiary shaft burials are located on the terrace immediately above and behind the row of the governors’ tombs.

b) Comparative Analysis of Architectural Features

While smaller in scale than some contemporary tombs of the neighbouring thirteenth, fifteenth and sixteenth nomes, the tombs at Meir nevertheless exhibit some common features with their larger counterparts. Table 4.1 presents an overview of typical architectural features for comparison, based on the chronological framework defined in the previous chapter, and listed accordingly.

An initial inspection of the features confirms that local factors exert a major influence on architectural design, leading to significant differences between sites in tomb size and architectural features. The tomb builders would have had constraints imposed on them by the local geography and quality of the rock strata at each site, which in turn may have determined respective tomb sizes, the number of chambers which could be excavated for the complex, and the style of preparation applied to the walls for application of the scenes and texts.

The position of the tomb owner may also play a role in the respective sizes of the tombs, with chapel size being determined by the highest position held by the tomb owner with respect to his peers. As noted in the previous chapter, all of the governors at Beni Hasan except for Khnumhotep II held the title of nomarch (great overlord), whereas only one governor of Meir (Ukhhotep I) did so, and his tomb chamber is slightly larger than that of his father Senbi I. The other Meir governors highest titles were Overseers of Priests, and this may in part account for the

(Khnumhotep I) (NEWBERRY, Beni Hasan I, pl. 43 and II, pl. 2, 9, 26, 27, 34) were also constructed on a larger floor plan than the B group Meir tombs.

575 Nevertheless Khnumhotep II’s tomb BH3 is still built to the same scale as BH2 of the nomarch Amenemhat, as his titles of Overseer of the Eastern Desert and Mayor of Menat-Khufu were presumably seen as equal in rank to Great Overlord.
uniformly smaller chapel dimensions at Meir than are seen in the Beni Hasan nomarchal tombs. Resources available to the tomb owner, in economic and manpower terms, may also have played a role in determining what was ultimately built, and this may also be related to his position. The evidence from the Meir tombs however suggests that chapel size should be considered an indicator of the relative position of the tomb owner, whereas the quality of the chapel's decoration may be a more accurate indicator of the wealth of the owner. This is evident in the comparison of the quality of the decoration of the Meir tombs, especially the relief executed in the first two tombs of the series\(^{576}\) in comparison to that found in some larger contemporary tombs (specifically tombs BH14, BH2 and Be1, which are closest to tombs B1 and B2 chronologically).\(^{577}\) This comparison is examined in detail in the next chapter dealing with art styles and execution.

The exterior of all six of the Middle Kingdom Meir tombs follow the same pattern, which is similar to the style seen on the Old Kingdom governors’ tombs at the site.\(^{578}\) The external face of the tomb is cut into the escarpment, by excavation of a small court into the slope with the flat vertical rear face forming the exterior wall of the chapel. A rectangular doorway was cut in the centre of the wall, leading to the internal excavated chapel. Due to the angle of the escarpment the forecourts thus formed are not large, being about 1 metre deep by 2.5 metres wide in the case of B1,\(^{579}\) 3 x 4 metres for B2,\(^{580}\) 2 x 4.75 metres for B4,\(^{581}\) and 6 x 7 metres for C1.\(^{582}\) This style of exterior, with plain external wall and central doorway is also observed for early Twelfth Dynasty tombs at Beni Hasan (BH14 Khnumhotep I,\(^{583}\) BH21 Nakht\(^{584}\) and BH23 Netjernakht\(^{585}\) ) and El-Bersha (Be1 – 17L30/1, Djehutinakht VI,\(^{586}\) Be3 –

\(^{576}\) Tombs B1, Senbi I and B2, Ukhhotep I (BLACKMAN, *Meir I & II*).
\(^{578}\) See for example, tombs A1 and A2, which feature squared doorways in a vertical tomb frontage, although they share the same narrow terrace rather than having their own rock-cut forecourts, BLACKMAN & APTED, *Meir V*, pl. 1. See also elevation of tomb facades, KANAWATI et al., *The Cemetery of Meir III*, pl. 54.
\(^{580}\) BLACKMAN, *Meir II*, pl. 1.
\(^{581}\) BLACKMAN, *Meir III*, pl. 1.
\(^{582}\) BLACKMAN & APTED, *Meir VI*, pl. 1.
\(^{584}\) NEWBERRY, *Beni Hasan II*, pl. 22.
\(^{585}\) NEWBERRY, *ibid.*, pl. 23.
\(^{586}\) NEWBERRY, *ibid.*, pl. 4.
17L22/1, Amenemhat;\(^\text{587}\) Be7 – 17K77/1, Neheri II\(^\text{588}\), following the same pattern of tomb exteriors for the Eleventh Dynasty tombs at the respective sites (see photo, Fig. 4.4).\(^\text{589}\) The main doorway jambs in all five Meir tombs were squared and dressed smooth, and in tombs B1, B2 and B4 evidence remains of a pivot hole for a wooden door. The tomb builders at Meir maintained this style of façade throughout the period of Middle Kingdom tomb building, even when the more elaborate twin-columned portico style became established first at Beni Hasan with BH2 (Amenemhat, see photo, Fig. 4.5)\(^\text{590}\) and BH3 (Khnumhotep II)\(^\text{591}\) then at El-Bersha with Be2 (17L20/1, Djeutihotep)\(^\text{592}\). In the case of the later tomb C1, however, there is evidence of remnants of a shallow portico constructed as an overhanging eave above the façade of tomb C1 (see photo, Fig. 4.3). This would have been carved into the cliff face without fronting columns, and may have been influenced by a similar structure above the façade of tomb Be3 (17L22/1Amenemhat) at El-Bersha.\(^\text{593}\)

The retention of a plain façade with a small overhanging portico for the final tomb of the series (C1) was possibly due to the constraints of the local geology, with the slope of the hill and rock strata less suitable for constructing a portico than that at the sites of the contemporaneous tombs at El-Bersha (Be2) and Beni Hasan (BH2 and BH3), however, it seems more likely that the builders were following the earlier model of el-Bersha tomb Be3 instead. A mix of local influences may however have been at play, such as a desire to continue the local architectural tradition or the apparent focus by the tomb owners of Meir on the quality of the internal decoration over external ostentation.

An earlier study by Badawy has categorized the internal layouts of the five Middle Kingdom governors’ tombs at Meir into three types.\(^\text{594}\) According to this scheme, the first of these is the predominant Middle Kingdom type at Meir with a single main

---

\(^{587}\) WILLEMS et al. (2009), *MDAIK* (65), 388, Fig 5.

\(^{588}\) GRIFFITH & NEWBERRY, *Bersheh II*, pl. 18. Although destroyed, the façade is determined to have been of the plain front style.


\(^{590}\) NEWBERRY, *Beni Hasan I*, pl. 4.

\(^{591}\) NEWBERRY, *ibid.*, pl. 22.

\(^{592}\) WILLEMS et al. (2009), *op. cit.*, Fig 5.

\(^{593}\) See the reconstruction of the Façade of tomb Be3 (17L22/1, Amenemhat) by WILLEMS et al. (2009), *MDAIK* 65, 388, Fig. 5.

chamber of approximately square floor plan (B1, B4, C1 and A3), while the other types with one example each consist of the rectangular chamber type with two internal pillars (tomb B2), and the type with two chambers on the main axis (B3). This classification is appropriate for a purely architectural study, but is less applicable to a chronological investigation as the predominant type covers the entirety of the time span of the series.

A better scheme of classification should include an assessment of external influences on the development of the architectural style at Meir, and it is proposed here to start the scheme with a basic chamber without elaborations introduced following established practices at other sites. Tomb B1 of Senbi I conforms to this initial style, and reflects the single chamber with flat dressed external façade and doorway, but without internal columns or porticos. This basic style is attested in the earlier Eleventh Dynasty tombs at the site of Beni Hasan and in contemporary early Twelfth Dynasty tombs at Deir el-Bersha. Although tomb B1 is approximately square in floor plan, equivalent tombs at other sites may be square or rectangular in form. The important attributes of the type are as stated, the absence of stylistic elaborations (internal columns, multiple chambers or porticos). The major point of difference between the early Twelfth Dynasty tombs at Meir and El-Bersha and the earlier examples referred to at Beni Hasan (BH14, 21 and 23) is the presence of a statue recess in the back wall and the consequent change of axis of the tombs as a result (discussed further with the seriation results below).

Senbi's son and successor Ukhhotep I styled his adjacent tomb B2 according to the next type in the series, introducing internal columns into the plan. This follows their prior introduction in the late Eleventh Dynasty at Beni Hasan and earlier in the Heracleopolitan period tombs at Asyut. Like the Asyut tombs, the two columns in B2 are square in form, and may have engaged with a transverse architrave (although insufficient remains of the tomb to confirm this feature). The

---

595 Tombs BH27, BH29, BH33. NEWBERRY, Beni Hasan II, pl. 26, 27, 34.
596 Tombs Be7 (17K77/1, Neheri II, GRIFFITH & NEWBERRY Bersheh II, pl. 18), The later Be1 (17L30/1, Djehutinakht VI) and Be3 (17L22/1, Amenemhat), were similar, but with rectangular chambers, GRIFFITH & NEWBERRY Bersheh II, pl. 4, 10.
597 Beni Hasan tombs: BH15 (Baqet III) and BH17 (Khety). NEWBERRY, Beni Hasan II, pl. 2, 9.
columns and architraves were rock cut during the excavation of the chapel, as was normal practice at all the sites, rather than being installed into the tomb during the final construction. The columns created in this fashion are demonstrably features of architectural elaboration, and are not strictly necessary to support the weight of the roof, as evidenced by many of them being robbed away in later eras without causing the chamber to collapse. The internal columns in the Beni Hasan tombs tended towards a more sculpted form than is evident in simple square columns, with those prior to the time of Ukhhotep I being carved into closed lotus bud style and the two later tombs introducing a fluted style of column. The advantage of square columns, however, is that the flat surfaces provide a surface for artistic decoration, as evidenced in tomb B2, and in the early First Intermediate Period tomb of Ankhtify at Moalla. The chapel of tomb B2 is also rectangular in plan, thus differing from its predecessor, although as noted this is not a major determinant for either type, given the variability in chamber geometry in comparison tombs at other sites which may have influenced the Meir tomb builders.

Also demonstrating a typology consistent with this second style is the Siutian tomb As2 of Djefaihapi II (O13.1), and the fact that it aligns most closely in style with the second Twelfth Dynasty tomb at Meir suggests that this governor is a contemporary of Ukhhotep I (and also a likely predecessor of Djefaihapi I at Asyut although serving under the same king, Senusret I).

The third type of tomb in this architectural scheme is identified by the presence of multiple tomb chambers, as evidenced by the large tomb As1 (P10.1) of Djefaihapi I at Asyut, dated to the reign of Senusret I (as well as the following tomb of series, As7 of Djefaihapi III). Tomb As1 contains no less than seven rooms, mostly

599 See the missing columns in As3 (N12.1, Iti-ibi), As4 (N12.2, Khety II), BH17 (Khety), (referenced op. cit.) and the later tombs BH2 (Amenemhat) and BH3 (Khnumhotep II), see KANAWATI & EVANS, Beni Hassan III, pl. 81 and Beni Hassan I, pl. 105-6. Author’s photo (Fig. 4.6) shows missing column in BH2.

600 BH17 (Khety) and BH15 (Baqet III). See also the uninscribed, unattributed tomb BH18 for the same style of column (NEWBERRY, Beni Hasan pl.20).

601 BH2 (Amenemhat) and BH3 (Khnumhotep II). Author’s photo, Fig. 4.6 and KANAWATI & EVANS, op. cit.

602 Vandier, Moalla. Pl. 6, see depictions of Ankhtify on column flats.

603 KAHL (2007), Ancient Asyut: The First Synthesis after 300 Years of Research, 85-86.

604 The ‘Salkhana’ Tomb (As7) of Djefaihapi III. Unfortunately this large monument still remains unpublished, and is currently inaccessible to study. PORTER & MOSS provides a floorplan, PM IV, 260.
arranged around a central axis, but with smaller side rooms located either side of the main axis off the transverse hall. Two tombs at Meir exhibit specific parts of the complex architectural plan of this very large tomb, and thus may be seen to be following the Siutian example at a smaller scale. The tombs in question are B3 (Senbi II), which attests two large tomb chambers arranged on the central axis (the outer of which also attests four square columns), and B4 (Ukhhotep II) which includes a small subsidiary room opening from the rear wall to the right of the statue recess separate to the central axis. Tomb B4 is notably smaller in scale than B3, however it was fully decorated whereas the internal decoration of B3 remained very incomplete. It is also notable for the raised porch fronting the statue recess which is reached by a flight of five steps. The resulting effect creates a sense of grandness without the need for a large space, emphasizing the statue recess as the focus of the tomb. The statue recess of B3 is also reached by four steps, however, the effect is diluted by the size of the tomb as a whole, its distance from the tomb entrance, and its separation from the entrance by the portal to the inner room. As the first of the Meir tombs to incorporate multiple steps fronting the statue recess, it clearly served as a design influence on tomb B4 for this feature, and in turn was likely influenced by the steps fronting the shrine in Asyut tomb As1.

The multi-chamber Siutian model was never adopted into the architectural plans of the mid-Twelfth Dynasty tombs at Beni Hasan or Deir el-Bersha. These three tombs (BH2 of Amenemhat, BH3 of Khnumhotep II and Be2 of Djehutihotep) implemented the primary feature characterizing the final scheme of this typology, in the form of an exterior portico supported by two large columns framing the exterior of the entrance doorway. The interior of the two Beni Hasan examples contain four columns, configured in two longitudinal rows of two each, supporting architraves which run the length of the tomb on either side of the main axis, while tomb Be2 also exhibits a longitudinal orientation to the statue recess, but no internal columns are extant. Their late contemporary at Meir and the final tomb of the

---

605 Badawy’s typology places tomb B4 with B1 and C1 as a type I ‘single square room’ (BADAWY (1966), 136-42). Given the elaborations of the subsidiary side room and the porch fronting the statue recess, it clearly does not belong in the same group with the simple layouts of B1 and C1.

606 See reconstruction of shrine, EL KHADRAGY (2007), GM 212, 56, Fig. 2.

607 BH2, Amenemhat and BH3, Khnumhotep II. See NEWBERRY, Beni Hasan I, pls. 4 and 22. Also see KANAWATI & EVANS, Beni Hassan I & III, op. cit.

608 Be2, Djehutihotep. See NEWBERRY, Bersheh I, pl. 2.
sequence at Meir, C1 of Ukhhotep III, does not follow these tombs by adopting either internal or external columns,\footnote{The overhanging eave portico of tomb C1 without columns, resembling that of Be3 (17L22/1, Amenemhat) has already been referred to (see photo, Fig. 4.3).} but returns to the simple layout of a slightly rectangular single chamber without columns.\footnote{The chamber of tomb C1 is slightly broader (5.32m) than it is deep (4.14m). Refer BLACKMAN, \textit{Meir VI}, pl. 4.} To this form it adds the unique innovation of a bench running around the base of all four internal walls from the doorway meeting at the statue recess (see photo, Fig. 4.2). The same bench feature is also present around the north and west walls of the exterior forecourt in front of the façade (see photo, Fig. 4.3).

Not included in this typology are distinct early Middle Kingdom styles from sites further removed geographically from Meir, as the distinct local architectural features of these tombs appear to have had less appreciable effect on the development of Meir architectural styles. Notable styles here include the Eleventh Dynasty Theban tombs situated in the royal court cemetery of Mentuhotep II on the Asasif,\footnote{Khety TT311, Henenu TT313, Ipi TT315: WINLOCK, \textit{MMAB} 18, fig 6, and 17, fig. 31. Also included is TT280 of Meketre in the north slope of the valley of the abandoned mortuary temple of Amenemhat I behind Sheikh Abd el-Qurna, WINLOCK (1942), \textit{Excavations at Deir el-Bahri}, fig. 2.} which are based on a long entry corridor as their main feature, leading in most cases to a small chamber from which descending passages lead to the burial apartments. Much of the tomb relief was inscribed onto limestone blocks lining the corridors (the little of which survives is compared against the Meir reliefs in the next section). Also excluded are the governors’ tombs at Qau el-Kebir, which are concurrent with the later tombs of the Meir series. The large multi-chamber chapels of these tombs bear some similarities to the earlier Siutian tomb of Djefaihapi I (As1, P10.1). Like the builders of Meir tombs B3 and B4, their builders may have based some of their design on this tomb, but with the addition of substantial masonary and mudbrick constructions fronting the rock cut parts of the tombs to achieve the large scale, rather than deep excavation of the chambers.\footnote{see PETRIE (1930), \textit{Antaeopolis. The Tombs of Qau}; STECKEWEH (1936), \textit{Die Fürstengräber von Qaw}.}

Table 4.1 (following) presents a summary of examined architectural features for the comparison of the Meir governors’ tombs with those of their contemporaries.
Table 4.1 - Architectural Features of the Governors Tombs

<table>
<thead>
<tr>
<th>Owner</th>
<th>Tomb ID</th>
<th>Internal Columns</th>
<th>Chamber Geometry</th>
<th>Number of rooms</th>
<th>Axis (eg to statue recess)</th>
<th>Ceiling profile</th>
<th>Architraves (orientation)</th>
<th>Portico</th>
<th>Shafts</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ankhtify</td>
<td>Mo1</td>
<td>Yes, square</td>
<td>Irregular rectangle</td>
<td></td>
<td></td>
<td>flat</td>
<td></td>
<td></td>
<td></td>
<td>IX? (Neferkare)</td>
</tr>
<tr>
<td>Khety I (Asyut)</td>
<td>As5</td>
<td>2 square</td>
<td>Irregular rectangle</td>
<td>1</td>
<td>transverse</td>
<td>(today) destroyed</td>
<td>(today) destroyed</td>
<td>no</td>
<td>rectangular (finished)</td>
<td>X</td>
</tr>
<tr>
<td>Baqet I</td>
<td>BH29</td>
<td>no</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>slight camber from centre</td>
<td>no</td>
<td>no</td>
<td>square X/ XI.3</td>
<td></td>
</tr>
<tr>
<td>Iti-ibi</td>
<td>As3</td>
<td>4 square</td>
<td>Rectangular with transverse hall</td>
<td>1 (combined)</td>
<td>longitudinal</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>rectangular</td>
<td>X</td>
</tr>
<tr>
<td>Baqet II</td>
<td>BH33</td>
<td>no</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>slight camber from centre</td>
<td>no</td>
<td>no</td>
<td>square XI.3/4</td>
<td></td>
</tr>
<tr>
<td>Khety II (Asyut)</td>
<td>As4</td>
<td>4 square</td>
<td>rectangular</td>
<td>1</td>
<td>longitudinal</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>rectangular</td>
<td>X (Merikare)</td>
</tr>
<tr>
<td>Remushenti</td>
<td>BH27</td>
<td>no</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>slight camber from centre</td>
<td>no</td>
<td>no</td>
<td>square XI.3/4</td>
<td></td>
</tr>
<tr>
<td>Baqet III</td>
<td>BH15</td>
<td>2: single row</td>
<td>rectangular</td>
<td>1</td>
<td>transverse</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>square XI.4</td>
<td></td>
</tr>
<tr>
<td>Khety (Thebes)</td>
<td>TT311</td>
<td>no</td>
<td>Corridor &amp; chapel</td>
<td>2</td>
<td>longitudinal</td>
<td>flat</td>
<td>no</td>
<td>no</td>
<td>passage XI.4, yr40</td>
<td></td>
</tr>
<tr>
<td>Meketre</td>
<td>TT280</td>
<td>no</td>
<td>corridor &amp;</td>
<td>2</td>
<td>longitudinal</td>
<td>flat</td>
<td>no</td>
<td>9 cols</td>
<td>rectangular</td>
<td>XI.4/5</td>
</tr>
</tbody>
</table>

---

613 Plan – KAHL et al (2009), SAK 38, 193, Fig 1.
615 Plan – KAHL (2012), Asyut and the Asyut Project, pl. 26, internal photos – pl. 27 a & b.
## Table 4.1 - Architectural Features of the Governors Tombs

<table>
<thead>
<tr>
<th>Owner</th>
<th>Tomb ID</th>
<th>Internal Columns</th>
<th>Chamber Geometry</th>
<th>Number of rooms</th>
<th>Axis (eg to statue recess)</th>
<th>Ceiling profile</th>
<th>Architraves (orientation)</th>
<th>Portico</th>
<th>Shafts</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khety (Beni Hasan)</td>
<td>BH17</td>
<td>6 (lotus): two rows</td>
<td>rectangular</td>
<td>1</td>
<td>transverse</td>
<td>slight camber from centre</td>
<td>transverse</td>
<td>no</td>
<td>square</td>
<td>XI.4/ XII.1</td>
</tr>
<tr>
<td>Khnumhotep I</td>
<td>BH14</td>
<td>2: single row</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>cambered from architrave</td>
<td>transverse</td>
<td>no</td>
<td>rectangular</td>
<td>XII.1</td>
</tr>
<tr>
<td>Senbi I</td>
<td>Meir B1</td>
<td>no</td>
<td>square</td>
<td>1</td>
<td>longitudinal</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>no</td>
<td>XII.1</td>
</tr>
<tr>
<td>Nakht I</td>
<td>BH21</td>
<td>2: single row</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>cambered from architrave</td>
<td>transverse</td>
<td>no</td>
<td>rectangular</td>
<td>XII.2</td>
</tr>
<tr>
<td>Ukhhotep I</td>
<td>Meir B2</td>
<td>2 square single row</td>
<td>rectangular</td>
<td>1</td>
<td>longitudinal</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>no</td>
<td>XII.2</td>
</tr>
<tr>
<td>Sarenput I</td>
<td>QH36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intefiqer</td>
<td>TT60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XII.2, yr20</td>
</tr>
<tr>
<td>Djefaihapi I</td>
<td>As1&lt;sup&gt;6&lt;/sup&gt;</td>
<td>no</td>
<td>rectangular</td>
<td>7</td>
<td>longitudinal</td>
<td>(1&lt;sup&gt;st&lt;/sup&gt; corridor): concave vault (trans &amp; inner halls): flat</td>
<td>no</td>
<td>no</td>
<td>Sloping passage to underground system</td>
<td>XII.2</td>
</tr>
<tr>
<td>Netjernakht</td>
<td>BH23</td>
<td>2: single row</td>
<td>square</td>
<td>1</td>
<td>transverse</td>
<td>cambered from architrave</td>
<td>transverse</td>
<td>no</td>
<td>rectangular</td>
<td>XII.2</td>
</tr>
<tr>
<td>Djefaihapi II</td>
<td>As2&lt;sup&gt;6&lt;/sup&gt;</td>
<td>4 square,</td>
<td>square</td>
<td>2+x</td>
<td>longitudinal</td>
<td>flat</td>
<td>transverse</td>
<td>no</td>
<td>Sloping</td>
<td>XII.2</td>
</tr>
</tbody>
</table>

<sup>6</sup> Plan – KAHL (2012), *Asyut and the Asyut Project*, pl. 32
Table 4.1 - Architectural Features of the Governors Tombs

<table>
<thead>
<tr>
<th>Owner (Location)</th>
<th>Tomb ID</th>
<th>Internal Columns</th>
<th>Chamber Geometry</th>
<th>Number of rooms</th>
<th>Axis (eg to statue recess)</th>
<th>Ceiling profile</th>
<th>Architraves (orientation)</th>
<th>Portico</th>
<th>Shafts</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amenemhat (El-Bersha)</td>
<td>Be3</td>
<td>2 rows.</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XII.2 yr31</td>
</tr>
<tr>
<td>Amenemhat (Beni Hasan)</td>
<td>BH2</td>
<td>4 fluted</td>
<td>square</td>
<td>1</td>
<td>longitudinal</td>
<td>concave vault</td>
<td>between architraves</td>
<td>Yes: 2 col rectangular</td>
<td></td>
<td>XII.2 yr43</td>
</tr>
<tr>
<td>Ukhhotep son of Iam</td>
<td>Meir A3</td>
<td>no square</td>
<td>1</td>
<td>Left of centre</td>
<td>flat</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>XII.2/3</td>
</tr>
<tr>
<td>Senbi II</td>
<td>Meir B3</td>
<td>4 square</td>
<td>rectangular</td>
<td>2 – both on main axis</td>
<td>longitudinal</td>
<td>flat</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>rectangular</td>
</tr>
<tr>
<td>Sarenput II</td>
<td>QH31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XII.3</td>
</tr>
<tr>
<td>Ukhhotep II</td>
<td>Meir B4</td>
<td>no square</td>
<td>2 – subsidiary room to right of axis</td>
<td>longitudinal</td>
<td>flat</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>XII.3</td>
</tr>
<tr>
<td>Khnumhotep II</td>
<td>BH3</td>
<td>4 fluted</td>
<td>square</td>
<td>1</td>
<td>longitudinal</td>
<td>concave vault</td>
<td>between architraves</td>
<td>Yes: 2 col rectangular</td>
<td></td>
<td>XII.3 yr19</td>
</tr>
<tr>
<td>Djehutihotep</td>
<td>Be2</td>
<td>no rectangular</td>
<td>1</td>
<td>flat</td>
<td></td>
<td></td>
<td></td>
<td>Yes: 2 col</td>
<td></td>
<td>XII.4</td>
</tr>
<tr>
<td>Ukhhotep III</td>
<td>Meir C1</td>
<td>no square</td>
<td>1</td>
<td>longitudinal</td>
<td>flat</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>XII.4</td>
</tr>
</tbody>
</table>

TABLE 4.2 Seriation of Architectural Features of the Governors Tombs

Seriation of the Governors tombs of Meir with those of the comparison sites

For the purpose of visualizing the architectural features of the governors’ tombs from a chronological perspective, the features listed in table 4.1 are transformed into attributes for the constrained seriation presented in table 4.2 (see the Occurrence Matrix in Appendix A-1). The seriation constraint places the tombs along the top axis according to the predetermined order from the chronological framework derived in chapter three. The resulting plot shows that the tombs can be arranged into two groupings, the first of which encompasses the earlier tombs in the study,
from that of Ankhtify to Khnumhotep I (BH14) at Beni Hasan, and the second group which covers all of the following tombs on the plot, to the right of (ie later than) BH14. This second group is composed of Twelfth Dynasty tombs at all sites, from tomb B1 of Senbi I onward, and is characterised by the presence of the following attributes in the lower right hand quadrant (note however that BH14 is itself securely dated by regnal citation to the first reign of Dynasty Twelve, as discussed in the previous chapter, even though it fits with the earlier group typologically):

<table>
<thead>
<tr>
<th>Architectural Features - Distinguishing Attributes of the Second Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seriation Attribute</strong></td>
</tr>
<tr>
<td>43</td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>44</td>
</tr>
<tr>
<td>72</td>
</tr>
<tr>
<td>21</td>
</tr>
</tbody>
</table>

Just as these attributes are the distinguishing characteristics of the second (later) group of tombs, their absence from the first group also serves to distinguish the earlier tombs (or those with typologically early architectural features). The related attribute 41 (tomb orientation on a longitudinal axis) strongly attested in the second seriation group is also seen in the Eleventh Dynasty corridor tombs from Western Thebes. These corridor tombs are exemplified on the seriation plot by Khety (TT311) and Meketre (TT280), and derive from a completely unrelated architectural style specific to the court tombs of Western Thebes. There is no uniform cluster of attributes which define the chronologically earlier tombs across all sites, and Eleventh Dynasty tombs at each site tend to conform to local styles only. At Beni Hasan for example, two attributes (80: square burial shafts and 40: transverse axis) are strongly represented in all of the Eleventh Dynasty and the earlier Twelfth Dynasty tombs, but as can be seen from the plot these are not major features at other sites.

---

As noted by BROVARTSKI (2010), in *Studies Kanawati (Woods et al. Eds.),* 48.
For the remainder of attributes with broad attestation, the significant gaps in their plot lines along the tomb axis indicates a poor correlation from a chronological perspective, indicating that differences in tomb architecture is likely to be influenced more by local factors than external influence by their contemporaries at other sites. This is confirmed by an unconstrained seriation on the same data set, with mathematical best fit being the only sort criterion, resulting in a significantly tighter seriation plot with tombs tending to aggregate in local clusters. Local factors influencing the observed architectural features may include aspects such as the geographical characteristics of the site, the expertise and skill sets of the local artisans, local architectural traditions followed and built upon, and the wealth and influence of the local ruling family. The political situation during the first intermediate period would have also limited cultural transmission between the Theban and Herakleopolitan spheres of influence, acting as a promoting influence on local traditions and capabilities.

An important observation for this study is that two of the Beni Hasan tombs dated to the Twelfth Dynasty and thus placed in the second group on the fixed chronological axis, BH21 of Nakht I and BH23 of Netjernakht, are actually typologically consistent with the earlier first group (as is the first Twelfth Dynasty tomb at the same site, BH14 of Khnumhotep I). Only the final two tombs in the Beni Hasan sequence (BH2 of Amenemhat and BH3 of Khnumhotep II) show a strong correspondence to the attributes of the second group. The progression to a more unified architectural canon as centralized control was reasserted over the provinces, and the part played by the Meir tomb builders, is discussed in the section below.

**Common architectural features of Twelfth Dynasty tombs**

Given the variation of architectural forms discussed above, there are several important architectural markers of Twelfth Dynasty tombs which can be seen as common elements in the Meir tombs, as well as those of the comparison sites. Foremost of these are the placement of a statue recess in the rear wall, directly opposite the main doorway, to act as the focus of the tomb owner’s mortuary cult. This placement has the effect of changing the axial symmetry of the tomb from the

---

619 These architectural markers have been identified in prior studies. See for example BADAWY (1966), *op. cit.*, 125-6.
transverse axis common in the Old Kingdom and continued through the Eleventh Dynasty at sites like Beni Hasan, to a longitudinal processional way beginning at the tomb entrance and ending at the cult focus. Although it has been shown above that the Meir tombs in general adopted basic chamber geometry and external façade types that were already established at other sites, tomb B1 of Senbi I is one of the earliest Twelfth Dynasty tombs to attest a prominent statue recess in the rear wall position.\(^\text{620}\) This is notably in contrast with the comparable early Twelfth Dynasty tombs BH14 (Khnumhotep I), BH21 (Nakht) and BH23 (Netjernakht) at Beni Hasan which retain the transverse axis of the earlier tombs at that site.

The processional axis of tomb B1 is further reinforced by the longitudinal architectural element of an approach path sunk below floor level from the doorway to the shrine. The concept of procession towards the shrine is also emphasized by gradually raising the path towards the statue recess by steps near the door and in front of the recess. At Meir, the raising of the processional axis via steps was continued in the subsequent tombs culminating in the most prominent example of this style with a porch fronting the statue recess in tomb B4 of Ukhhotep II (see photo, Fig. 4.1) and the bench/step painted red in front of the statue recess in tomb C1 (see photo, Fig. 4.2).

The concept of a step up to the statue recess is seen to have been adopted at El-Bersha (tomb Be2 of Djehutihotep) and Beni Hasan (BH2 of Amenemhat and BH3 of Khnumhotep II) perhaps influenced by the earlier examples instigated by Senbi I and his successors at Meir. In the large multi-chamber tomb As1 (Asyut P10.1) of Djefaihapi \(^\text{621}\) the concept of a processional way rising from entrance to shrine is achieved by sloping the path upwards through successive rooms, with the roof height also decreasing at a corresponding rate (as seen in temples of later periods), culminating in a flight of steps admitting to the shrine (a feature which likely influenced the steps fronting the statue recess in the slightly later Meir tomb B3 and the porch of tomb B4).

---

\(^{620}\) This observation holds true even if a later dating of tomb B1 into the reign of Senusret I is accepted. 
\(^{621}\) See plan, KAHL (2012), Seven Seasons at Asyut, pl 32; shrine reconstruction, EL KHADRAGY (2007), GM 212, 56, Fig. 2; KAHL (2007), Ancient Asyut, 88-89.
In tomb As1 (P10.1) of Djefaihapi I, longitudinal axial symmetry was maintained by constructing alternating rooms as long corridors, with central doorways in the long ends leading into broad transverse halls. The processional axis bisects the first transverse hall to continue into the next corridor towards the statue recess. Tomb B3 of Senbi II replicates this on a smaller scale, with only two rooms. Neither room is shaped as either a corridor or a broad hall, but the centrally placed doorway between the two acts to emphasise the processional axis from the entrance to the steps in front of the statue recess. Tomb B4 of Ukhhotep I is a much smaller construction than that of Senbi II, returning to a single main chamber layout. Its builders however adopted a further aspect of Djefaihapi I’s tomb in the form of a small off-axis subsidiary room cut into the western wall of the main chamber to the north of the processional axis. If it were not for the prominence of the porch fronting the statue recess, this single off-centre side room would have the effect of disrupting the longitudinal symmetry of the tomb chapel, as these side rooms are balanced in the original example of tomb As1 by placing subsidiary rooms on either side of the processional axis.

At the site of Beni Hasan, internal columns were introduced as an architectural feature in the late Eleventh Dynasty tomb BH15 of Baqet III, and became standard in all subsequent tombs. While the transverse architrave above the columns of BH15 reflected the processional axis of the tomb towards the false door on the southern side wall, the use of transverse architraves continued in the first three tombs of the Twelfth Dynasty, effectively drawing architectural emphasis away from a longitudinal axis. This was rectified in the final two tombs, BH2 (Amenemhat) and BH3 (Khnumhotep II) where the architraves ran longitudinally either side of the central axis, thus reinforcing it by dividing the roof into three longitudinal vaults (see photo, interior of BH2, Fig. 4.6).

A secondary architectural attribute that is commonly attested in the Twelfth Dynasty is the rectangular cross section of burial shafts in the chapel floors. Tombs dating from the reign of Amenemhat I in the study tend to exhibit rectangular

---

622 BH14, BH21, BH23 previously referenced. See NEWBERRY, Beni Hasan I, pl. 43 and Beni Hasan II, pl. 22, 23.
623 See author’s photo of BH2 (Fig. 4.6) showing longitudinal architraves separating vaults. See also NEWBERRY, Beni Hasan I, pl. 4, 22; KANAWATI & EVANS (2014) Beni Hassan Vol I, The Tomb of Khnumhotep II, pl. 105-6 and (2016) Vol III, The Tomb of Amenemhat, pl. 81.
shafts, while prior to this date square burial shafts are commonly attested at some sites, particularly at Beni Hasan.624 This is not a universal dating criterion however because rectangular shafts are also attested at other sites prior to the Twelfth Dynasty. At Asyut for example, all of the Heracleopolitan tombs possess rectangular shafts, with only one of two shafts in the earliest tomb (shaft 1 of As5, M11.1, Khety I) being roughly square.625

In summary, from an architectural standpoint, the Meir tomb builders were followers rather than innovators for fundamental aspects of tomb design, beginning with the basic single chamber plain-fronted style of tombs B1 and B2 as seen in the Eleventh Dynasty tombs at Beni Hasan (see photo, Fig. 4.4). On the chronological evidence it can be demonstrated that the Meir tomb builders adopted, albeit on a smaller scale, several architectural elaborations in subsequent tombs that were well attested in prior tombs at neighbouring sites, including the use of internal columns and multiple chambers. The final major innovation of a columned portico, as seen at Beni Hasan (tombs BH2, see photo Fig. 4.5, and BH3) and El-Bersha (tomb Be2) was never adopted at Meir, perhaps due to the unsuitability of the rock strata and location on hills B and C into which the Meir tombs were excavated, although a remnant overhanging portico is evident above the façade of tomb C1 similar in style to that of tomb Be3 at el-Bersha.

The Meir tomb builders appear however to have adopted two important characterizing features of Twelfth Dynasty tombs at an earlier point in time than their counterparts at Beni Hasan. The first of these features is the definition of a longitudinal symmetry designed to emphasize the processional axis from entrance to shrine and the second (related) feature is the positioning of a prominent statue recess as the processional focus and defining point of the axial symmetry. This second feature is attested in every Twelfth Dynasty tomb post-dating tomb B1 of Senbi I in all comparison sites of the study, regardless of other architectural differences, except for Beni Hasan, where the adoption of this feature occurred later than at other sites (see for example the transverse orientation of tombs BH21 and 23, which are contemporary or slightly later than B1). When finally adopted at Beni

624 As noted by BROVARSKI (2010), in Studies Kanawati, 48.
625 See KAHL (2102) 'Asyut and the Asyuṭ Project', pl. 22-23 for ground plan and photo of M11.1 chapel room showing the two shafts.
Hasan in the final two tombs of the sequence at this site (BH2 and BH3), the feature was implemented with an assertiveness that saw the statue recess constructed at the scale of a small room.
II. Shaft Tombs and Coffins of Subsidiary Burials

This section compares the Middle Kingdom governor’s tombs at Meir with the numerous shaft tombs located in their immediate vicinity. At the Meir group A and B cemeteries, lesser burials of the extended families and court officials of the governors are found in close association with the elite tombs. These typically consist of a rectangular shaft of varying depth with a small rough-hewn undecorated chamber at its base. The chamber was little more than an enlargement of the shaft, generally on its southern side, just large enough to take the coffin and a small assemblage of funerary items.626

With the exception of the burial of Daughter of the Ruling Class Nebet-Hut, which is definitively recorded in shaft B3:3 of governor Senbi II’s tomb (B3), and Steward Senbi with a provenance of either shaft B3:1 or B3:2 of the same tomb,627 it is not possible to map the exact location of any of the other shaft tombs from group A or B as this information was not recorded during the excavation.628 Disturbance of the site prior to excavations by plundering of the local inhabitants is also noted,629 as well as official (but undocumented) antiquities gathering for the Cairo Museum in 1877-8 and 1892-5.630 The disturbed contexts and incomplete records notwithstanding, a valid investigation can be made to compare the common textual elements of the coffins in this assemblage with the texts of the governor’s tombs, as reviewed in Chapter Three. The coffins are the most numerous and important of the items of the assemblage, and together with the six governors’ tombs, two family

626 Plans of two of the shaft tombs excavated at Meir demonstrate larger examples of this style: Daughter of the Ruling Class Nebet-Hut (KAMAL (1911), ASAE 11, 15) from shaft B3:3 of tomb B3 (Group B) and Sealbearer Ukhhotep (KAMAL (1912), ASAE 12, 109) from Group A (precise location unrecorded). Both of these burial chambers exhibit a niche and additional free space beside the coffin for burial goods.
627 As reported by Kamal with a floor plan of tomb B3 showing the respective pits 1, 2 and 3 (KAMAL (1911), ASAE 11, 10-11). The record is unclear as to whether the burial assemblage of Steward Senbi was found in the main shaft of tomb B2, sunk unto the terrace immediately behind the statue recess, or in the second shaft of the outer room adjacent to the shaft of Nebet-Hut.
628 KAMAL, “Rapport sur les Fouilles Exécutées Dans la Zone Comprise Entre Deirout au Nord et Deir el-Ganadlah, au Sud”, in three parts: (1911), ASAE 11, 3-39; (1912), ASAE 12, 97-127; (1914), ASAE 14, 45-87.
629 LEGRAIN (1900), Notes sur la Necropole de Meir, ASAE 1: 65; CHASSINAT (1900), Notes Prises a Meir (Mars-April 1899), Rec. Trav. 22: 74
630 BLACKMAN (1912), Meir 1: 12; LEGRAIN (1900) op. cit.: 65-66. Items preserved from this work were assigned Cairo Catalogue numbers 359, 468, 780-4, 790, 810, 853, 913, 913bis, 914, 1315, 1321, 1325, 1328, 1340, 1347, 1359.
group statues\textsuperscript{631} from tomb C1 (Ukhhotep III) and five canopic chests\textsuperscript{632} from various tombs they form the total corpus of Twelfth Dynasty inscribed sources from Meir. Smaller items of mortuary assemblage including assorted models,\textsuperscript{633} staves\textsuperscript{634} and personal items\textsuperscript{635} are uninscribed and are not included in this study.\textsuperscript{636}

The analysis in this section extends and reinterprets a similar study by Willems,\textsuperscript{637} which compared textual attributes of the governors’ tombs at Meir with those of the standard class coffins using the technique of constrained seriation. The present analysis for the first time includes a seriation of all the substantially intact coffins from the site, extending the corpus under study to include coffins without interior decoration, which were not part of the Willems study. The dateable attributes of the full coffin corpus from Meir were examined in a further study by Lapp,\textsuperscript{638} although the sources were not subject to the seriation technique in this later work. Of the total corpus of Meir coffins examined here, sixteen (45% of the corpus) attest inner decoration of the standard type, and are identified by their De Buck identification numbers.\textsuperscript{639} For the remaining twenty coffins (55% of the corpus) without inner decoration but attesting an otherwise standard exterior layout, the identification numbers assigned by Lapp\textsuperscript{640} have been used. The results of this analysis reaffirm the identification of the two existing typological clusterings of coffins established by the Willems study,\textsuperscript{641} but more importantly, additional coffins have been added to

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{631} MFA 1973.85 (Boston) (see SIMPSON (1974), Boston Mus. Bull. 72 #368, 100-104); and JE 30965 / Cat. Gen. CG 439 (Cairo).
  \item \textsuperscript{632} See Appendix D for list of Canopic Chests and jars.
  \item \textsuperscript{633} BORCHARDT (1911-1936), Cat. Gen du Caire: Statuen und Statuetten, 155-163, pl. 49-55, predominantly servants, agricultural and workshops. Boat models are also attested, eg. MMA. 12.183.4, 11.150.11; and animal models, eg. faience hippopotamus from shaft 2 of tomb B2, MMA. 17.9.1 (New York).
  \item \textsuperscript{634} Example items: Mace, MMA. 12.182.68; straight and bent staves, MMA. 12.182.62, 12.182.69; w’s sceptre, MMA. 12.182.64 (New York).
  \item \textsuperscript{635} Example items: Collar and mirrors of Hapy-Ankhify, MMA. 12.183.12, .18a,b, .19a,b; Model dagger of Ukhhotep, MMA. 11.167.2 (New York).
  \item \textsuperscript{636} see instead PODVIN (2000), MDAIK 56, 277-334 for an examination of complete assemblages of thirty upper Egyptian Middle Kingdom tombs, including those of Nebet-Hut (coffin M18), joint burial of Rahotepi (coffin M57) and Kayt (coffin M54), and Ukhhotep (coffin M1NY) from the present study.
  \item \textsuperscript{637} WILLEMS (1988), Chests of Life, 89-96, Seriation Plot: Table 3.
  \item \textsuperscript{638} LAPP (1993), Typologie, 95-107, 108-120, 286-91, tab. 13-16, pl. 19-23.
  \item \textsuperscript{639} De BUCK (1935-1961), The Egyptian Coffin Texts (Vols 1-8), see specifically List of Sources: Vol 1, xviii; Vol 2, xii; Vol 3, x; Vol 4, xi; Vol 5, x-xi; Vol 6, x-xi; Vol 7, x; see also WILLEMS (1988), op. cit., 24-26.
  \item \textsuperscript{640} LAPP (1993), Typologie, 286-91.
  \item \textsuperscript{641} WILLEMS (1988), op. cit., 92 and 96.
\end{itemize}
\end{footnotesize}
each group, and a third earlier group of sources has been identified which was not evident in the Willems study due to its restriction to standard type sources.

As was the case for the Willems study, a constrained seriation was prepared, taking into account the chronological ordering of the Meir tombs determined in Chapter Three. For this analysis, a full (unconstrained) seriation was first performed on the coffins alone, to determine their correct mathematical ordering based on the essential attributes of the exterior decoration. The data lines for the governors’ tombs were then interpolated into the plot at defined (constrained) intervals, based on their predetermined order (as established in the previous chapter) and probable relationships with specific sources in the coffin corpus as discussed below.

From the resulting plot (see Table 4.3) the three typological groupings of sources can be clearly seen, with the newly identified early group in a cluster of data points in the top left hand quadrant. The two clusters identified by the Willems seriation are also evident in these results corresponding to the middle group (equivalent to Willems’ first cluster) left of centre and oriented towards the middle of the plot, and the later group (Willems’ second group) occupying the lower right hand quadrant. The members of each group and the textual attributes they share with each other and the governors’ tombs are discussed below.

---

642 WILLEMS (1988), op. cit., 91, see also nr. 165.
643 WILLEMS (1988), op. cit., Table 3.
Table 4.3  Seriation of Textual Attributes of the Meir Governors’ Tombs and Coffins from Associated Shaft Tombs.

a) Meir Coffins Predating the Twelfth Dynasty Governors Tombs: The Early Cluster

Immediately evident on the seriation plot is a distinct cluster of coffins which (with the exception of M5C) were not part of the Willems study. They are identified on
the upper left hand corner of the plot as Kayt (M54), Ukhhotep (M10), Nakht-Hathor (M5C), Kayt (M53), Rahotepi (M57), Ibet (M2) and Seni (M42). This cluster attests a number of unique textual attributes listed below, none of which are shared with the texts in the governors tombs, but which indicate an eleventh or early Twelfth Dynasty date. In addition, the exterior design reflects a style with either no vertical text columns (common from the Old Kingdom to the end of the First Intermediate Period), or a rare transitional style with one or two vertical text columns. It has been demonstrated that these transitional styles can be dated to the early Twelfth Dynasty, from about the middle of the reign of Amenemhat I to early Senusret I, thus are likely to have slightly preceded or are approximately contemporary with the construction of the first B series tomb (B1 of Senbi I).

In the case of M5C, the coffin is strongly consistent with the others from the cluster on a textual basis, however, it is the only one of the group to exhibit the mid-Twelfth Dynasty style of three vertical text columns, thus it could be seen as an early example of this style. Willems placed it in an early position in his sequence and determined that it was not systematically associated with his two identified groups. The present study confirms this positioning and places it with the early cluster. The name of the coffin owner, Nakht-Hathor, is also suggestive of a dating prior to the Twelfth Dynasty governors, being represented in register 6 of the list of predecessors of Ukhhotep II in tomb B4, as the wife of governor Ukhmeref. There

---

644 KAMAL (1912), ASAE 12, 99, private collection, Basel. See also LAPP (1985), Särge Khashaba, 14-15, Taf 28. A rare type with single vertical text column, found beside M57 (Rahotepi) in same shaft.
645 KAMAL (1911), ASAE 11, 26-27 (source not extant).
646 JE 42826 (Cairo). KAMAL (1911), ASAE 11, 35-36. See MEYER-DIETRICH (2001), Nechet und Nil, for a study of the ritual aspects of the decoration and texts of coffin M5C.
647 KAMAL (1911), ASAE 11, 25-26 (source not extant).
648 KAMAL (1912), ASAE 12, 98-99 (source not extant).
649 KAMAL (1911), ASAE 11, 8-9 (source not extant).
650 KAMAL (1911), ASAE 11, 27-28 (source not extant).
651 LAPP, Typologie, 97-102. See §221, §229 and table §269 (pp 116-8).
653 These conform to Willems Style II(a) and II(b). See WILLEMS (1988), op. cit. 127-30.
654 WILLEMS (1988), op. cit., Table 7.
656 List of predecessors located on western wall of main chamber, south of porch to statue recess, tomb B4 (Ukhhotep II): Register 6, No. 51, BLACKMAN, Meir III, 19; CHASSINAT (1900), ‘Notes Prises a Meir’, Rec. Trav. 22, 77. The list is too fragmentary and the surviving names can’t be systematically compared to other dated monuments, so it can not be established that the registers of...
is no evidence to identify the coffin owner of M5C with the governors wife of the inscription, however, the use of the same name and its similarity in style to the other names of both governors and wives in the same register suggest that it may be contemporaneous. If this is the case then it would suggest the governors of register 6 might be placed at the end of the Eleventh Dynasty, and are the immediate predecessors of Senbi I, based on the dating of M5C discussed above. The names of the other coffin owners of the cluster do not correspond with any surviving names in the list of predecessors, with only a partial match of Rahotepi with the name fragment [...]htp in register 2.\textsuperscript{657}

**Characterising Attributes for the Early Coffin Cluster**

None of the attributes unique to this early group of coffins are shared with any of the governors’ tombs or the two later coffin clusters. The attributes that are exclusive to this early group of coffins are:

<table>
<thead>
<tr>
<th>Characterising attributes for the early coffin cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
</tr>
<tr>
<td>329</td>
</tr>
<tr>
<td>333</td>
</tr>
<tr>
<td>115</td>
</tr>
<tr>
<td>108</td>
</tr>
<tr>
<td>105</td>
</tr>
<tr>
<td>50,51,52</td>
</tr>
</tbody>
</table>

Like those coffins of the middle cluster with an inner decoration, M5C (Nakht-Hathor) inner decoration is of type 1b\textsuperscript{662} and it also shares the three-column layout

---

\textsuperscript{657} Register 2, No. 14, BLACKMAN, *Meir III*, 17. The partial name match for *Rc-htpi* is inconclusive.

\textsuperscript{658} The verbal form is associated with Lapp’s Typ. Dyn 11, whereas for Typ. Dyn 11/12 the nominal form of the phrase had come into usage. see LAPP, *Typologie*, 97 & 99.

\textsuperscript{659} LAPP, *Typologie*, states this form to be consistent with Typ. Dyn 11: see pp 98, 117, table §269. See also WILLEMS (1988), *op. cit.*, 173.

\textsuperscript{660} BENNETT (1941), *JEA* 27, 80, states this epithet to be characteristic of Dynasty 11.

\textsuperscript{661} Although attested on stelae until the end of the reign of Amenemhat II (BENNETT, *op. cit.*, 78), this determinative is only present on two of the early cluster of Meir coffins.
on the external sides, which on its own would suggest its dating to be early Twelfth Dynasty. Its texts however are consistent with the early group of coffins in which it is placed by the seriation. These earlier features indicate it is likely to date no later than the governorship of Senbi I, and could therefore be the earliest extant example of a three-column coffin at the site.

On the basis of the early textual forms seen on this identified coffin cluster, the early group of coffins is likely to pre-date the Twelfth Dynasty governors tombs examined in the study. This suggests an established and ongoing use of the northern part of the Meir necropolis in the period preceding the establishment of the Twelfth Dynasty governors tombs in cemetery B.

b) Meir Coffins Contemporary with Senbi I and Ukhhotep I: The Middle Cluster

The middle cluster of sources on the seriation plot are identified as: Senbi (M37C), Senbi (M6C), Senbi (M3C), Senbi (M1Be), Seneb-Imy (M4C), Ukhhotep (M28C), Nakht (M13C), Ukhhotep (M9) and Hathoremhat (MAAnn). Of these, all but the last two agree with those in Willems’ first group. Coffin M9 of Ukhhotep is added to this group as a result of this analysis. Additionally, coffin MAAnn of Hathoremhat is definitively included in this seriation group in contrast to Willems’ placing of it in an indeterminate position outside of his two main clusters.

---

664 JE 42827 (Cairo), KAMAL (1911), ASAE 11: 28-30.
665 JE 42825 (Cairo), KAMAL (1911), ASAE 11: 33-34. See MEYER-DIETRICH (2006), Senebi und Selbst, for a study of the ritual context of M3C (incl. 79-103: detailed publication of the coffin).
667 WILLEMS (1988), op. cit., 96 and Table 3.
The tombs of Senbi I (B1) and Ukhhotep I (B2) are also the governors' tombs most closely associated with the middle cluster, based on commonality of attributes. These middle group sources are characterised by the following attributes:

**Attributes predominantly attested in the middle cluster**

A small number of textual features are observed to be concentrated in the middle group. These attributes are most strongly attested in this group, although some outliers are noted for some (attributes 53, 347) on individual sources in either the earlier or later groups. The coffins of this cluster are most likely to have three vertical text columns on the long sides. A local orthographic variation is also noted below (attribute 442) shared with the two earliest governor’s tombs, B1 (Senbi I) and B2 (Ukhhotep I).

<table>
<thead>
<tr>
<th>Attributes predominantly attested in the middle cluster of coffins</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>325</td>
<td>The invocation offering is followed by ‘every good and pure thing.’</td>
</tr>
<tr>
<td>334</td>
<td>The lid text is the wish form: šdš-k hr wsw.t nfr.wt n.t hr.t-nfr (may you proceed on the good roads of the necropolis).(^{673})</td>
</tr>
<tr>
<td>442</td>
<td>The variant form of sign F39 (imšḥ) shows either straight or slightly curved spinal chord. <strong>Also attested in tombs B1 and B2.</strong></td>
</tr>
<tr>
<td>347</td>
<td>Offering formula invokes Osiris, Thoth and the two state chapels.(^{674}) <strong>Also attested in tomb B2.</strong></td>
</tr>
<tr>
<td>53</td>
<td>Long sides of coffin have three vertical text columns on the exterior decoration.</td>
</tr>
</tbody>
</table>

**Middle cluster attributes in common with the earlier group**

The majority of the textual attributes show strong but fairly equal attestation within the middle group and the newly identified early group of coffins. Except for a few outliers, they are not significantly attested in the late group. They include features of the offering formula which have been demonstrated to occur most frequently through the early Twelfth Dynasty.\(^{675}\) As expected, the direct introduction of the request is represented here (attribute 320), and is noted in tombs B1 (Senbi I) and B2 (Ukhhotep I), and as an outlier, a late example of its usage in tomb B4 (Ukhhotep II).

---

\(^{673}\) LAPP, *Typologie*, states this form to be consistent with Typ. Dyn 11/12: see pp 99, 117, table §269.


CHAPTER 4 - Architecture and Archaeology

<table>
<thead>
<tr>
<th>Common attributes shared between the early and middle coffin clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>324</td>
</tr>
<tr>
<td>336</td>
</tr>
<tr>
<td>109</td>
</tr>
<tr>
<td>338</td>
</tr>
<tr>
<td>103</td>
</tr>
<tr>
<td>106</td>
</tr>
<tr>
<td>322</td>
</tr>
<tr>
<td>112</td>
</tr>
<tr>
<td>320</td>
</tr>
</tbody>
</table>

Middle cluster attributes in common with the late group

Several attributes are seen to be adopted at the time of the middle cluster, with their usage continuing to be evidenced on subsequent tombs and coffins of the later group. Of particular note here are the offering of the request to the kA of the tomb owner (rather than directly to the tomb owner), as noted in tomb B2 and all the succeeding governor’s tombs, and the attestation of the epithet ‘justified’ following the tomb owner’s name (also seen in all the governor’s tombs following B2, except for the final tomb in the sequence, C1).

<table>
<thead>
<tr>
<th>Common attributes shared between the middle and late coffin clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
</tr>
<tr>
<td>330</td>
</tr>
<tr>
<td>332</td>
</tr>
<tr>
<td>328</td>
</tr>
<tr>
<td>337</td>
</tr>
<tr>
<td>339</td>
</tr>
</tbody>
</table>
c) Meir Coffins contemporary with the later governors: The Late Cluster

The largest group on the seriation plot represents coffins that the findings suggest are contemporary with the later governors Senbi II (tomb B3), Ukhotep II (tomb B4) and Ukhotep III (tomb C1). The sources in this group which are consistent with Willems’ second cluster\(^676\) are identified as Weresnefer (M8C),\(^677\) Khnumhotepehenni (M2C),\(^678\) Weresnefer (M42C),\(^679\) Tjetetu (M1Tor)\(^680\) and Hapy-Ankhtyf (M2NY).\(^681\) The results of this analysis also place Rerut (M1C)\(^682\) and Ukhotep (M1NY)\(^683\) in this group, as opposed to Willems not placing them in either cluster in his study.\(^684\) It is noted however that coffin M1NY does exhibit a broader spread of attributes than is seen in any of the other late cluster sources. This analysis adds a significant number of coffins not studied by Willems to the late cluster, these being Khnumhotepe (M37),\(^685\) Khnumhotep (M38),\(^686\) Nebet (M17),\(^687\) Sennu (M43),\(^688\) Senbi (M45),\(^689\) Senbi (M47),\(^690\) Khnumhotep (M40),\(^691\) Khnumhotep (M41),\(^692\) Wahka (M5),\(^693\) Nebet-Hut (M18),\(^694\) Senbi (M48)\(^695\) and Ameny (M3).\(^696\)

Attributes Predominantly Attested in the Late Cluster

In addition to the attributes shared with the middle cluster of sources (described above), the following attributes are predominantly concentrated in the late cluster.

---

\(^676\) Willems (1988), op. cit., 92, 96 and Table 3.
\(^677\) CG 28038 (Cairo), Lacau (1904), Cat. Gen. du Caire, Vol 14, 116ff. Middle coffin of three from the same burial.
\(^678\) JE 42947 (Cairo), Kamal (1914), ASAE 14, 55-56.
\(^679\) CG 28039 (Cairo), Lacau (1904), op. cit.: 122ff. Innermost of three coffins from the same burial (see M8C above).
\(^680\) Lands of the Bible Archaeology Foundation No. 3 (Toronto), Kamal (1914), ASAE 14, 47-48.
\(^681\) MMA 12.183.11a (New York). Kamal (1914), ASAE 14, 82-86, fig. 15.
\(^682\) JE 42949 (Cairo). Kamal (1914), ASAE 14, 61-62.
\(^684\) Willems (1988), op. cit., 96.
\(^685\) Kamal (1912), ASAE 12, 104.
\(^687\) CG 28066 (Cairo), see also Lacau (1904), Cat. Gen. du Caire, Vol 14, 145.
\(^688\) Kamal (1911), ASAE 11, 32-3 (source not extant).
\(^689\) Kamal (1911), ASAE 11, 31-2 (source not extant).
\(^690\) CMA 1914.716.a (Cleveland). Kamal (1912), ASAE 12, 120-21.
\(^691\) MMA 12.182.131a, (New York), see also Hayes (1968), Scepter I, 315, fig. 204.
\(^693\) Kamal (1914), ASAE 14, 45. Private collection, Basel. See also Lapp (1985), Sürge Khashaba, 12-13.
\(^695\) JE 42948 (Cairo). Kamal (1912), ASAE 12, 122.
\(^696\) MMA 11.150.39a (New York). Kamal (1914), ASAE 14, 56.
### Attributes predominantly attested in the late coffin cluster

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>Orthography of Dw shows djed pillar (R11) preceding the open hand d-sign (D46), a double djed pillar, or djed pillar without a following D46. <strong>Also attested in tombs B3 and B4.</strong></td>
</tr>
<tr>
<td>107</td>
<td>Osirian epithets in sequence: nb Dw, nTr ʾz, nb šbqw <strong>Also attested in tombs B3 and B4.</strong></td>
</tr>
<tr>
<td>323</td>
<td>Plural strokes are absent from prl.t-hrw <strong>Also attested in tomb B2.</strong></td>
</tr>
<tr>
<td>348</td>
<td>The Anubis formula request phrase is for cool water, incense and oil. <strong>Also attested in tomb B3.</strong></td>
</tr>
<tr>
<td>104</td>
<td>The name of Osiris is represented without a determinative. <strong>Also attested in tombs B2, B3, A3, B4 and C1.</strong></td>
</tr>
<tr>
<td>326</td>
<td>The prl.t-hrw includes elaborations of incense, oil, linen and alabaster. <strong>Also attested in tombs B2, B3, A3, B4 and C1.</strong></td>
</tr>
<tr>
<td>321</td>
<td>The prl.t-hrw is introduced by prospective ʾdisf (that he may be given...). <strong>Also attested in tombs B3, A3 and C1.</strong></td>
</tr>
<tr>
<td>335</td>
<td>The lid text wish form is: ʾdʾš-k p.t sm3-k tš tʾr-k n nTr-ʾz nb p.t (May you sail across the sky, may you be united with the earth, may you rise up to the great god lord of heaven).<strong>697</strong></td>
</tr>
<tr>
<td>54</td>
<td>Four vertical text columns on the long sides of the exterior decoration.</td>
</tr>
</tbody>
</table>

The following governors’ tombs also share these attributes with a small subset of the late cluster coffins:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>Epithets of Anubis in the sequence: shm ts.wy, tp.y Dw-ʾf. <strong>Attested in tombs B2 and B4, and coffins M1NY (Ukhhotep) and M1C (Rerut).</strong></td>
</tr>
<tr>
<td>444</td>
<td>Dwr sign (D45) shows local variation with two hands holding wand. <strong>Attested in tomb C1 and coffins M1NY (Ukhhotep), M8C (Weresnefer) and M42C (Weresnefer).</strong></td>
</tr>
</tbody>
</table>

Willems’ study was specific to those sources attesting inner decoration, which he described as either type 1 or type 2. He demonstrated that the type 2 inner decoration was introduced into the coffins of his study corpus at approximately the time of Amenemhat II.**698** Of the coffins in the late cluster, M1C (Rerut), M2C (Khnumhotep/Henni), M8C (Weresnefer), M42C (Weresnefer), M1Tor (Tjetetu) and M2NY (Hapy-Ankhtify) all demonstrate type 2 inner decoration, while only M1NY (Ukhhotep) shows the earlier type 1 style.**699** This is consistent with the positioning of the data line for tomb B4 (Ukhhotep II) in the middle of the coffin cluster exhibiting this type of inner decoration, given the attestation of Amenemhat II’s prenomen on the statue recess lintel of tomb B4 (discussed in the previous chapter).

---

**697** LAPP, Typologie, states this form to be consistent with Lapp’s Typ. Dyn 12 and Typ. Dyn 12/13: see pp 99, 108, 117, table §269; WILLEMS (1988), op. cit., 173 states that the formula was introduced on coffins around the time of Amenemhat II.

**698** WILLEMS (1988), op. cit. 190.

**699** See WILLEMS (1988), op. cit., 185 for summary of his inner decoration findings.
A wider range of coffin owner’s names are also seen amongst the late group, particularly in comparison to the middle group. While the owners of the surviving middle group coffins tend very strongly to have been given a name of the local governor (of the nine middle group owners, four are named Senbi and three Ukhhotep), for the late group there are only three Senbis and one Ukhhotep of the nineteen coffins identified. Of the newly attested names in this group, the most common is Khnumhotep (five coffins), a name which is also very commonly attested at Beni Hasan.\textsuperscript{700} A possible conclusion that may be drawn from this is that it points to a definite influence of Beni Hasan at Meir concurrent with the final three governors tombs: B3, B4 and C1. This may be a result of intermarriage between respective members of the broader ruling clans or their officials, or possible migration or posting of some officials from Beni Hasan to Meir, with a result that some of the coffin owners may either originate from Beni Hasan or be locally born of a parent from Beni Hasan. Further circumstantial evidence of possible intermarriage or other influence from Beni Hasan is provided by the final tomb in the sequence (C1 of Ukhhotep III), which is decorated in paint only, a technique that is universally attested at the latter site (as discussed in Chapter Five).

d) Positioning the governors tombs relative to the coffin corpus

On the seriation plot, Senbi I’s tomb has been inserted into the sequence at the beginning of the middle group for two reasons. First, two of its three plotted attributes are strongly attested in both the middle cluster and the newly identified early cluster, so that typologically, the tomb can be seen to sit between the two groups. Secondly, the preponderance of the name ‘Senbi’ is noted amongst the owners of the middle cluster coffins. The location of the shaft tombs which yielded these coffins is indicated to be the area around the chapels of Senbi II,\textsuperscript{701} Ukhhotep III\textsuperscript{702} and ‘the second hill’ generally\textsuperscript{703} (or Hill B). While not specific about the exact location of the shafts, Kamal makes one reference to an excavation located ‘about thirty metres north’ of B3.\textsuperscript{704} This reference places some of Kamal’s work in the

\textsuperscript{700} See the tomb owners of BH14, BH3, BH4, BH13 and numerous attestations of family and officials in tombs BH14, BH2, and BH3. NEWBERRY, \textit{Beni Hasan I}, 14-19, 41, 43-51, 75, 81, 83.
\textsuperscript{701} KAMAL (1911), \textit{ASAE 11}, 10-14.
\textsuperscript{702} KAMAL (1914), \textit{ASAE 14}, 74.
\textsuperscript{703} KAMAL (1914), \textit{ASAE 14}, 78.
\textsuperscript{704} KAMAL (1911), \textit{ASAE 11}, 14.
immediate vicinity of tombs B1 and B2 (Macquarie University investigations in 2011 uncovered several shaft tombs on the terrace immediately above and behind tomb B1 (see photo, Fig. 4.8). Although remnants of later re-use were observed, it is possible these shafts were among those excavated by Kamal). It is very likely that the middle cluster coffin owners are members of the extended family and senior officials of Senbi I (and possibly Ukhhotep I), with Senbi being a common name locally following the governor of the same name. The construction of tomb B1 established Hill B as the cemetery for Senbi’s provincial dynasty, and the shaft tombs of his family and retainers would have been sited in its proximity from that time. For this reason, the most likely position on the seriation plot for Senbi I’s tomb is at or near the beginning of the middle coffin cluster. The position of tomb B2 of his successor Ukhhotep I must logically follow towards the end of this cluster, allowing for the passage of time between their respective periods as governor. The fact that several attributes of B2 are shared with the later cluster fits well with its position on the plot between the middle and late clusters.

Of the governors’ tombs at Meir, B3 of Senbi II is the one for which a correspondence to a key source in the coffin corpus can be made, with definitive identification of shaft B3:3 in the outer room of that tomb chapel as the provenance site of coffin M18 of daughter of the ruling class Nebet-hut. It is clear that the shaft post-dates the construction of the chapel, and the data line for the tomb can therefore be placed prior to that of coffin M18 on the seriation plot. The other coffin attributed to the same tomb, M6C of steward Senbi is placed by the seriation into the middle cluster, indicating that it is typologically consistent with the earlier coffins and that it therefore predates tomb B3. Several possibilities exist regarding the owner of this coffin. The first is that it belongs to the governor himself, and the title of steward merely reflects his previous title (given the coffin was made before the tomb). A second possibility is that the coffin owner was contemporary with Senbi II even though his coffin attests some earlier characteristics of exterior

---

705 The title ss.t ḫ3.ty-n5 attested on the coffin was originally translated as “governor’s daughter” (BLACKMAN, Meir VI, Addendum, p7) however the more general reading of “daughter of the ruling class” is a widely accepted interpretation of this common title. In this specific case the siting of the burial inside the chapel of a governor’s tomb suggests the earlier, more literal interpretation of the title may be valid.

706 The attested title on M6C is im.y-rz pr.w (“Steward” or more literally, Estate Overseer).
decoration. This second scenario suggests that the coffin owner (steward Senbi) served under Senbi II’s father Ukhotep I, surviving into the early part of Senbi II’s short administration, to be interred in shaft B3:1 or B3:2. Nebet-Hut’s burial in shaft B3:3 was probably a later interment, in keeping with the later typological features of her coffin (which also shows evidence of an original name of Ukhotep being overinscribed with Nebet-Hut). Based on the above reasoning, tomb B3 of Senbi II is placed in the seriation between the two respective coffins, but closer to that of Nebet-Hut, with which there is a higher degree of correlation of the textual attributes.

For the placement of tomb A3 in the seriation, the similarities in the offering formulas to those of coffin M1NY (see photo, Fig. 4.7) belonging to overseer of sealbearers Ukhotep is noted, as identified by Lapp. The reported position of the shaft tomb below the site of tomb A3 suggests the possibility that the coffin owner is the same Ukhotep as identified on the statue recess of the tomb above. This association is suggested in Porter & Moss, however, for the hypothesis to be valid, the differing titles of Ukhotep on the coffin and on the lintel of the statue recess of his tomb need to be resolved. If the owner of M1NY is indeed the same Ukhotep son of Iam commemorated in the inscription of A3 it would suggest that the coffin must have been made at an earlier stage of his career, indicated by the lower ranking title compared to that attested in the tomb.

Tomb B4 of Ukhotep II (who was responsible for the statue recess in honour of his predecessor in tomb A3) is also placed in close association with the above coffin and tomb on the seriation plot. Noted in tomb B4 is the naming of sons as Senbi and Ameny, and coffins M48 and M3 belonging to individuals with the same names appearing on the seriation following tomb B4. Both of these coffins are decorated very similarly in the polychrome palace façade style, the only ones in the Meir corpus exhibiting this style, suggesting a possible link between the two. Although Ameny’s title on the coffin is s3 ḫ3.ty-n this should be more correctly translated as

707 Kamal’s account is not clear on which of the two shafts was the find site of the coffin.
708 LAPP, Typologie, 289. HAYES, Scepter I, 315, incorrectly notes the original name as Senbi.
709 LAPP, Typologie, 114.
710 PORTER & MOSS, Topographical Bibliography IV, 249.
711 BLACKMAN, Meir III, pl. 18. Two sons named Senbi are attested in the text.
712 BLACKMAN, Meir III, pl. 26.
son of the ruling class, rather than the earlier interpretation of governor’s son, thus can’t be taken as evidence of direct filial relationship with the owner of tomb B4. It is possible nevertheless that the two coffins do indeed belong to the sons of Ukhhotep II mentioned in tomb B4, and this is not contradicted by the correlation of the seriation parameters.

III. Chapter Summary

The first part of the chapter compares the tomb architecture of the Meir governors with that of their peers and contemporaries at other sites. Significant differences persist between sites in terms of tomb sizes and architectural features through the time period of the study, confirming that no time did a unifying architectural style arise, although the results of the seriation highlighted a few common features that were widely adopted towards the mid Twelfth Dynasty. These centred mainly around a raised cult focus in the form of the statue recess, with the longitudinal axis of the approach reinforced by one or more architectural traits (the application of these traits is variable, even between tombs at the same site: sunken approach, gradually rising toward the shrine, steps leading to the shrine, columns with longitudinal architraves, porticos – with or without columns). The variety of architectural traits did however have the same ultimate design goal: the emphasis of the cult focus at the end of a longitudinal processional approach. In this respect, the Meir tomb builders were at the earlier end of first adoption, although in basic façade style and chamber geometry they tended to follow established types at other sites.

The remainder of the chapter is concerned with the alignment of the Meir governors’ tombs with the coffin corpus from their associated subsidiary shaft tombs. The owners of these coffins are members of the governor’s wider family or other members of the provincial elite. Three groups are identified in the seriation. The first group exhibits early features of exterior typology suggesting it may slightly pre-date tomb B1 of Senbi I. One of the coffin owner’s names also aligns with the name of a governor’s wife attested on the list of predecessors on the western wall of tomb B4 (Ukhhotep II). The second group is strongly associated by name with the Meir governors and typologically shows an alignment with the first two governors, Senbi I (with whom the majority share their name) and Ukhhotep I. The later, third
group of coffin owners, associated with the later governors Senbi II, Ukhhotept II and Ukhhotept III, generally share names more aligned with the ruling family of Beni Hasan rather than Meir (the most frequently attested name is Khnumhotep). It is suggested this provides evidence for intermarriage or migration of elite family members and provincial officials from Beni Hasan to Meir in the later phase of tomb building, concurrent with the reigns of Amenemhat II to Senusret III.
Chapter Four Photographs and Figures (Figures 4.1 to 4.8)

Fig. 4.1 Elevated Porch fronting Statue Recess – Tomb B4 (Ukhhotep II)
Aspect from chapel entrance. Note that the longitudinal axis is emphasised by the porch and increase in height of the statue recess as the cult focus. Roof and top of porch jambs have been restored.
(Photo by author, 2011)

Fig. 4.2 Elevated statue recess – Tomb C1 (Ukhhotep III)
Statue recess is on longitudinal axis opposite tomb entrance, and is elevated behind a single bench/step that runs around all internal walls. The front face of the bench is painted red to highlight the approach to the statue recess.
(Photo by author, 2011)
Overhanging square cut rock in the upper right hand corner indicates that the exterior of the tomb was originally cut with an overhanging portico, perhaps influenced by the later exterior styles at Beni Hasan and El-Bersha. There is no evidence of columns supporting the portico, which either collapsed or was destroyed by later quarrying.

(Photo by author, 2011)

Tomb BH15 (Baqet III). Note the plain fronted style with square cut, centrally positioned doorway (probable influence on the exterior styling of early Twelfth Dynasty tombs at Meir).

(Photo by author, 2011)
This tomb was the first Twelfth Dynasty example of the twin columned portico attested in U.E. 13 to 16. It was followed by similar porticos for tombs BH3 at Beni Hasan and No 2 at Deir el-Bersha. The innovation of porticos may have influenced the design of Tomb C1 at Meir (see Fig. 4.3).

(Photo by author, 2011)

Longitudinal axis is emphasised by statue recess in line with entrance, and approach flanked by columns with longitudinal architraves and barrel vaulting. Note single small step up to the statue recess.

(Photo by author, 2011)
CHAPTER 4 - Architecture and Archaeology

Fig. 4.7  **Coffin of Sealbearer Ukhhotep (M1NY) MMA 12.182.132a.**
Provenance: shaft tomb below Meir A group governors tombs. Note combination of
(1) late group characteristic of four vertical text columns contrasted with
(2) early style of request phrase on horizontal text (ḥṣ ṭ request).
(Photograph: Metropolitan Museum of Art, New York)

Fig. 4.8  **Shaft tomb on terrace above and behind governor’s tomb B1 (Senbi I) at Meir.**
Consistent with features of Middle Kingdom shaft tombs associated with the B group
governors tombs. Note rectangular shaft with coffin chamber/recess opening to the south
wall of the shaft.
(Photograph by author, 2011)
CHAPTER FIVE

THE MEIR TOMBS: ARTISTIC STYLE AND EXECUTION

Following the review of architectural features of the Meir tombs and the analysis of coffins from their associated shaft tombs in Chapter Four, this chapter will present an investigation on aspects of artistic style of the wall decoration and an analysis of the techniques employed for control of the artistic medium, based on surviving evidence in the tombs.

The first part of the chapter presents a review of the compositional principles governing the wall decoration, illustrated by specific examples from the tombs under study. This is followed by a detailed examination of the stylistic features of individual traits in the human subjects of the wall art, and identifies possible influences exerted on the artists of Meir by examples at comparative sites, as well as possible influences deriving from the Meir tombs on the art at other sites.

Different stylistic approaches are discussed within the sequence of the Meir tombs, leading into a study of the techniques of execution, particularly related to the early Twelfth Dynasty style initially attested in tomb B1 and which culminated in tomb B2. Due to the extraordinary quality of the reliefs in tomb B2 compared to those in the later Meir tombs and to the surviving decoration at comparison sites, the decoration of B2 forms the basis of a case study in this section, where selected motifs are highlighted to illustrate the achievements of this artist in this tomb.

The fourth part of the chapter investigates the conventions applied for compositional control of the medium (be it painted or sculpted surface, or a combination of both). The extensive surviving gridlines in tombs B2 are used as a case study to illustrate how these artists’ grids were employed in the early Twelfth Dynasty to lay out the artistic composition of a range of themes involving human subjects. The significant surviving gridlines in tomb C1 (the final tomb in the Meir sequence) facilitates a comparison on how the usage of artists’ grids developed at this site through the course of the mid Twelfth Dynasty.
I. Compositional Principles

The central characteristic of wall art observed in the tombs of this study is that it is a form of abstraction\textsuperscript{713} governed by canonical conventions. This is regardless of the technique in which it was executed, be it painted, cut relief or a combination of the two.\textsuperscript{714} The conventions are so uniformly adopted that they could be considered as a set of rules governing the way information is encoded into a composition to facilitate its interpretation by the viewer.\textsuperscript{715} The essential rules in the canon were established early in the history of Egyptian art, and remained stable and relatively invariant over significant periods of time. Presented here is a review of these principles, as observed in the artwork of the Middle Kingdom tombs at Meir and the comparison sites.

**Typical Aspect**

The fundamental principle of the abstraction seen in Egyptian art is that each object, animal or human figure is drawn in a two-dimensional aspect, showing the most recognizable features in a stylized (but not necessarily realistic) form. The underlying drivers for this style of representation have been discussed by various authors.\textsuperscript{716} Possible reasons cited include the fact that not all parts of any given subject are equally recognizable from the same aspect, and that not all of its important distinguishing features may even be visible from a single viewpoint.\textsuperscript{717} In order to make the representation absolutely clear to the viewer, convention required the artist to decompose the subject into its component parts, which were then rendered individually in a way that was most recognizable for that part within the integrated whole. The result is a diagrammatic form of the object or figure, in which

\textsuperscript{713} Abstraction here is defined as a departure from realistic depiction. The resulting images are not ‘abstract’ according to the modern art definition, as they are still centred around figurative representation of human forms, animals and other subjects.

\textsuperscript{714} Techniques of execution can be broadly categorized as carved (relief), painted or a combination of the two (see detailed discussion below).

\textsuperscript{715} SCHÄFER (1986), Principles of Egyptian Art, (Ed. E. Brunner-Traut, Trans. J. Baines), 9-68. Schäfer’s original study was the groundbreaking analysis of representational conventions examined here; KANAWATI & WOODS (2009), Artists of the Old Kingdom, 30.


\textsuperscript{717} DAVIS (1989), op. cit., 10.
its salient features are instantly recognizable to the viewer and thus information about it can be accurately interpreted in the context of the overall composition. The restrictive set of conventions governing depiction of objects and figures leads to a high degree of uniformity with similar subjects of the same type. The term ‘typical aspect’ has been used to describe this style of depiction, with its design template-like quality, based on its most recognizable and characteristic features,\textsuperscript{718} and the style of art to which it belongs has been called ‘aspective art’.\textsuperscript{719}

An example to illustrate this principle from Meir tomb B1 includes two tables for jewellery standing side by side.\textsuperscript{720} The tables are shown in side view, showing two of the four legs and thus presenting their most recognizable facets. Although they appear to be stacked one on top of the other, this is to be interpreted as the tables standing side by side. On top of the lower table two necklaces are depicted vertically above the tabletop, although in reality they would be lying flat on the table surface and thus would not be clearly visible to the viewer. Likewise the second table (depicted on a subsidiary baseline above the first) shows four bracelets vertically above the tabletop, appearing as they would if viewed from above, although they too would not be visible to the viewer in a realistic depiction. Similar depictions showing baskets of food offerings (with baskets in side view and their hidden contents depicted above the container as they would appear if seen looking into it) are common in the same tomb at Meir,\textsuperscript{721} as well as the later tombs at the site.\textsuperscript{722} The feature is also well attested (with objects either in baskets or on tables) at comparison sites.\textsuperscript{723} Examples from the Old Kingdom,\textsuperscript{724} including precedents at

\textsuperscript{718} KANAWATI & WOODS (2009), \textit{op. cit.}, 29-30. The authors suggest that this typical aspect also presented the most visually satisfying aspect to the viewer.
\textsuperscript{719} BINDER (2000), \textit{op. cit.}, 31.
\textsuperscript{720} BLACKMAN, \textit{Meir I}, pl. 2, (Tomb B1, Senbi I, north wall).
\textsuperscript{721} BLACKMAN, \textit{Meir I}, pl. 9.
\textsuperscript{722} BLACKMAN, \textit{Meir II}, pl. 6 (B2, Ukhhotep II); \textit{Meir III}, pls. 17, 25 (Ukhhotep II, B4); \textit{Meir VI}, pl. 25 (C1, Ukhhotep III)
\textsuperscript{723} NEWBERRY, \textit{Bersheh I}, pl. 26 (Bc2, Djehutihotep); NEWBERRY, \textit{Beni Hasan I}, pls. 12, 17-20 (BH2, Amenemhat), pl. 35 (BH3, Khnumhotep II); \textit{Beni Hasan II}, pl. 4 (BH15, Baqet II); pl. 17 (BH17, Khety); pl. 30 (BH29, Baqet II); DAVIES, \textit{Antefoker}, pl. 10 (TT60, Senet, mother of Intefiqer) including necklaces inside a chest being depicted above the chest; DAVIES, \textit{Five Theban Tombs}, pl. 38 (Dagi); EL KHADRAGY (2007), \textit{BACE 18 }, figs. 7, 9 (As1, Djefaihapi I).
\textsuperscript{724} For example, see DUELL, \textit{Mereruka}, pl. 30, bottom register. Further numerous examples in piles of offerings, burial chamber east wall, KANAWATI \textit{et al.}, \textit{Mereruka and his Family III}, pl 94-96.
Meir,\textsuperscript{725} confirm that this principle was established early in the developmental stage of tomb art and was maintained with little change through the period under study.

The typical aspect used to depict animals is illustrated by the extensive cattle scenes at Meir,\textsuperscript{726} although the same principles apply to other domesticated animals, as well as wild game and predators.\textsuperscript{727} Animals are uniformly depicted in whole body profile, always with four legs visible, also in profile aspect. A layering effect is applied to clearly show the two near-side legs from the viewer’s perspective, with the far-side legs being shown behind the belly and front-side legs, where these overlap. The only full aspect effects are minor body parts around the head of the animal, with one full view eye being depicted above the snout and two full view horns protruding from the head of cattle and other horned animals, also layered to indicate the near and far-side horns. Utilising the side-on body profile, a range of postures are indicated by positioning the legs, where the artist always retains all four in the figure, either flexed or straight in standing or various phases of motion. Infrequently animals are depicted with their heads turned 180 degrees at the shoulder, maintaining (but reversing) the profile aspect, to indicate the animal looking rearwards as a vignette of a larger action scene. Examples at Meir include a hippopotamus in the water band of a fishing and fowling scene\textsuperscript{728} and antelopes in hunting and desert scenes.\textsuperscript{729}

Greater variability exists in the depiction of birds, however they generally also show a mix of profile aspect bodies and full aspect wings in various positions, depending whether they are mid flight, taking off, swooping or perched. Like the typical aspect of animals, the bodies of birds are shown in profile, with a single full view eye. Wings of flying birds are most commonly depicted outstretched in full aspect, one on either side of the body. Often the artist depicts one or more birds of a flock in flight with both full-view wings above or below the body, in an effect that breaks up the pattern of the outstretched wings and lends a little more realism to the

\textsuperscript{725} Tomb D2, table of offerings. See BLACKMAN,  	extit{Meir IV}, pl. 18; KANAWATI & EVANS,  	extit{The cemetery of Meir I}, pl. 85. See offerings to left of table.
\textsuperscript{726} BLACKMAN,  	extit{Meir I} pl. 9,  	extit{Meir II} pl. 3,6,7,  	extit{Meir III} pl. 13.
\textsuperscript{727} See the desert hunt scenes of tombs B1 and B2 (discussed in Chapter 6) and the associated desert tableau depicted in B2,  BLACKMAN,  	extit{Meir I}, pl. 6 and  	extit{Meir II}, pl. 7, 8.
\textsuperscript{728} BLACKMAN,  	extit{Meir I}, pl. 2 (B1, Senbi I).
\textsuperscript{729} BLACKMAN,  	extit{Meir I}, pl. 6;  	extit{Meir II}, pls. 7, 8 (B2, Senbi II).
As with the other representations of typical aspect discussed above, these depictions borrow heavily from the Old Kingdom Memphite court style, via Old Kingdom tombs at the same site.

**Representation of the human form**

Central to most compositions are the representations of people, whether they are the major figure of the tomb owner or the much more numerous depictions of subsidiary figures. In either case, a strict canonical form is followed in the depiction, which illustrates the diagrammatic characteristic of the medium as referred to above. Each component of the body is treated from a different aspect, with the whole combined in the final form in a physiologically impossible fashion, but with the finished figure capturing the essence of the human form in a visually pleasing and instantly recognisable image. For the standing or seated figure, the canonical rule sees the upper trunk of the body consisting of the shoulders and upper chest depicted in full frontal view, while the lower trunk, head and all four limbs are represented in profile although they are appended to the frontal view upper trunk. Within the profile aspects of the head and lower trunk, most details such as the mouth, nose and hair are also in profile, but key details, particularly the eye and eyebrow, are shown in frontal aspect. Importantly, only one full frontal eye is ever depicted, towards the front of the face in its natural position above the nose, and is always the eye that would be closest to the viewer if the subject were three-dimensional. On the lower trunk the navel also receives a frontal treatment, but is placed towards the front edge of the subject’s abdomen so that it blends more naturally with the profile view of this part of the body.

The feet are generally both shown with the big toe and arch towards the viewer, thus no attempt is made to differentiate right from left. Likewise, there is variability

---

730 See for example the ducks taking to the air above the papyrus thicket in Meir tombs B1 and C1. (BLACKMAN, *Meir I*, pl. 2 and *Meir VI*, pl. 13).
731 As observed in tombs of the Memphite court officials. See for example DAVIES (1901), *Ptahhetep and Akhetetep*, pl. 13, 14.
732 BLACKMAN, *Meir IV*, pls. 7, 8 (D2, Pepiankh-heri(y)b); *Meir V*, pl. 24 (A2, Pepiankh-henykem).
733 With each body part being represented in its typical aspect. See KANAWATI & WOODS (2009), *op. cit.*, 30.
734 KANAWATI & WOODS (2009), *op. cit.*, 30.
735 KANAWATI & WOODS (2009), *op. cit.*, 30.
736 KANAWATI & WOODS (2009), *op. cit.*, 30.
in the positioning of the thumbs and fingers on both hands, with some figures showing correct orientation and ordering, and others displaying incorrect placement of these.

When a figure is at rest or not engaged in some activity requiring the hands, one arm in profile view hangs from either side of the full frontal upper body, however, figures engaged in activities will often show arms in profile awkwardly crossing over the front of their frontal view upper trunk, which has a less natural look to it than the simpler figure at rest. Exceptions to the canonical rules are sometimes observed in minor figures of workers or foreigners, as discussed in more detail below.

**Pattern**

When groups of animals or people are depicted in the same composition engaged in a collective activity (for instance, walking in rows) there is a tendency to create patterns from the grouping of the figures to emphasise the activity being depicted.\(^{737}\) This is facilitated by the figures having the same postures and facing the same direction, with limbs and bodies overlapping. The resultant interlaced pattern reinforces the uniformity of the group. This is particularly noticeable at Meir in the scenes of cattle droving\(^ {738} \) and ploughing,\(^ {739} \) and is also seen in the desert animals in the tomb B1 hunting scene.\(^ {740} \) Similar repeating patterns are also noted with overlapping human figures in the dueling boatmen of tomb B2\(^ {741} \) and wrestlers in B1.\(^ {742} \) The same patterns are observed on a larger scale in the wrestlers of Beni Hasan tombs BH2, BH15 and BH17,\(^ {743} \) the latter two pre-dating the Meir tombs. The marching soldiers in the Tenth Dynasty tomb 4 at Asyut\(^ {744} \) also exhibit a striking pattern of uniformity, illustrating strong adherence to canonical conventions during the First Intermediate Period at this site, although the bodies are spaced so that the pattern is achieved without the overlapping of limbs. Figures in different postures

---


\(^{738}\) BLACKMAN, *Meir I*, pls. 9-11 (Senbi I); *Meir II*, pl. 6 (Ukhhotep II); *Meir III*, pls. 4, 13 (Ukhhotep II).

\(^{739}\) BLACKMAN, *Meir I*, pl. 3 (Senbi I).

\(^{740}\) BLACKMAN, *Meir I*, pl. 6 (Senbi I).

\(^{741}\) BLACKMAN, *Meir II*, pl. 4 (Ukhhotep II).

\(^{742}\) BLACKMAN, *Meir I*, pl. 3 (Senbi I).

\(^{743}\) NEWBERRY, *Beni Hasan I*, pl. 14 (Amenemhat); *Beni Hasan II*, pl. 5 (Baqet III), pl. 15 (Khety).

\(^{744}\) EL KHADRAGY (2008), *SAK 37*, figs. 4, 5 (Khety II).
can form rhythmical patterns from the interplay of limbs & bodies, such as that seen by birds taking flight from a papyrus thicket.\textsuperscript{745}

Pattern is employed in place of perspective. True perspective, providing a realistic representation of three dimensional depth on the two-dimensional surface, is not employed in Egyptian wall art.\textsuperscript{746} Overlapping of legs and bellies has already been referred to above for indicating near and far-side legs of animals in depicting their typical aspect. The concept is commonly extended and is encountered in the depiction of groups of people or animals, where it is also used as a depth cue to suggest that certain figures lie further away from the viewer than the “closest” figure, which is placed on the baseline. Those with a higher vertical position in the composition are to be interpreted as being behind the baseline (forefront) figure, as seen with the placement of slain soldiers one above the other in BH14,\textsuperscript{747} although it is not otherwise a technique commonly employed in the tombs of this study. The desert hunt scene referred to above\textsuperscript{748} is also to be interpreted in this manner, with animals on irregular baselines placed higher on the desert field interpreted as being at a further distance from the viewer. When the feet of all overlapping figures are placed on the baseline, then the placement of overlapped limbs behind others indicates depth, as can be seen in the cattle droving and ploughing scenes\textsuperscript{749} discussed in the preceding paragraph on uniformity. These scenes follow conventions observed in Old Kingdom Memphite tombs,\textsuperscript{750} and copied in the Sixth Dynasty tombs at Meir.\textsuperscript{751}

**Balance**

A well balanced composition is one of the principles observed in tomb art that conforms to the canonical style, and is seen in all the Meir tombs.\textsuperscript{752} Like the use of patterning above, it is one feature that shows a degree of variation, due to either

\textsuperscript{745} BLACKMAN, *Meir I*, pl. 2 and *Meir VI*, pl. 13, in the scenes from tombs B1 and C1 referred to previously.
\textsuperscript{746} KANAWATI & WOODS (2009), *Artists of the Old Kingdom*, 30.
\textsuperscript{747} NEWBERRY, *Beni Hasan I*, pl. 47 (Khnumhotep I).
\textsuperscript{748} BLACKMAN, *Meir I*, pl. 6 (Senbi I).
\textsuperscript{749} BLACKMAN, *Meir I*, pls. 3, 9-11 (Senbi I); *Meir II*, pl. 6 (Ukhhotep II); *Meir III*, pls. 4, 13 (Ukhhotep II).
\textsuperscript{750} See for example, DAVIES (1901), *Ptahhnetep*, pl. 21 (cattle droving, flock of geese).
\textsuperscript{751} BLACKMAN, *Meir IV*, pl. 14 (Pepiankh-heryib, donkeys and cattle).
\textsuperscript{752} ROBINS (1994), *Proportion and Style*, 11.
local customs or chronological factors. At its most obvious level it is achieved by symmetry of composition, as is observed in the fishing and fowling scenes of tombs B1 and C1,\textsuperscript{753} which are composed of two halves effectively mirroring each other. The central element of this scene is the papyrus thicket (in the case of C1 the statue recess also provides the central focus, with the thicket around it). Two major figures of the tomb owner are represented standing on reed skiffs, facing each other across the thicket, providing balance to the composition. Besides symmetry, balance is also achieved in the wall decoration of the Meir tombs by the juxtaposition of a major figure (typically of the tomb owner) on one side of the composition against a series of smaller figures on multiple registers in the remainder. Balance is achieved here by the section containing the multiple registers of smaller figures being correspondingly larger than the scene element depicting the tomb owner. Examples of this type of composition include the tomb owner standing receiving offerings or inspecting his subordinates (who may be wrestlers, dancers, musicians, agricultural workers or offering bearers).\textsuperscript{754} The general rule for orientation of these scenes is for the tomb owner to face outward from the inner part of the tomb (toward the living world), and for the offering bearers and other subordinates to face towards the tomb owner, and they are therefore observed on the south and north walls at Meir to achieve this orientation. The same convention is observed at the comparison sites.\textsuperscript{755}

Other scenes that achieve a similar balance are the desert hunt scenes of tombs B1 and B2, where the major figure of the tomb owner (in these cases with an associate) faces a large number of minor figures of game animals on the larger part of the composition. A point of difference in the orientation of the minor figures in these scenes is that they generally face away from the hunter and his arrows, and the regular structure provided by the register baselines is deliberately diluted by the use of irregular ungrounded baselines (in B1) or the lack of baselines (in B2). The effect of no baselines in the hunting scene of tomb B2 is a contributor to the sparseness of composition on the desert side (see the section below on spatial distribution) and as a result this scene is less effectively balanced than the its earlier counterpart in tomb B1.

\textsuperscript{753} BLACKMAN, Meir I, pl. 2 (Senbi I); Meir VI, pl. 13 (Ukhhotep III).
\textsuperscript{754} BLACKMAN, Meir I, pls. 2, 9; Meir II, pls. 2, 3, 6, 11, 15; Meir III, pl. 3; Meir VI, pls. 11, 18; noting subordinates on multiple registers.
\textsuperscript{755} NEWBERRY, Beni Hasan I, pl. 30, 35 (Khnumhotep II), pl. 17 (Amenemhat); Beni Hasan II, pl. 4 (Baqet III), pl. 31 (Baqet I); Bersheh I, pl. 12 (Djehutihotep); Bersheh II, pl. 8 (Djehutinaahkht VI).
The hunting scene of tomb B2 still shows a greater degree of balance than the marshland scene of the earlier tomb BH17 at Beni Hasan. While the Twelfth Dynasty Beni Hasan tombs show a similar adherence to established conventions as those at Meir (particularly the fishing, fowling and clapnetting scene in BH3 and the offering scenes in both BH2 and BH3), the marsh scene of tomb BH17 shows a less careful compositional layout, with three major figures, including two of the tomb owner facing in different directions, on floating baselines on the left hand side and a mix of small animal and subordinate worker figures in the center, also on floating baselines. There is little coordination or connection between these groups, and the large areas of empty space between places the whole composition significantly out of balance. Only the right hand side of the scene depicts orderly registers of marshland activities.

While the compositional freedom and lack of balance as exemplified by tomb BH17 demonstrates a chronological dimension at Beni Hasan (with conventions being more rigidly enforced in the later tombs), this is not observed at other sites under study. The extant scenes from tomb 4 at Asyut show well-balanced compositions following the established Old Kingdom Memphite traditions more closely than do their contemporaries at Beni Hasan, and are comparable to the conventions observed in the later Asyut tombs.

Balance is also achieved at the micro-scene or vignette level within a composition, by arrangement of individual small items (such as offerings in a basket or on a table) into groups, the placement of which against adjacent groups provides symmetry to the larger scene. This can be seen in the offering table scenes where the standing loaves are placed immediately above the tabletop, and smaller offerings are grouped by type and arranged above and to the left side of these, so that the compositional surface area is fully packed. Symmetric packing of small objects can also be observed in various other scenes, such as the small fish

756 NEWBERRY, Beni Hasan II, pl. 11 (Khety).
757 NEWBERRY, Beni Hasan I, pl. 32-4 (Khnumhotep II, fishing & fowling/clapnet).
758 NEWBERRY, Beni Hasan I, pls. 17, 18, 35.
759 EL KHADRAGY (2008), SAK 37, figs. 2, 4, 5 (Khety II).
760 For example, EL KHADRAGY (2007), BACE 18, figs. 5-12 (Djefaihapi I).
761 ROBINS (1994), op. cit. 11.
762 BLACKMAN, Meir I, pl. 9 (Senbi I); Meir II, pl. 6 (Ukhhotep II).
uniformly filling the fisherman’s hand net in tomb B1,\textsuperscript{763} where the filled net counter-balances the figure of the fisherman.

**Spatial distribution**

The balance of a composition is strongly influenced by the spatial distribution of its elements, particularly with regard to placement of major and minor figures and compositional density – ensuring elements in a motif are not too crowded or too dispersed with wide gaps to break the rhythm of the entire composition.\textsuperscript{764} The marsh scene of BH17\textsuperscript{765} referred to above is an extreme example of sparseness and irregular placement of major figures. Besides removing the principle of balance in the composition, the large gaps between these figures and the apparently randomly placed minor figures at the centre of the scene act to disconnect each figure from the common theme. The desert hunt scene of tomb B2 at Meir with its associated desert tableau\textsuperscript{766} comes close to suffering from some of the same drawbacks, in that the sparseness of the desert field tends to reduce the overall balance of the whole composition. It is possible that the lack of visible baselines and larger than usual spaces between the animals was an intentional innovation by the artist in this case, to emphasise the wildness and the large area of the open rangeland. This observation is supported by the noted absence of the usual enclosure fences depicted in hunting scenes (since the prototypical royal example in the mortuary temple of Sahure)\textsuperscript{767} to indicate control over the wilderness, and the inclusion of exotic wild animals to reinforce the perception that the depiction is of a wild place. This is also notable given that the remainder of the decoration of the tomb conforms strongly to the established canon. Due to its departure from normal conventions however, the overall scene holds the attention of the viewer and manages to express its theme effectively.

For techniques used to control special distribution (including baselines and registers) see the section on Control of the Medium below.

\textsuperscript{763} BLACKMAN, *Meir I*, pl. 3 (Senbi I).
\textsuperscript{764} ROBINS (1994), *op. cit.*, 13.
\textsuperscript{765} NEWBERRY, *Beni Hasan II*, pl. 11 (Khety).
\textsuperscript{766} BLACKMAN, *Meir II*, pls. 7-8 (Ukhhotep II).
\textsuperscript{767} BORCHARDT (1913), *Sahure II*, pls. 15-16.
Chapter 5 - Artistic Style and Execution

Scale
The system of scale encodes the relative importance of figures. The larger the figure is in relation to others in the composition, the greater the importance of the figure within the theme. In the Meir tombs B1, B2, B4 and C1 the figure of the tomb owner occupies full wall height (three registers in B1 and two registers in B2), while senior officials standing behind Ukhhotep I in B2 occupy half-height positions, and lesser subordinates are less than a single register. While the relative scale of the tomb owner with respect to officials and lesser subordinates is an obvious example of the relationship, the coding of importance also extends beyond human subjects. To interpret the scale of all human figures relative to the tomb owner as an indicator of social status is a misinterpretation of the convention. As an illustration, the fish on the end of Senbi I’s spear in the fishing and fowling scene in tomb B1 are larger in scale relative to the tomb owner’s wife, as the fish more central to the theme of this motif than the wife. This is a universal convention, and is even more noticeable in tomb B4 of Ukhhotep II, where the fish on the spear are almost as tall as Ukhhotep’s wife, while the densely packed fish in the water band and mound (less central to the motif) are much smaller and similar in scale to the figure of the wife. In both tombs the fish on the spear correspond to the scale of the tomb owner.

II. Stylistic Features of Individual Traits in Human Subjects
Prior studies by Robins and Freed have demonstrated changes in the way certain stylistic features of human subjects were depicted over time, from the end of the First Intermediate Period and throughout the late Eleventh and early Twelfth Dynasties. This section applies these observations to the depictions of individual traits in the study group tombs of Meir and compares them to similar depictions at the key comparison sites.

769 BLACKMAN, Meir I, pl. 2.
770 BLACKMAN, Meir III, pl. 6.
771 ROBINS (1990), The Reign of Nebhepetre Montuhotep II and the Pre-unification Style of Relief in "Beyond the Pyramids" (G Robins Ed.), 39-45.
772 FREED (1981), in Studies Dunham, 68-77; FREED (1984), Middle Kingdom Egyptian Relief Sculptural Schools (PhD dissertation); FREED (1996), in Studies Simpson, 297-336
The following attribute descriptions are based on direct observations of the decoration in the Meir and Beni Hasan tombs, compared with photographic and other published evidence of tombs at other sites (noted where appropriate).

(a) Face and Head

**Eyes and Eyebrows**

<table>
<thead>
<tr>
<th>Face/Head:</th>
<th>Attributes: Eyes and Eyebrows</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>Tombs</td>
<td></td>
</tr>
<tr>
<td>Meir tombs</td>
<td>B1, B2</td>
<td>Eyes are normal size. Eyes, eyelids and eyebrows are sculpted in tombs B1 and B2. Brows are slightly curved over the eyelid, accentuated by sculpted indentation between brow and eyelid (more noticeable in tomb B2). Notch of inner canthus is angled slightly downward.</td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>Eyes are normal size on major figures, enlarged on some subsidiary figures. Eyes, lids and brows are sculpted, but without sculpted indents below eyebrows, which are slightly curved. Inner canthus is not noticeably angled downward. Short cosmetic line on some figures at outer canthus. Painted pupil.</td>
</tr>
<tr>
<td></td>
<td>C1</td>
<td>All detail is painted (no sculpture). Brows are slightly curved. Eyes are enlarged on all subsidiary figures. Inner canthus not angled or not well defined. Cosmetic line not present.</td>
</tr>
<tr>
<td>Beni Hasan</td>
<td>Dyn XI: BH29, 33, 15, 17</td>
<td>Eyes are significantly enlarged on subsidiary figures with very slightly curved (almost straight) eyebrow painted as a black line above.</td>
</tr>
<tr>
<td></td>
<td>Early-Mid Dyn XII: BH14, 2, 3</td>
<td>Eyes slightly enlarged generally, and significantly enlarged in some figures. Eyebrows are painted in black and slightly curved.</td>
</tr>
<tr>
<td>Deir el-Bersha</td>
<td>Be5</td>
<td>Insufficient material to determine facial features. Newberry’s line drawings suggest eyes are enlarged on subsidiary figures.</td>
</tr>
<tr>
<td></td>
<td>Be2</td>
<td>Eyes are slightly enlarged. Some larger figures show the eyes outlined by shallow very fine black outline with painted iris and pupil, with black painted curved eyebrow above. Some minor figures demonstrate significantly enlarged eyes.</td>
</tr>
</tbody>
</table>

773 Observations taken during 2011 site visit (author’s site notes).
775 Including major figures, see tomb owner Khununhotep II (BH3), fowling scene east wall: KANAWATI & WOODS (2010) op. cit., photo 2.
777 See Willems (2014), Historical and Archaeological Aspects, pl. 10 for recent photograph of Ahanakht I standing. Technique demonstrates high quality El-Bersha-style sunken edge relief (discussed later this chapter), however the head of the figure has been destroyed.
778 Djehutihotep’s sister: relief fragment EA1150 (British Museum).
779 See agricultural worker, east wall: STEVENSON-SMITH (1951), AJA 55 [4], 321-332, pl. 20.
### Face/Head: Attributes: Eyes and Eyebrows

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asyut</td>
<td>FIP</td>
<td>Insufficient preserved detail.</td>
</tr>
<tr>
<td>Dyn XII</td>
<td>(As1/P10.1)</td>
<td>Eyes normal to slightly enlarged, with arched eyebrow above. Executed in sunk relief with minimal interior detail.</td>
</tr>
<tr>
<td>Western Thebes</td>
<td>Dyn XI (TT311)</td>
<td>Large eye outlined in strong raised relief, with straight inner canthus and raised cosmetic line from outer canthus. Curved eyebrow immediately above in raised relief.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII (TT60)</td>
<td>Eyes noticeably enlarged on minor figures, with slightly arched eyebrows.</td>
</tr>
<tr>
<td>Southern Egypt</td>
<td>Mo1 (Ankhtify)</td>
<td>Eyes enlarged on minor figures, eyebrows slightly curved or nearly straight.</td>
</tr>
</tbody>
</table>

### Nose, Lips and Ears

### Face/Head: Attributes: Nose, Lips and Ears

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meir tombs</td>
<td>B1, B2</td>
<td>Straight nose, prominent on subsidiary figures, accentuated by sculpted depression between bridge and eyes (adjoining the sculpted depression beneath eyebrows). Nostril is deeply and realistically incised. Lips are straight and rounded at the inner corner. Some figures (e.g., hunting companion) show furrow from nostril to inner corner of mouth. The medial cleft (below nose) is evident on some minor figures (including beja). Ears are normal size, with distinct sculpted modelling of the helix, lobes and ear canal.</td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>Straight nose (tip profile is slightly more rounded than in tombs B1 and B2), prominent on subsidiary figures, with the only sculpture being incised modelling of curl of the nostril (not as deep or well defined as in tomb B2). Lips are full, straight and rounded at the inner corner. Ears are slightly larger than in B1/B2 and helix, lobes and ear canal are sculpted.</td>
</tr>
</tbody>
</table>

---

780 Tomb AS4 (Khety II). See EL KHADRAGY (2008), *SAK* 37, Fig 2., photo KAHL et al. (2012), *Seven Seasons*, pl. 27(b).
781 EL KHADRAGY (2006), *GM* 212, Fig. 3-7 and (2007), *BACE 18*, Fig. 6-11
782 EL KHADRAGY (2006), *GM* 212, 44 notes that the lack of colour on the sunken relief of the figures in the shrine suggests these remain unfinished, and that interior painted detail may have been intended for the completed work by the artists.
783 Relief fragment MMA 26.3.354jj (*New York*). (Desert Hunt scene from TT311 – Khety). Face fragment shows strong correlation with that of Mentuhotep II from the Deir el-Bahri mortuary temple (fragment MMA 07.230.2)
784 DAVIES (1920), *Antefoker*, pl. 11a, 12.
### CHAPTER 5 - Artistic Style and Execution

#### Face/Head: Attributes: Nose, Lips and Ears

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
</table>
| C1           |                                | Nose profile is very similar to tomb B4, but executed in paint only. Some major figures show painted facial detail as follows:
|              |                                | Curl of nostril is painted with outline and shading to give appearance of depth, painted medial cleft from nose to upper lip, lips are full, depicted in painted outline, straight and rounded at the inner corner, ear details of helix and lobes are highlighted by painted lines. (Minor figures are generally devoid of painted detail, with a few exceptions). Ears are enlarged with respect to ear size in B1/B2. |
| Dyn XI:      | BH29, 33, 15, 17                | Nose is straight with rounded tip. Curl of nostril is commonly represented by black painted line. The mouth on subsidiary figures is not always fully drawn, with only the lips shown in profile. Outline of ear is drawn in black, generally without inner detail of helix or ear canal. |
| Beni Hasan   | Early-Mid Dyn XII: BH14, 2, 3   | Straight nose with nostril curl painted in black. (Foreigners in BH3 have a different nose style bulging out below bridge and with a less-rounded tip). Lips are full and straight, rounded at the inner corner. Male foreigners are shown with beards pointed at the chin. Short chin beards are depicted on some attendants and the tomb owner in BH3 (tomb owner also shown with ceremonial beard). Ear detail (helix, lobes, ear canal) are evident in very fine lines on major figures. |
| Deir el-      | Be5                            | Insufficient material to determine facial features.                           |
| Bersha       | Be2                            | On major figures the nose is straight, edged incised, with finely painted curl of the nostril. Lips are full and straight, also outlined in fine black line, rounded at the inside edge, with medial cleft between nose and lips. |
| Asyut        | FIP (As4)                       | Nose is straight, either incised in sunk relief with incised nostril curl and lips, or painted detail. |
| Dyn XII       | Straight nose with painted internal detail. |
| (As1)        |                                |                                                                                |

---

785 For example: Standing figure of wife, behind seated tomb owner, statue recess west wall (see author’s photo of facial detail, Fig. 5.13).
786 See female offering bearer, north wall (see author’s photo of facial detail, Fig 5.14).
789 See Willems (2014), op. cit., pl. 10.
790 For example Djehutihotep’s sister: relief fragment EA1150 (British Museum).
791 Tomb AS4 (KhetyII). See EL KHADRAGY (2008), SAK 37, Fig. 2., photo KAHL et al. (2012), Seven Seasons, pl. 27(b).
792 Northern Soldiers Tomb. See EL KHADRAGY (2006), SAK 35, Fig. 5-7.
793 KHADRAGY (2007), BACE 18, Fig 5. (woman at rear of boat). See also GM 212, footnote 22 on p44.
### Face/Head:
**Attributes: Nose, Lips and Ears**

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Thebes</td>
<td>Dyn XI (TT311 and TT103)</td>
<td>Nose represented in raised relief with deeply sculpted internal detail of nostril and depression behind bridge (both tombs). Tip of nose is rounded. Sculpted nostril detail is also highlighted with painted line (TT103). Lips are sculpted full and straight.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII (TT60)</td>
<td>Noses have rounded tips, with minimal internal detail consisting of painted outline of nostril and lips.</td>
</tr>
<tr>
<td>Southern Egypt</td>
<td>Mo1</td>
<td>Nose is protruding or rounded, especially on minor figures, with minimal internal painted detail. Chins and lips are poorly represented on many minor figures. Lips are very full when sculpted.</td>
</tr>
</tbody>
</table>

### (b) Torso

#### Breast, Waist, Small of Back

**Attributes: Breast, Waist, Small of Back**

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meir tombs</td>
<td>B1, B2, B4</td>
<td>Torso tapers gradually from armpits to waist following canonical style. Male breast is slightly rounded, with second slight curve at base of ribs. In tomb B2 the seated tomb owner (Fig 5.6) has very shallow sculpted modelling to emphasise the curve of the breast and the musculature of the abdomen. The official standing behind is shown with slightly corpulent features (protruding breast and sculpted rolls of fat below). Some minor figures are shown with realistic features (Beja depict scarification marks and some field workers have pot bellies). Female torsos follow canonical style, with angular breasts.</td>
</tr>
<tr>
<td></td>
<td>C1</td>
<td>Major figures follow canonical style as for the earlier tombs above (without internally depicted musculature). Some minor male and female figures exhibit narrower waistlines than those in the above tombs, contributing in part to their more slender appearance (see discussion on tomb C1 in the section on artist grids below).</td>
</tr>
</tbody>
</table>

---

794 Relief fragment MMA 26.3.354jj (*New York*), (Desert Hunt scene from TT311 – Khety); Relief fragment MMA 12.180.265 (*New York*), (Head of scribe from TT103 – Dagi).
795 DAVIES (1920), *Antefoker*, pl. 11a, 12.
796 See brewing scene, VANDIER (1950), *Moalla*, pl. 32-1
797 For example, see standing female figure, VANDIER (1950), *Moalla*, 53, fig. 4.
## Torso:
Attributes: Breast, Waist, Small of Back

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beni Hasan</td>
<td>Early series BH29, 33, 15, 17</td>
<td>Torso tapers from armpit to waist. Profile of breast and ribs is noted on some major figures otherwise not well defined. There is a lack of painted internal detail. Female breasts are angular. In the earliest tombs, the taper of the torso is not well defined resulting in a stocky appearance.</td>
</tr>
<tr>
<td></td>
<td>Late series BH14, 2, 3</td>
<td>Tapered torso follows canonical style, with profile of slightly rounded male breast and ribcage. Female breast is more rounded.</td>
</tr>
<tr>
<td>Deir el-Bersha</td>
<td>Be5</td>
<td>Male torso is moderately tapered, with rounded breast.</td>
</tr>
<tr>
<td></td>
<td>Be2</td>
<td>Tapered torso follows canonical style, with profile rounded breast and ribcage barely discernible. Female figure is very slim at the waist with rounded breast.</td>
</tr>
<tr>
<td>Asyut</td>
<td>FIP (As4)</td>
<td>Male torso tapers strongly from armpits to waist with well-defined curve of breast. Female figure is slim at the waist also with broad shoulders and rounded breast.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII (As1)</td>
<td>Male torso conforms to mid Twelfth Dynasty canonical form. Shoulders are less broad in comparison to waist that seen in tomb As4. Female figures have similar slim waist to that in As4, but with less broad shoulders.</td>
</tr>
<tr>
<td>Western Thebes</td>
<td>Dyn XI (TT103)</td>
<td>Narrow torso without internal sculpted detail. Follows canonical style, similar to that on royal mortuary temple.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII (TT60)</td>
<td>Painted torso with fine edge outline, marking the profile of the curve of the breast and a slight curve of the ribcage below. There is no internally painted detail. Similar in style to that of BH3 (Khnumhotep II). Womens breasts are full and rounded rather than angular.</td>
</tr>
</tbody>
</table>

---

798 Baqet III standing, BH15 south wall. Refer to NEWBERRY, Beni Hasan II, pl. 7.
799 See tomb owner standing, BH29 east and south walls. Refer to NEWBERRY, Beni Hasan II, pl. 30-31.
800 See Khnumhotep II standing, BH3 north & east walls. Refer to NEWBERRY, Beni Hasan I, pl. 30, 34.
801 See offering bearer, BH2: NEWBERRY, Beni Hasan I, pl. 10; wife at offering table, ibid., pl. 18.
802 WILLEMS (2014), op. cit., pl. 10. Photo shows Ahanakht standing, northern jamb to inner room, Be5.
803 See tomb owner standing: NEWBERRY, Bersheh I, pl. 10.
804 Djehutihotep’s sister: relief fragment EA1150 (British Museum).
805 See Khety II and wife standing, tomb 4 north wall (photo): KAHL et al. (2012), Seven Seasons in Asyut, pl. 27b.
806 EL KHADRAGY (2007), BACE 18, 125-44: tomb owner standing, fowling scene, north wall inner passage, Fig. 5; Female offering bearer, south wall inner passage, Fig. 10.
807 FREED (1984), op. cit., 60, DAVIES, Five Theban Tombs, 36, pl. 30 fragment 1.
808 See relief of king from royal mortuary temple, MMA 07.230.2 (New York).

160
(c) Limbs

**Hands, Knees, Lower Legs**

<table>
<thead>
<tr>
<th>Site</th>
<th>Tombs</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meir tombs</td>
<td>B1, B2, B4</td>
<td>Tendons and muscles of lower leg, and creases delimiting the kneecap are sculpted prominently on minor figures in tomb B2.(^{809}) and more subtly on one depiction of the tomb owner in tomb B1.(^ {810}) Fingers of outstretched hands are mostly straight. In tomb B2 incised details of fingernails and toenails are noted.</td>
</tr>
<tr>
<td></td>
<td>C1</td>
<td>Internal painted detail of kneecaps, musculature etc is not evident. Fingers of outstretched hands are slightly curved.</td>
</tr>
<tr>
<td>Beni Hasan</td>
<td>Early series BH29, 33, 15, 17</td>
<td>Musculature of limbs not well defined. Internal painted detail is not discernable. Extended fingers are generally straight.</td>
</tr>
<tr>
<td></td>
<td>Late series BH14, 2, 3</td>
<td>Definition of muscle bulges of upper and lower arm depicted in finely painted black outline, with intricate internal detail of fingernails in black outline in tomb BH3.(^ {811})</td>
</tr>
<tr>
<td>Deir el-Bersha</td>
<td>Be5</td>
<td>Rounded modelling of ankles and heels are noted on standing figure of tomb owner.(^ {812}) Musculature is otherwise not attested in sculpture. Extended fingers are generally straight.(^ {813})</td>
</tr>
<tr>
<td></td>
<td>Be2</td>
<td>Fingers of some outstretched hands are slightly curved.</td>
</tr>
<tr>
<td>Asyut</td>
<td>FIP tombs</td>
<td>Insufficient surviving evidence for observations to be made.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII As1 (P10.1)</td>
<td>Insufficient surviving evidence for observations to be made.</td>
</tr>
<tr>
<td>Western Thebes</td>
<td>Dyn XI</td>
<td>Insufficient surviving evidence for observations to be made.</td>
</tr>
<tr>
<td></td>
<td>Dyn XII (TT60)</td>
<td>Arms and legs are painted, delineated at the edges with fine outline. The profile of muscle bulges is observed on the arm of Intefiker bowhunting,(^ {814}) similar to but less well defined than that of Khnumhotep II in BH3. There is no evidence of internally painted muscle detail in major or minor figures. Fingers of extended hands are noticeably rounded.</td>
</tr>
</tbody>
</table>

The Theban court-style relief of the Eleventh Dynasty is demonstrated by fragmentary remains from tomb TT311 of chancellor Khety at Western

---

\(^ {809}\) South wall, desert hunt: bodyguard standing behind Ukhhotep II, refer to KANAWATI et al. (2017), pl. 84, and north wall bottom register: Boatmen and papyrus gatherers. Refer to KANAWATI et al. (2017), pl. 91-92.

\(^ {810}\) East wall, desert hunt: tomb owner Senbi I leaning forward. Refer to BLACKMAN, Meir I, pl. 6-7.

\(^ {811}\) Khnumhotep II hunting with bow, north wall. See KANAWATI & WOODS (2010), op. cit., photo 28.

\(^ {812}\) Photo of Ahanakht standing, northern jamb of entrance to inner room. Refer to WILLEMS (2014), op. cit., pl. 10.

\(^ {813}\) NEWBERRY, Bersheh 2, pl. 14 (tomb owner sitting), pl. 17 (officials).

\(^ {814}\) North wall. For relative position of this motif, refer to DAVIES, Antefoker, pl. 7.
Thebes/Asasif. Aspects of sculpted facial features observed in this tomb are also apparent in the early Twelfth Dynasty style from Meir, as exemplified by the reliefs from tomb B2. The fragment of the face of Khety from his hunting scene in tomb TT311 can be directly compared to the more complete depictions of Mentuhotep II from the same tomb and from the adjacent royal mortuary temple,\(^{815}\) and was probably carried out by the same team of artists. The work, executed in a high raised relief, illustrates the modeling of internal facial detail by deep, sharply defined cuts at the base of the nose, depicting the nasal cavity and rounded flare of the nostril, as well as a sculpted depression between the bridge of the nose and the eye. The relief profile is higher and more rounded than is seen in tomb B2 (which exhibits the lower, flatter style of the early Twelfth Dynasty),\(^{816}\) however, the internal sculpted detail of B2 indicates a return to the style of the late Eleventh Dynasty in terms of sculpted interior detail. Fig. 5.7(b) illustrates the similarity of the face of Ukhhotep I’s wife to the above features in the king’s face from TT311, notably the sculpted modelling of the nostril and the facial crease from the corner of the nostril towards the mouth, the downturned inner canthus of the eye, the depression between the eye and the bridge of the nose emphasizing the upper cheek, and the fine swelling to emphasise the chin. The relief of Ukhhotep’s wife reflects a similar standard of workmanship to that of the earlier court-style relief in TT311, and is superior in some aspects of depiction, with a more realistic modelling of the bridge of the nose and an eye in better proportion to the size of the face. The apparent return to a style of sculpted interior detail by the artist of tomb B2 was begun in the preceding tomb B1, in which similar stylistic features were represented, although the relief was less prominent and greater use was made of painted internal detail in line with the early Twelfth Dynasty court style.

Eleventh Dynasty tombs at comparative sites, particularly Asyut, Beni Hasan and Deir el-Bersha examined above, demonstrate less commonality with the Theban court style and on the evidence presented, appear to have exerted less influence on the development of the early Twelfth Dynasty style at Meir. Of these, the earliest tombs at Beni Hasan show a distinctly local course of development, being executed in paint only and consequently with a lessened emphasis on internal detail and

\(^{815}\) MMA 07.230.2 (New York) from nearby royal mortuary temple, see also the king’s facial detail in the reliefs from tomb TT311 wall decoration (MMA 26.3.354b, New York).

realistic representation that was possible with sculpted relief. It is noted however that the basic style of the early tombs was adhered to throughout the series of the Beni Hasan tombs (with the exception of small sunk reliefs of the seated tomb owner on the statue recess jambs of BH3), and underwent refinement through the Twelfth Dynasty with the capacity to better incorporate realistic depictions and more refined internal detail into the painted style. Refer for example to the depictions of the tomb owner’s wife in BH15 (Baqet III) and BH3 (Khnumhotep II). The BH3 figure maintains the paint-over-plaster technique typical of the Beni Hasan local style, however, the internal painted facial detail demonstrates more commonality with tomb C1 at Meir (see Figs. 5.13 and 5.14). Khnumhotep II’s wife shows similar very fine black line detail of the nostrils, lips and ear details to that seen on Ukhhotep III’s wife in Meir tomb C1, while lip and nostril outlines, while present on the wife of Baqet III, are not as finely executed and do not include the same intricacy of detail as seen in the later tombs.

The decoration of early tombs at both Deir el-Bersha and Asyut are based on a style of sunk relief which evidently pre-dates the Theban court style (refer to the dating of tomb As4 of Khety II in Chapter Three), and developed independently of it. The state of preservation of facial features in tombs As4 (Asyut) and Be5 (El-Bersha) unfortunately limits the comparison of the degree of internal modelling employed at these sites, however, the style of sunk relief at both sites seems to be employed to delineate the outline of the figures, with rounded modelling of the limbs within the outline, and fine detail likely to be painted in. This style possibly influenced the similar small scale reliefs of Khnumhotep II attested on the statue recess jambs of BH3, mentioned previously. At both sites, the same relief style is continued in the mid-Twelfth Dynasty tombs As1 (Djefaihapi I) and Be2 (Djehutihotep) respectively. In the case of Djefaihapi I, the entire wall of the shrine is edge-incised for interior painted detail (which in its unfinished state remained unapplied), while the tomb of Djehutihotep shows a mix of the painted technique similar to that noted in the Beni Hasan tombs, and shallow fine edge-incised relief derived from the local style seen in the earlier tomb Be5. In the latter case these two techniques can be seen in

---

817 Wife seated before offering table, south wall top register: refer to NEWBERRY, Beni Hasan I, pl. 35.
818 EL KHADRAGY (2007), GM 212, 44 and footnote 22. See also KAHL (2013), Proportionen und Stile, in Frood & McDonald (Eds.), 141-6.
CHAPTER 5 - Artistic Style and Execution

the same composition,\textsuperscript{819} with minor figures on the bottom register, being edge-incised while the figures in the register immediately above are painted only.

III. Techniques of Execution: Relief and Painted Representation

(a) Case Study – Meir Tomb B2 (Ukhhotep I)

Blackman described the reliefs on the north and south walls as “remarkable”,\textsuperscript{820} and those of the west wall as “quite excellent”, however, he noted that the tomb was in an unfinished state in comparison to the adjacent tomb B1 and therefore he did not investigate the qualities of the relief in more detail. Tomb B1 of Ukhhotep I’s father Senbi I is frequently cited as a significant example of the early Twelfth Dynasty naturalistic style of relief,\textsuperscript{821} and the fine quality of the decoration in this tomb warrants this attention, as does the degree of completion and their state of preservation. It is clear however that an investigation of the early Twelfth Dynasty style at the site of Meir requires the examination of both tombs B1 and B2 together. When compared against those of tomb B1, it is apparent that the B2 reliefs of Ukhhotep I represent the culmination of this style, and exceed the quality of those of his father in several respects which are discussed below.

Stylistic Features

The reliefs of both tombs B1 and B2 reflect the low, flat style that is characteristic of the early Twelfth Dynasty under Amenemhat I (and continuing under Senusret I),\textsuperscript{822} and which was, itself, derived from aspects of earlier Theban styles.\textsuperscript{823} The B1 reliefs in particular exhibit a shallow cut with flat surface, compositional sparseness and with a few exceptions, a lack of incised interior detail, where the artist has chosen to represent the majority of detail via painted medium. In this, the artist has adopted style cues observed in earlier elite private tombs of the Theban court, in particular TT103 (Dagi)\textsuperscript{824} and TT280 (Meketre).\textsuperscript{825} In the few areas where incised detail is

---

\textsuperscript{819} Right-hand wall, facing seated tomb owner. Refer to Newberry, Bersheh I, pl. 12.
\textsuperscript{820} BLACKMAN, Meir II, 10.
\textsuperscript{821} FREED (1984), op. cit. 195; DAVIS (1989), Canonical Tradition ,85-6; GROENEWEGEN-FRANKFORT (1951), Arrest and Movement, 68-73 discusses both tombs B1 and B2, however predominantly uses B1 as examples.
\textsuperscript{822} FREED (1984), op. cit., 195 (discussing tomb B1), 206 (discussing tomb B2).
\textsuperscript{823} ROBINS (1990), The Reign of Nebhepetre Mentuhotep II and the Pre-Unification Theban Style of Relief, 42; FREED (1984), op. cit., 191-3.
\textsuperscript{824} DAVIES, Five Theban Tombs, 36; FREED (1984), op. cit., 60-3.
presented, as for example in the wing feathers of ducks (see photo, Fig. 5.1) it is executed sharply and precisely, providing a precursor to the extensive incised detail and modelling attested in the following tomb B2. Elsewhere, for example in the procession of cattle (see photo, Fig. 5.2), internal detail is provided by painted contrasting colour and lines, indicating the hide colouration and drawn lines to highlight the contours of the animals’ musculature. A major stylistic point of departure between tombs B1 and B2 is the degree of internal modelling and incised relief, which is more developed in the later tomb. While the overall relief is shallow like that of his father, the style of Ukhhotep I’s tomb introduces significant incised detail into a range of both human and animal subjects.

Although the compositional sparseness and flatness of the relief typical of the early Twelfth Dynasty remain, the artist in tomb B2 makes more frequent and bolder use of incised detail, as can be seen in Fig. 5.6, where the seated figure of Ukhhotep displays very finely executed low, flat relief on a sparse compositional ground. The edges of his collar are marked by a single incised line, with the fine detail of the necklace to be later filled in by painted detail alone (typical of the prevailing style). The main figure is surrounded by smoothly finished empty space, not tightly packed with text or subsidiary depictions. A closer examination of the arms and torso reveals the subtle definition of musculature by incised relief, and Ukhhotep’s wig displays a deep and intricate incised pattern, which marks a departure from the style of the preceding tomb.

The increased application of incised internal detail over painted detail alone is continued with depictions of animals and other subjects. The attention to detail in the depictions of cattle is a characteristic of the newly developed style, and the significant space given over to cattle processions and livestock handling on the northern, western and southern walls may reflect the relative importance of livestock to the Cusite governors. The finest examples of incised, moulded detail in cattle, occurs on the top register of the north wall (see photo, Fig. 5.3). This scene illustrates the complex but subtle moulding of rolls of fat around the animal’s neck.

825 Relief fragments MMA 20.3.162, Metropolitan Museum of Art, New York; FREED (1984), op. cit., 91-2. These private reliefs reflect the styles seen on the mortuary temple of Mentuhotep II at Deir el-Bahri (see relief block of King Mentuhotep II, MMA 7.230.2, New York).
and body, and the attempts at realistic modelling of the musculature of its limbs.\textsuperscript{826} Using this method the artist is able to more effectively portray the fine condition of the animals than is possible using painted technique alone, as employed in the cattle procession of tomb B1 (photo, Fig. 5.2). Even in the technique of relief, the ability to display a lifelike vitality to the subject is variable, illustrated by the cattle reliefs on the southern wall of B2 (see photo, Fig. 5.5). The reliefs are executed to the same style as the cattle on the north wall, with interior moulding of the head and neck, and significant inletting around the eyes and brows, however, the moulding is not as extensive and lifelike, suggesting that the south wall may have been executed by a less capable artist. On the north wall, significant attention to interior sculpted detail is also applied to other non-human subjects, such as the papyrus bundles being carried in the bottom register, with both the stems and papyrus heads being represented in sharply cut relief.\textsuperscript{827}

\textit{Achievements of the artist}

The artist strictly adheres to the established canon for the representation of major figures (particularly the tomb owner, his family members and senior officials) and for ritual scenes (the presentation of offerings and funerary rituals depicted on the west wall). Although finely executed, the figures on the west wall are depicted in uniformly formal, upright postures with little indication of movement. Even the dancers are depicted in the same formal posture standing in line. Many of the subsidiary figures depicted elsewhere in the tomb engaged in activities not associated with the central mortuary cult exhibit individual stylistic features, which illustrate the achievements of the artist in his mastery over the medium.

\textit{Successful Depiction of Movement:} On the north wall in particular, a range of scenes are presented which involve estate workers in activities depicting at times strenuous physical exertion, and the range of postures of these figures provide scope for the artist to demonstrate success of movement in his work. The themes demonstrating this aspect in the art of tomb B2 are common motifs in the decorative programmes of contemporary early Middle Kingdom tombs, including agricultural and marshland work contexts (bringing down a bull, papyrus gathering, boatbuilders.

\textsuperscript{826} KANAWATI & EVANS (2017), \textit{Wekkkhotep (B2)}, \textit{publication forthcoming}, pl. 90, see top register.
\textsuperscript{827} KANAWATI & EVANS (2017), \textit{Wekkkhotep (B2)}, pl. 90, see bottom register.
netting of waterfowl, and duelling boatmen) and military training (wrestling), however the scenes including several of these motifs in tomb B2 represent the finest examples of their type attested in the early Middle Kingdom provincial tomb corpus.

The two scenes that above all show a greater degree of mastery over movement by the artist of B2 than can be seen in contemporary scenes at other sites are the duelling boatmen (see photo, Fig. 5.12) and the bringing down of a bull (see photo, Fig. 5.11). The duelling boatmen theme is a common representation dating to the Fifth Dynasty court tombs at Saqqara, with subsequent copying in later tombs and more occasionally at regional tomb sites. This scene is the first depiction of the theme at Meir, which closely follows its Old Kingdom Memphite antecedents. The artist however surpasses most of these in his expression of movement, with a complex overlapping of figures duelling in the first two boats. The interplay between the two central figures (one from each boat) as they grapple each other sets a precedent for this scene in the Middle Kingdom (photo, Fig. 5.12). While the right hand figure leans across to the opposing boat, bracing himself in an elongated stance, he is shown grasping his opponent around his neck with his left hand while he places the man in a headlock with his right arm. Meanwhile the left hand man loops his left arm under the first figure’s thigh and grabs his lower leg in his right hand. While engaged in these wrestling holds, both figures also retain their boat staves tucked under their armpits. The crossing of the boat staves of the four central figures at different angles also adds to the sense of movement in the scene. Dramatic tension is included in the scene by a fifth man who, having been knocked off his feet, has the arch of his back stretched over the prow of his boat with his head dangling precariously close to a crocodile underneath.

The scene which most effectively conveys vigorous action, is found in the top register on the north wall (the same wall as the duelling boatmen). It depicts the bringing down of a very large bull by a team of seven workers, six of whom are attempting to hold the animal while the seventh places a lasso over its head. Two

---

828 Tombs of Ti (STEINDORFF, 1913, pl. 110-11); Ptahhotep/Tjefu (DAVIES, 1900, pl. 21)
829 See BOLSHAKOV (1993), BSEG 17, 31-3 for a table of occurrences of the scene.
830 North wall, top register: BLACKMAN, Meir II, pls. 3-4; KANAWATI & EVANS (2017), Wekhhoteb (B2), publication forthcoming, pl. 91.
men are nearly prostrate as they lean against the foreleg to aid in immobilising the beast, with the upper of the two figures also grasping the right horn as the bull’s head is fully rotated to the left with its muzzle pointing upwards (see photo Fig. 5.11). Like the overlapping figures of the boatmen, the two men leaning against the foreleg show a complexity of overlapping of limbs at oblique angles (including the bull’s leg) with a three layer overlap of the lower figure’s head, which is tucked under the upper figure’s armpit and thus overlaps the upper figure’s left arm, which in turn overlaps the lower figure’s right shoulder. Two other figures help in keeping the bull’s head pointing upwards while the fifth and sixth figures hold onto the rear leg and tail respectively. The overall impressions conveyed to the viewer are of strenuous activity and the barely constrained power of the bull.

Attention to small details which emphasise movement related to the activity depicted is also evident in the clapnet pullers, where moulding of the musculature of the lower legs and the creases around the knees emphasise the stress on the lower limbs as they force their feet into the ground while pulling the net closed. In an unusually detailed gesture, the toe of the third figure is also flexed downwards, emphasising the arching of the foot in this process. A precedent of a small detail accentuating movement exists in the figure holding down a bull in a slaughtering scene in tomb B1 (see photo fig. 5.10). The force exerted by the worker in restraining the bull is emphasised by his chin being depicted over his chest, in the non-canonical depiction of his head being hunched down as he leans forward. A near identical posture is seen in two of the boat-builders in tomb B2, with their chins tucked below their shoulders as they strain against the ropes as they tie the reeds into bundles.

Another aspect of movement explored by the artist on the north wall of tomb B2 is the sequence of movement, as portrayed in the papyrus gathering scene on the bottom register. The sequence begins with the tying of a papyrus bundle by two workers. Each successive vignette of the scene depicts a stage in the lifting and carrying of the bundle on a worker’s back (the differing hair and beard details

---

831 KANAWATI & EVANS (2017), Wekhhotep (B2), pl. 91, see middle register, line of clapnet-pullers.
832 This detail is noted by GROENWEGEN-FRANKFORT (1951), op. cit., 70.
833 KANAWATI & EVANS (2017), Wekhhotep (B2), pl. 91, see bottom register.
834 BLACKMAN, Meir II, pl. 3, 4; KANAWATI & EVANS (2017), Wekhhotep (B2), pl. 90, 91.
between the first pair of workers and the second pair lifting the bundle indicates that different workers are depicted in the activity, rather than a “freeze frame”, progressive narrative view of the same worker at different stages of the carry, as might be understood from a modern perspective).  

Transmission of expressions: A more subtle indicator of the artist’s capability is attested in the way he conveys expression on the face of the woman accompanying the tomb owner in the large scale depiction of Ukhhotep I seated observing musicians and the cattle procession (see photo Fig. 5.7a). The woman, presumably his wife, is depicted sitting at Ukhhotep’s feet at about half scale compared to the tomb owner. She has her arm around his left leg and her head is turned rearward and upward to look at Ukhhotep with a distinct facial expression of admiration (see photo, Fig. 5.7b), denoted by her lips being elongated and raised into slight smile, reinforced by the facial crease extending across her cheek from the base of her nostril. The adjacent vignette of the blind musicians also demonstrates a similar capability for conveying expression, with the facial features of the musicians indicating concentration on their music (see photo, Fig. 5.8a). Although the musician’s eye is closed and curved as an indicator of blindness, this also helps in conveying the sense of concentration, as does the hand held to the ear to concentrate on his own voice. It should be noted that where they exist in the wall decoration of the tomb, indications of expression are invariably attested on the faces of minor figures. The tomb owner is depicted according to strict convention with a neutral expression (see for example, Ukhhotep standing, western end of north wall, or both depictions on the western wall). Transmission of expression in this artist’s work is not limited to human subjects, as can be seen in the minor animal figure of the hare in the desert tableau / hunting scene at the eastern end of the south wall. The hare is one of the smaller animal depictions in the scene, however it is the most expressive (see Fig. 5.9). It is shown with its head turned rearward towards the hunter (following a similar innovation in the hunting scene of Senbi I in

835 BRAUN (2015), in Hartwig (ed.), 348, argues that typical recurring activities (such as this work context) are not to be classified as a visual narrative, as they are not intended to describe particular historical (or mythical) events.
836 BLACKMAN, Meir II, pl. 3; KANAWATI & EVANS (2017), Wekhhotep (B2), pl. 90.
837 Ibid.
838 Ibid.
839 BLACKMAN, Meir II, pl. 11, 15; KANAWATI & EVANS (2017), Wekhhotep (B2), pl. 87, 88.
tomb B1, where one of three overlapped gazelles is similarly turned to look at the hunter.\textsuperscript{840} The eye of the hare is round and enlarged, and the sunken cheek conveys a sense of the animal’s fear and alarm to the viewer. The Hare’s legs are elongated (perhaps abnormally so), emphasising that it is ready to run.

\textit{Divergence from the canon}

As with tomb B1, the artist of tomb B2 demonstrates his ability of observation and realistic depiction in specific figures within the decorative program wherever he has a free hand to do so. These depictions represent significant divergence from the established canon, and are not simply caricatures, but are accurate renderings from detailed observation of real subjects (to the point of functional rendering).\textsuperscript{841} These exceptions from the canon are restricted to minor figures in subsidiary agricultural scenes or other working contexts where they are less likely to cause offence to those observing the tomb owner’s mortuary cult. In contrast, the major figures of the tomb owner, his family and senior officials and other figures (predominantly on the western wall) engaged in the funerary ritual, although executed to the finest standard, are in strict conformance with convention.

The most striking of these are the figures of the Beja herdsmen,\textsuperscript{842} which are also seen in tomb B1.\textsuperscript{843} The three Beja figures in tomb B2 (and the two in B1) all share the thin, emaciated look of a desert tribesman, with prominent initiation scars depicted on the torso. All three depicted in tomb B2 stand in stooped postures, leaning on a rough cut walking stick and the figure on the north wall limps on a malformed right leg (see photo Fig. 5.4). The three figures are shown in an identical motif on each wall, with the Beja leading a small group of two or three cattle via a rope (Fig. 5.5), and an Egyptian overseer bringing up the rear. The canonical form of the overseer stands in strong contrast to the stark realism of the Beja. The best preserved of the three (on the south wall, see fig. 5.8b) illustrates the deep incisions in which the figures are carved, to emphasise the realistic facial features including

\textsuperscript{840} BLACKMAN, \textit{Meir I}, pl. 6.  
\textsuperscript{841} GROENEWEGEN-FRANKFORT (1951), \textit{Arrest and Movement}, 3-5.  
\textsuperscript{842} South wall, middle register, north wall, top register and west wall, bottom register: KANAWATI & EVANS (2017), \textit{Wekhhotep (B2)}, pls. 86, 87, 90; BLACKMAN, \textit{Meir II}, pls. 6, 3, 11.  
\textsuperscript{843} South wall, upper and middle registers: BLACKMAN, \textit{Meir I}, pls. 9, 10.
scars, sinews protruding on the neck, arms and legs, the short beard and copious fuzzy hair.

In terms of human subjects, the Beja herdsmen represent an extreme departure from the canonical form, however, the artist also diverted from these conventions in a more subtle way in the depiction of some minor Egyptian figures. On the north wall a group of three seated musicians are depicted conventionally, with the exception of closed eyes denoting their blindness (see fig 5.8a). Following Old Kingdom Memphite antecedents (and thus an established, permitted departure from canonical form), other minor figures are occasionally depicted with attributes of age, such as the bearded, pot-bellied boatbuilder leaning on a walking stick. Other workers in the same and adjacent scenes are depicted with bald spots.

In summary, the artist seems to show his abilities in small details and unusual figures, such as the beja herdsmen and blind musicians, with the majority of this exceptional work on the north wall, although divergences from the canon are also noted in the beja depicted on the south wall.

(b) Artistic Styles and Techniques in Comparison Tombs

Comparison of tomb B2 to Other Meir Tombs

The similarities between the relief styles in tombs B1 and B2 have already been discussed above. It is clear that the more detailed stylistic cues applied in tomb B2, especially with regard to the greater degree of internal sculpted modeling, were elaborations on the simpler early Twelfth Dynasty style of B1 where the majority of inner detail within subjects was painted rather than sculpted (with notable exceptions as discussed).

The next sequential tomb where wall decoration is attested at Meir is not that of Ukhhotep I’s immediate successor (tomb B3 of Senbi II) but tomb B4 of the following governor Ukhhotep II. Although it survives in a very fragmentary state in comparison to the reliefs of tombs B1 and B2, the wall decoration of B4 indicates a

844 North wall, bottom register: BLACKMAN, Meir II, pl. 4; KANAWATI & EVANS (2017), Wekhhote (B2), pl. 91.
number of stylistic departures from the earlier tombs of the sequence. The majority of the scenes are executed in raised relief, on a thicker layer of plaster throughout the tomb than is evident in tomb B2 (where plaster is mainly used to smooth out faults in the rock substrate on the north wall). While the extent of the plaster base in tomb B4 may arise from a poorer quality of bedrock at the southernmost end of the B group tombs, it may also indicate the preference and skill level of a new artist responsible for the decoration of tomb B4. The reliefs are slightly more rounded than the low flat style seen in both tombs B1 and B2. In addition, there has been a return to the convention of completing much of the internal detail of subjects with painting only, and employing the raised relief to delineate the edges and some major internal details of a figure. Some of the internal painted detail is very finely executed, for example the scales of a fish drawn in fine red cross-hatch infilled with green, gives a striking three-dimensional appearance with the combination of pattern and colours used, and thus provides a similar quality to the motif as would be achieved by sculpture of the fish scales. Similar fine lined detail in red is attested on the belts and kilt edges of the procession of priests in the interior of the porch.

Given the technical capability of the artist of tomb B4 however, the minor figures are depicted in more conventional postures than can be seen in the prior tombs (particularly in tomb B2, where divergence from the canon is noted in several scenes, as discussed above). The execution of the reliefs is of a very fine technical standard, but the artist appears to be very careful to follow established conventions, and there are no scenes where he allows a similar degree of depiction of movement to that seen in tomb B2.

The final tomb of the sequence, C1 of Ukhhotep III, attests the most significant departure from the techniques used to execute the wall decoration in the previous three tombs, in that it is entirely executed in paint over plaster (with the minor exceptions of folds of Ukhhotep III’s kilt in the fowling scene, which is represented by raised lines of plaster). The surviving decoration in tomb C1 demonstrates that the artist relied on vivid colour with finely drawn internal detail, and it is possible that it was influenced by the painted style and techniques from Beni Hasan. Possible mechanisms for this influence may include the relocation of artists from

845 South wall of outer room, fishing scene, western end. For position see BLACKMAN, Meir III, pl. 6.
846 Refer to BLACKMAN, Meir III, pl. 18.
Beni Hasan to Meir, with the result that the tomb is executed according to their expertise (which did not extend to sculpted relief). This translocation of artisans might have been part of a wider migration of workers accompanying members of the ruling family, if intermarriage took place between the ruling families of both nomes. As noted in the previous chapter, the frequency of names consistent with the Beni Hasan governors is attested in the group of coffins corresponding with the later Meir governors’ tombs, suggesting that some degree of intermarriage might have taken place. The arrival of artists with specific expertise in painted technique may have also simply been a generational change, as the artists responsible for the prior tombs either passed away or moved elsewhere as their skills were required.

There are some differences noted between the painted styles exhibited in tomb BH3 at Beni Hasan and Meir tomb C1, however, with the scenes in C1 appearing to be rendered in a more vibrant colour palette. A more important difference between the two is seen in the proportionality of the figures. A number of the minor female figures in tomb C1 have a more slender profile than those of BH3, and there are some inconsistencies with other minor figures with regard to leg proportions (see Section III for a full discussion), resulting in the figures appearing less stocky than the minor figures in tomb BH3. The slender female figures of C1 are closer in style to a pair of figures in TT60, however, the compositional space is less dense and the scenes are less complex in TT60 than seen in C1, which is closer to BH3 in this regard.

**Comparative Tombs at Other Sites**

**Beni Hasan**

The tombs at Beni Hasan clearly demonstrate an independent development of art styles to those of Meir, with the decorative programmes being executed entirely in painted decoration over smoothed and thinly plastered walls. This technique is in evidence from the earliest decorated tomb at the site (BH29 of Baqet I, significantly pre-dating the first Middle Kingdom tomb at Meir) through to the final tomb of the series (BH3 of Khnumhotep II, approximately contemporary with Ukhhotep II of

---

847 North wall, see DAVIES, Antefoker, pl. 13.
848 KANAWATI & WOODS (2010), Beni Hassan, Art and Daily Life, 24, 36, 42, 50.
Meir tomb B4). While the basic style continued to be based on the pre-Twelfth Dynasty examples from the Baqet family tombs, and at no time was a Twelfth Dynasty relief style adopted, the degree of internal detail represented is noticeably more elaborate in the final tomb of the series (BH3 of Khnumhotep II). Compare for example the detail of the facial features and profile of the arm muscles of Khnumhotep II fowling849 with the less detailed depictions of Khety inspecting activities in tomb BH17850 or a similar representation of Baqet III in tomb BH15.851 Further comparison can be made in the representation of birds in tombs BH15 and BH3. The bird depictions in BH15 are well executed, with fine detail shown of the outer feathers of the wings and tail,852 however, similar scenes in tomb BH3 present a higher level of expertise in depicting this detail, along with the complex pattern of acacia leaves surrounding their bodies.853 A similar depiction of birds in tomb BH17 is a near exact copy of the scene in BH15, and could have been executed by the same artist.854

In comparison to the early middle Kingdom Meir tombs, the representation of minor figures in the Beni Hasan tombs generally lack the range of movement that is so convincingly conveyed in tomb B2. It is clear however that the Beni Hasan artists possessed the capability for convincing depiction of movement, as the substantial wrestling scenes covering the eastern walls of tombs BH15 (Baqet III),855 BH17 (Khety)856 and BH2 (Amenemhat)857 demonstrate. The range of movement depicted in these scenes is executed with a similar level of skill as the more limited depiction of wrestlers in tomb B2,858 however, these scenes remain exceptions in the Beni Hasan tombs where the overall impression is otherwise of subsidiary figures depicted in neutral stance or standing passively upright with both feet on baselines. Key scenes that are analogous to the scenes of tomb B2 discussed above are the clapnet scenes in BH29,859 BH33860 and BH2,861 and the duelling boatmen in BH29862

849 East wall. See KANAWATI & WOODS (2010), *op. cit.*, photos 2, 18.
850 Standing figure of tomb owner, south wall. See KANAWATI & WOODS (2010), *op. cit.*, photo 5.
851 Tomb owner standing, south wall. See KANAWATI & WOODS (2010), *op. cit.*, Fig. 40.
852 KANAWATI & WOODS (2010), *op. cit.*, photo 197.
855 NEWBERRY, *Beni Hasan II*, pl. 5.
856 NEWBERRY, *Beni Hasan II*, pl. 15.
859 NEWBERRY, *Beni Hasan II*, pl. 28.
and BH15. In all four tombs, these scenes are smaller motifs than the discussed scenes in Meir tomb B2, involving fewer figures and smaller representations with respect to the total compositional space.

The duelling boatmen scene in BH29 for example involves only six figures on two boats. Only the two central figures are waving their staves at each other, and the right-hand man of these two is standing passively upright like the other figures in the scene. There is no attempt to convey movement by complex overlapping of figures or patterns of oblique angles of intersecting boat staves, as can be seen in the equivalent scene in Meir tomb B2. Likewise, the clapnet scenes in all three Beni Hasan tombs show a small number of workers standing upright holding the rope net, with no attempt by the artist to represent any form of action by depicting the workers leaning against the net as can be seen in B2. Only in the bull lassoing scene in BH29 is there some attempt to depict frantic action by the workers, with five figures attempting to bring down the bull by the forelegs, tail and horns (like those in the Meir B2 depiction, but with more rigid, less realistic stances). The action in the scene is (not very successfully) conveyed by a sixth figure depicted above the bull’s horns with his legs apart and arms forward, presumably having been thrown from the animal’s back (alternatively, the positioning of this figure could merely indicate his position behind the bull from the viewer’s perspective, according to the principle of ‘typical aspect’ described above).

Deir el-Bersha

The stylistic tradition at Deir el-Bersha is clearly differentiated from Beni Hasan in that incised relief is used to delineate the figures, particularly the major depictions of the tomb owner and ritual scenes. The early relief style pre-dates the Twelfth Dynasty, and thus does not correspond to the early Twelfth Dynasty relief style adopted and extended in Meir tombs B1 and B2. This style is evidenced by the standing figure of the tomb owner Ahanakht I located on the northern jamb between the inner and outer rooms of tomb Be5. The figure is executed as a sunk

---

860 NEWBERRY, Beni Hasan II, pl. 35.
861 NEWBERRY, Beni Hasan I, pl. 12.
862 NEWBERRY, Beni Hasan II, pl. 29.
863 NEWBERRY, Beni Hasan II, pl. 4.
864 NEWBERRY, Beni Hasan II, pl. 31.
865 WILLEMS (2014), Historical and Archaeological Aspects of Funerary Culture, pl. 10.
relief with rounded modelling of the body, limbs and torso within the incised outline. Details such as the staff, sceptre, kilt and belt are similarly edge-incised, however, the collar edges are in raised relief. Interior detail is fully painted and relies on strong colours rather than overly intricate details. The style of relief bears little in common with the early Twelfth Dynasty style of Meir tombs B1 and B2 as described above, and clearly draws on the First Intermediate Period style as attested in tomb As4 of Khety II at Asyut.\textsuperscript{866} Elsewhere in tomb Be5, similar edge-incised sunk relief is evident in portrayals of the tomb owner and a papyrus column.\textsuperscript{867} By the middle of the Twelfth Dynasty, however, the final tomb in the series (Be2 of Djehutihotep) shows evidence that this edge-incised sunken relief style established in the early tombs at the site is still employed, as can be evidenced on the major figures of the tomb owner on the rear wall of the ruined portico as well as the rear wall of the statue recess.\textsuperscript{868} Very shallow sunken relief is used in outline on minor figures in several scenes (in which all internal detail is painted), while other motifs involving workers tend to follow the Beni Hasan style of painted figures on a thin layer of plaster, without any outline incision. A good example of the two styles for minor figures can be seen on the bottom two registers of the left wall of the inner chamber,\textsuperscript{869} where the bottom row of figures is edge-incised in the El-Bersha-style sunken relief, while the register immediately above is painted only, strongly reminiscent of the Beni Hasan painted style. Like the subsidiary figures in the Beni Hasan wall scenes, the El-Bersha depictions of smaller scale figures tend to show less movement than the figures in Meir tomb B2, with similar formal stances to those at Beni Hasan.

\textsuperscript{866} KAHL (2012), in Seven Seasons in Asyut, pl. 27(b). Plate shows similar standing tomb owner.
\textsuperscript{867} WILLEMS (2014), op. cit., pl. 14A. Shows inner room southeastern corner.
\textsuperscript{868} NEWBERRY, Bersheh I, Pl. 8, 9, 33; Photographs 11, 62, 29 (R. Betz), osirisnet.net/tombes/el_bersheh/djehoutyhotepe/djehoutyhotepe_01.htm
\textsuperscript{869} NEWBERRY, Bersheh I, pl. 18.
IV. Conventions for Control of the Artistic Medium

The preceding sections of this chapter have illustrated the importance placed on a common set of compositional principles by the tomb artists at the sites under study. A properly executed programme of tomb decoration ensured that it could be correctly interpreted for its ritual functions of the tomb owner’s mortuary cult. The general principles applied uniformly as shown above gave rise to canonical rules governing the production of the artwork, to control the proportions and scale of figures, as well as the effective rendering of spatial aspects of the composition, such as placement of figures and control of patterns and balance. This section investigates the evidence in the Meir tombs for the use and development of artistic standards and technical drawing techniques employed to control scene composition throughout the early to mid Twelfth Dynasty.

(a) Registers and Baselines

The use of baselines is feature of Egyptian art attested from the beginning of the early dynastic period, where it was originally used to provide a common groundline to link adjacent, spacially-related figures. As well as satisfying the requirement for coherence in representation of motifs, baselines became an essential element of composition in the control of spatial distribution within a composition. This was achieved by organising related figures and elements into specific vignettes and motifs on the same baseline, and arranging successive baselines one below the other to spread the various motifs of the scene in an ordered and regular fashion across the compositional space. By the early Fourth Dynasty the use of registers for this purpose is attested in wall scenes of elite tombs, and

---

870 See for example the Narmer Palette (Cairo, CG14716) recto, where the king shares a common groundline with a prisoner in the earliest extant representation of the smiting of the enemy motif. A small-scale sandal bearer occupies a separate subsidiary groundline in the same composition, while two defeated enemies are depicted below the main groundline.


872 The Narmer Palette (Cairo, CG14716) verso, demonstrates the early organisation of baselines into registers, with the compositional space divided into three registers, each with apparently unrelated content (top register = royal procession, middle register = mythical creatures, bottom register = rampaging bull trampling enemy and attacking a fortification).

873 Rahotep and Nefermaat in the court necropolis of Sneferu at Meidum being the earliest known attested, GROENEWEGEN-FRANKFORT, op. cit., 30. See FLINDERS PETRIE (1892), Medium; HARPUR (2001), Nefermaat and Rahotep, photo of female offering bearers (2x reg.) pl. 53;
the convention became a fundamental aspect of elite tomb art in the Fifth and Sixth Dynasties.\textsuperscript{874}

Several scenes in the earlier series of tombs at the comparison sites of this study exhibit a loosening of the strict convention governing the use of registers and baselines established during the Old Kingdom. The first example presented here is the tomb of Ankhtify at Moalla, and is most evident on the west wall where the core motif to the right of centre is the tomb owner spear fishing above a seine netting scene and to the left is the tomb owner observing the unconnected themes of butchers slaughtering a bull and watercraft below.\textsuperscript{875} The majority of the figures are not associated with a baseline, and no attempt has been made to organise the space into registers, resulting in a chaotic mix of unconnected themes with empty space at irregular points of the composition. The only coherence observed is in the spear fishing motif, where the major elements of the tomb owner, his skiff, the harpoon and the speared fish are connected by direct contact. The remainder of the subsidiary figures appear to float ungrounded around the tomb owner (including fish in front of Ankhtify’s face), and some of the larger empty spaces have been used for caption texts. The application of registers to control spatial distribution is observed in isolated contexts within the tomb, however, particularly with smaller compositions on the pillars which exhibit well organised scenes in registers, balanced with texts in well-defined rows and columns.

Not all tombs in the study dating to the First Intermediate Period exhibit such a lack of control over scene organisation however. Tomb As4 of Khety II at Asyut demonstrates a well ordered compositional organisation including rows of marching soldiers arranged in registers,\textsuperscript{876} and a scene of the tomb owner standing with his wife, integrated with a biographical text in its own clearly defined columns.\textsuperscript{877} This scene also demonstrates the inclusion of text and images as a normal aspect of a balanced composition. It is evident from the surviving scenes of

\textsuperscript{874} Universally attested. For specific examples see DAVIES, *Ptahetep and Akhethetep*; DUELL, *Mereruka*, and KANAWATI et al., *Mereruka and his Family, I-III*, and at the site of Meir, the Old Kingdom tombs of D2 (Pepiankh-heryib) and A2 (Pepiankh-henikem), BLACKMAN, *Meir IV* and *V*, and KANAWATI & EVANS, *The Cemetery of Meir I and II* (passim).

\textsuperscript{875} VANDIER (1950), *Moalla*, pl. 40.

\textsuperscript{876} EL-KHADRAGY (2008), *SAK* 37, Fig. 4, 5, pl.4.

\textsuperscript{877} EL-KHADRAGY (2008), *SAK* 37, Fig. 2.
As4 that Old Kingdom organisational conventions were observed at this site with regard to baselines and registers, and none of the compositional looseness associated with the First Intermediate period (as typified by Ankhtify’s tomb) is attested. Both of the above scenes from As4 are topped by a kheker frieze, a device which facilitates the organisation of the wall decoration by providing a decorative top border to separate the wall scenes from the ceiling (which may carry its own decorative program or texts).

In the earlier Eleventh Dynasty tombs at Beni Hasan, the surviving wall scenes in the tombs of Baqet I (BH29), Baqet II (BH33) and Baqet III (BH15) show that the artists attempted to follow the convention of organising the scenes in registers following the Old Kingdom precedents. While the use of baselines organised into registers is adhered to in all of these scenes, the spatial distribution (with a few exceptions)\(^{878}\) is not as tight and regular as observed in prior Old Kingdom examples at other sites (particularly with respect to the Old Kingdom tombs at Meir).\(^{879}\) The early Beni Hasan tombs show instead a sparse and irregular placement and sizing of figures within the registers and uneven register spacing itself, demonstrated on the north and south walls of BH29,\(^{880}\) and the north wall of BH33.\(^{881}\) Only on the west wall of the later tomb BH17 of Khety,\(^{882}\) which was most likely completed around the beginning of the Twelfth Dynasty, does the compositional control of the artistic program lessen to a similar degree as exhibited in the First Intermediate Period tomb of Ankhtify at Moalla.\(^{883}\) The marsh scene on the northern side of the entrance demonstrates in particular a lack of balance due to the absence of registers coordinating the major figures with the associated marsh activities. The composition is very sparse with large areas of empty space around

\(^{878}\) The decorative program of Baqet III is of a generally higher standard than his predecessors, and the east wall military and wrestling scenes in his tomb (BH15) and that of his successor Khety (BH17) are well executed in terms of balance, use of space and coherence of depicted themes, see NEWBERRY, *Beni Hasan II*, pls. 5 & 15.

\(^{879}\) Meir tombs A2 (Pepiankh-henihem) and D2 (Pepiankh-beryib) for example. See BLACKMAN, *Meir IV*, pls. 8-9; BLACKMAN & APTED, *Meir V*, pl. 11. See also tight spatial distribution and even register spacing, tomb (Niankhpepy-kem) A1 west wall (KANAWATI et al., *The Cemetery of Meir III*, pl. 65)

\(^{880}\) NEWBERRY, *Beni Hasan II*, pls. 28-29.

\(^{881}\) NEWBERRY, *Beni Hasan II*, pl. 35. Irregular figure sizes on north wall of BH33; see also irregularly spaced registers on north wall of BH17, (ibid., pl. 14).

\(^{882}\) NEWBERRY, *Beni Hasan II*, pls. 11 & 12.

the tomb owner’s standing and seated figures. The small scale papyrus thickets to
the side are painted in registers, but these are not completely level or parallel,
showing similar lack of attention to the geometry of the registers seen on the same
wall south of the entrance. The execution of the east wall composition stands in
contrast to the competent rendition of the military and wrestling scenes on the east
wall of the same tomb (which are essentially a copy of the same wall of his
predecessor in BH15). The variable quality of the composition (and also the
rendering of proportion discussed in the next section) observed in tomb BH17
results in a lack of unity of the artistic programme as a whole and suggests separate
artists or groups of artists may have been responsible for different parts of the
decoration.

The Twelfth Dynasty tombs at Meir represent a significant adherence to the strict
organisation of registers for control of the compositional space. Tombs B1 and B2
utilise four and three-register schemes respectively at full wall height on the north
wall.\textsuperscript{884} Subsidiary figures are mostly oriented along the registers facing towards
the major figures at the western end of the scenes. The compositional density,
balance of figures and space, and uniformity in the size and positioning of the
figures is comparable with those of the Old Kingdom, and illustrate a superior
control of the medium than is evident in the Eleventh Dynasty tombs at Beni Hasan
and Ankhtify at Moalla discussed above, and show a better balance of space and
density of figures than is seen in the marching soldiers of As4 (N12.2) at Asyut,\textsuperscript{885}
which has the most regular and correctly spaced register layout of the early tombs
of the study.

The hunting scene of tomb B1\textsuperscript{886} takes prior examples of an undulating desert
groundline\textsuperscript{887} to new levels, with pronounced irregular groundlines specific to
groups of desert animals, without a scheme of continuity between the desert
registers. This provides emphasis to the dispersion of the game animals across the

---

\textsuperscript{884} BLACKMAN, \textit{Meir I}, pls. 2, 3, 4 and \textit{Meir II}, pls. 2, 3, 4.
\textsuperscript{885} EL-KHADRAGY (2008), \textit{SAK} 37, 236-7, Fig. 4-5.
\textsuperscript{886} BLACKMAN, \textit{Meir I}, pl. 6.
\textsuperscript{887} DAVIES, \textit{Ptahhetep & Akhtethetep}, pl. 21; DUELL, \textit{Mereruka I}, pls. 23b, 24, 25; KANAWATI \textit{et
al.}, \textit{Mereruka and his Family I}, pl. 19, 73
wide area of the hunting enclosure. The desert hunt of tomb B2 copies the theme of that in B1, however register baselines are absent completely. There is a question as to whether this was a deliberate omission by the artist, or that the scene simply remains unfinished, and the registers were intended to be painted in at a later stage. The main relief of the tomb owner and his bodyguard, as well as those of the game animals are complete, however, and the animals are placed in three undulating lines leading from the tomb owner into an open desert tableau. The bottoms of their feet are approximately in line with those of the adjacent animal and it can be discerned where the curved baselines might have been drawn into the scene had that been the artist’s intention. The initial impression gained from the absence of the baselines is that the animals appear unconnected and randomly dispersed over the compositional field, with large areas of blank space between, and the compositional control of the scene is thus slightly reminiscent of the marsh scene of Khety in BH17 (a slightly earlier tomb) and the west wall of Ankhify’s tomb (significantly earlier) as discussed above. A closer examination of the positioning of the animal’s feet as mentioned however would indicate that this placement was more intentional on the part of the artist, whereas the artists of Khety’s and Ankhify’s scenes were perhaps less knowledgeable in the application of registers to control compositional coherence and spatial density, resulting in a more random placement of figures in those respective scenes. The fact that the remainder of the wall scenes in tomb B2 are otherwise so well ordered sets the desert tableau apart, and indicates that this was an intentional innovation of the artist to convey the landscape with a degree of realism.

The wall scenes of the two later tombs at Meir (B4 of Ukhhotep II and C1 of Ukhhotep III) show a different style of execution, as indicated by their style of relief (B4) and painted scenes (C1), however, the strict adherence to baselines and organisation into registers is maintained. It would appear from the remains of the

888 BLACKMAN, Meir II, pl. 8, with desert tableau scene continuing to pl. 7. Same scene in KANAWATI & EVANS (2017), Wkhhotep (B2), publication forthcoming, pl. 84-85.
889 BLACKMAN notes that the second figure in the hunting scene is the tomb owner’s son, however this view is not supported by any textual evidence in the tomb. The figure may also be a member of Ukhhotep’s personal staff.
890 Note from the previous section, that the artist of this tomb also rendered realistic aspects in some depictions of minor scenes and characters (e.g. the beja herders, the duelling boatmen and restraining of a bull), although these were realistic vignettes within the conventional scheme of registers.
desert hunt scene in C1\textsuperscript{891} with its flat groundlines that the application of baselines has become more rigid and formalised than is observed by the undulating or absent groundlines depicted in the hunting scenes of tombs B1 and B2. This rigid application of baselines and registers is also observed in the later tombs at the comparison sites of the study.\textsuperscript{892}

(b) Gridlines and Proportionality

Gridlines (and the earlier artists guidelines) have been the subject of prior studies,\textsuperscript{893} particularly in relation to the canon of proportionality.\textsuperscript{894} While the use of registers enables the coordination of placement of individual motifs within larger compositions, the actual artistic process of creation of figures within scenes was dependent on the application of a temporary grid pattern to the smoothed wall surface, as a final preparatory stage before the drawing in of the designs. Register baselines therefore were intended to endure as a permanent component of the composition, while gridlines, which were applied in red paint, were intended to be removed or painted over in the finishing stages of the work (and are not commonly attested as a result). The site of Meir is rare in Upper Egypt in that two of the six Middle Kingdom tombs contain artists gridlines that can provide evidence of how the application of the technique varied during the course of the Twelfth Dynasty. The surviving gridlines in tomb B2 are the most comprehensive in existence at any site from that period, and illustrate the use of the full eighteen square grid relatively early in the Twelfth Dynasty (from the second reign) while still-substantial remains in tomb C1 show how their application at Meir had changed by the time of construction of the last large governor’s tomb (in the fifth reign of the Twelfth Dynasty). Together, the evidence in both tombs provides insights into the development and application of the technique at Meir from a chronological perspective.

\textsuperscript{891} BLACKMAN & APTED, \textit{Meir VI}, pl. 9.
\textsuperscript{892} NEWBERRY, \textit{Beni Hasan I}, pl. 11-20 (BH2 - Amenemhat), pl. 29-35 (BH3 - Khnumhotep II); Bersheh I, pl. 15-18 (Be2 - Djetuthihotep).
\textsuperscript{894} ROBINS (1994), \textit{Proportion and Style in Ancient Egyptian Art}; IVERSEN (1975), \textit{Canon and Proportions in Egyptian Art (2nd Ed.)}
**Case Study I – Meir Tomb B2 (Ukhhotep I)**

Tomb B2 offers the most comprehensive set of surviving artists’ gridlines on its northern and western wall decoration for the period spanning the early to mid Twelfth Dynasty. Furthermore, because individual scenes within the decorative programme of the tomb chapel were left in varying stages of completion (even to the level of different scenes on the same wall), the surviving grids provide an opportunity to study the process of creating wall decoration as it existed in the early Twelfth Dynasty and the development of techniques to control the appearance and quality of the finished work. Aspects of artwork in this tomb can be compared with similar figures and subjects in contemporary tombs to evaluate the degree to which similar conventions would have been applied at other sites – effectively an evaluation of the technical control aspects of artistic transmission in the early Twelfth Dynasty.

The artists’ gridlines in tomb B2 take the form of straight red painted horizontal and vertical lines, which divide the compositional space into square grid patterns. They are attested on a range of subjects on the northern wall, including the tomb owner and subsidiary figures in various postures, and on the western wall with female subsidiary figures. There are also partial grid remains on three faces of the one surviving pillar in the chapel.

The position of the surviving grid systems and their respective measurements are observed as follows:

**West Wall**

<table>
<thead>
<tr>
<th>Tomb B2 Artists Gridlines – West Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North of Statue Recess</strong></td>
</tr>
<tr>
<td>Upper (top) register  The top register contains three separate grid systems (of which the main tomb owner grid is overlayed with sub-grid).</td>
</tr>
<tr>
<td>Officials standing behind table scene above (2/3 height)</td>
</tr>
</tbody>
</table>

### Tomb B2 Artists Gridlines — West Wall

<table>
<thead>
<tr>
<th>North of Statue Recess</th>
<th>Three registers, including double-register height main scene.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double-height major scene (incorporating middle and bottom registers – northern end of wall)</td>
<td>Priests, three standing &amp; two kneeling</td>
</tr>
<tr>
<td>Middle register (middle and southern end)</td>
<td>Tomb owner &amp; wife standing</td>
</tr>
<tr>
<td>Bottom register (middle and southern end)</td>
<td>Five male offering bearers standing (one leading an antelope) in a single composition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>South of Statue Recess</th>
<th>Three registers, including double height main scene.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper (top) register Contains three separate grid systems.</td>
<td>Tomb owner and wife seated before offering table with harpist seated on floor.</td>
</tr>
<tr>
<td>Middle &amp; bottom registers (southern end)</td>
<td>Female attendant standing behind tomb owner and wife.</td>
</tr>
<tr>
<td>Tomb owner standing, overseeing ritual, facing towards shrine.</td>
<td>Five priests standing</td>
</tr>
</tbody>
</table>

| Middle register | Empty grid beside standing females with sistrums (wall preparation for further figures). | 23.0 mm (sq) |
|-----------------|-------------------------------------------------------------|
| Bottom register | Overseer and two herdsmen standing, with fighting bulls. | Poorly preserved, irregular grids. Main grid at base, estimated at 23.0 mm (sq) Overlayed smaller grid for bulls (insufficient for measurement). |

### North Wall

<table>
<thead>
<tr>
<th>Tomb B2 Artists Gridlines — North Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western section (full height)</td>
</tr>
<tr>
<td>Officials standing behind</td>
</tr>
<tr>
<td>west - top register</td>
</tr>
<tr>
<td>Middle &amp; bottom registers</td>
</tr>
<tr>
<td>Centre – main scene (double height, top and middle register)</td>
</tr>
<tr>
<td>Centre section - top register</td>
</tr>
<tr>
<td>Bringing down a bull</td>
</tr>
<tr>
<td>Middle register</td>
</tr>
<tr>
<td>Clapnet</td>
</tr>
<tr>
<td>Bottom register</td>
</tr>
<tr>
<td>2nd and 3rd figures – evidence of small grid between bodies</td>
</tr>
</tbody>
</table>
**Tomb B2 Artists Gridlines – North Wall**

<table>
<thead>
<tr>
<th>Eastern section major scene top &amp; middle register</th>
<th>Boatbuilding</th>
<th>Fragmentary remains of tomb owner fishing and fowling</th>
<th>No surviving gridlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern section – bottom register</td>
<td>Dueling boatmen</td>
<td>Insufficient surviving gridlines for estimate</td>
<td></td>
</tr>
</tbody>
</table>

**North Pillar and Statue Recess**

<table>
<thead>
<tr>
<th>Tomb B2 Artists Gridlines – North Pillar and Statue Recess</th>
</tr>
</thead>
<tbody>
<tr>
<td>North pillar: west face</td>
</tr>
<tr>
<td>Tomb owner standing</td>
</tr>
<tr>
<td>Partial grids. Average from H.6 to H.18-56.3mm sq</td>
</tr>
<tr>
<td>North pillar: north and south faces</td>
</tr>
<tr>
<td>Tomb owner standing</td>
</tr>
<tr>
<td>Very incomplete grids. Average from H.6 to H.17 (north face only) – 56.3mm sq</td>
</tr>
<tr>
<td>North pillar: east face</td>
</tr>
<tr>
<td>Tomb owner standing</td>
</tr>
<tr>
<td><strong>no surviving grids</strong></td>
</tr>
<tr>
<td>Statue Recess: North wall (N)</td>
</tr>
<tr>
<td>(N &amp; S) Tomb owner standing with wife, offering bearers; (W) table scene slaughter scene</td>
</tr>
<tr>
<td><strong>no surviving grids</strong></td>
</tr>
</tbody>
</table>

**South Wall**

<table>
<thead>
<tr>
<th>Tomb B2 Artists Gridlines – South Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern end</td>
</tr>
<tr>
<td>Desert hunt &amp; tableau (wild animal fecundity)</td>
</tr>
<tr>
<td>Centre</td>
</tr>
<tr>
<td>Cattle procession / livestock management</td>
</tr>
<tr>
<td>Offering list</td>
</tr>
<tr>
<td><strong>no surviving gridlines</strong></td>
</tr>
<tr>
<td>Western end</td>
</tr>
<tr>
<td>Cattle with beja, slaughtering scene</td>
</tr>
<tr>
<td><strong>no surviving gridlines</strong></td>
</tr>
<tr>
<td>Offering bearers / table scene</td>
</tr>
<tr>
<td><strong>no surviving gridlines</strong></td>
</tr>
<tr>
<td>Standing tomb owner</td>
</tr>
<tr>
<td><strong>no surviving gridlines</strong></td>
</tr>
</tbody>
</table>

**The Tomb Owner and subsidiary figures standing**

The first observation to be made is that the great majority of the eighteen-square grids observed in the tomb, as well as the grids which survive on the major figures in the later tomb C1, actually consist of nineteen equally spaced horizontal lines above the baseline, although the divisions of the grid are mathematically based on the factors of 18 as described below. The nineteenth horizontal gridline (designated
here H.19) serves as the upper limit of the composition, and is positioned just above the top of the subject’s head in the examples attested.

In the case of the major full height composition on the north wall of the tomb owner and his wife standing,897 facing three registers of minor figures, the height of H.19 from the baseline measures two nbi (1.4m) exactly.898 It appears in this case that the draftsman intentionally scaled the composition to two nbi as he did not scale the grid to the maximum available wall height below the border line, but left a small amount of empty space above the work. This scene is the largest representation of Ukhhotep I and his wife in the tomb, and is the only one to conform to the two nbi measurement.

Large scale depictions are also attested on the west and south walls, although these are only double register height (as opposed to the three-register height scene on the north wall) and the grid has been scaled down accordingly. Like the north wall scene, the example to the right of the statue recess on the west wall depicts Ukhhotep I and his wife standing, in this case facing two registers of minor figures. The grid squares are correspondingly smaller and the height of this composition measures two small cubits899 to gridline H.18 (a height of 90 cm). The top borderline H.19 above the tomb owner’s head is not the key measurement point in this case, unlike the major composition on the north wall referred to above. The eighteen-square grid is further downscaled for the single-register height minor figures, although the proportionality of the figures is maintained. Examples of these single-register compositions include the bottom and middle registers of offering bearers on the north wall,900 where the height of the grids from the baseline to H.18 measures slightly under but within the margin of variability of one small cubit (or 45 cm).901 The individual squares of these grids are equivalent to one phalange (measured as

898 The architectural measure of one nbi represents the length of a full arm, from the tip of the medius phalange to the shoulder (equivalent to 70 cm). See VICTOR (1991), GM 121, 101-3. The height to H.19 is 1.4 metres exactly. It is possible that a measuring rod was employed to establish this grid, given the accuracy of its measurement, similar to rods attested in other contexts.
899 The small cubit equates to the length of the forearm, from the tip of the medius to the elbow (equivalent to 45 cm). See VICTOR (1991), GM 121, 103-4. The height of the composition is 0.9 metres exactly from baseline to H.18, or two small cubits.
901 The single register grids of the offering bearers measure 44.3 cm (7 mm short of the small cubit). This may reflect a slightly smaller length of the draftsman’s forearm compared to the notional standard, if this was used as the convenient method of measurement.
the distance from the medius tip to the first knuckle, defined as 2.5 cm, although those in the tomb are slightly smaller in the range of 2.44 cm to 2.46 cm. As can be seen from the compiled table of grid measurements above, the one phalange square height is a common observation in the grids of the minor figures in the tomb, and it appears likely that the first joint of the draftsman’s medius finger was extensively used to scale these smaller single-register grids, along with his finger tip to elbow (one cubit) measurement to establish the heights of the composition. The grid of the wrestlers register at 2.22 cm is slightly smaller than those of the adjacent figures, possibly drawn by another artist with physically smaller hand/arm dimensions, although the fact these figures are not in a standing posture may also be a factor in the smaller grid units. The use of the phalange to space single grid units in the above registers results in a grid of eighteen horizontal lines to the small cubit, which marks the top (hairline) H.18 gridline in these specific examples. Thus, two simple body dimensions may have been used to mark out the compositional space on these registers in tomb B2, with the elbow to tip of medius (small cubit) used to mark the top-to-bottom distance of the standing figure, and the medius phalange (fingertip to first joint) used to divide this into eighteen equally spaced horizontal units.

The significance of the number 18 in the formation of the grid
The above observation raises a significant question as to is why the grid system as attested in tomb B2 (and otherwise widely adopted in Middle Kingdom art) was based on eighteen horizontal lines. Although the smaller grids in the tomb, scaled on the small cubit described above, naturally result in eighteen lines when the phalange is used for the measurement of individual squares, the varying scales of other artists grids elsewhere in the tomb suggest that the reasons for its adoption

902 See VICTOR (1991), GM 121, 103, Fig. 1.
903 The small differences in these measurements (0.02 cm) may be simply within the normal range of variation in grids drawn by one artist (the blind musicians and officials behind the tomb owner are on grids of 2.44 cm and the offering bearers in the middle and bottom registers are on grids of 2.46 cm).
904 The eighteen square grid is well documented as being widely adopted in the Middle Kingdom, see ROBINS (1994), Proportion and Style, 65-86. For remains of the 18-square grid in tomb As1 at Asyut, see KAHL (2013), Proportionen und Stile, 141, 145-6; KAHL (2007), Ancient Asyut, pl. 7a.
905 See for example the standing officials behind the seated Ukhhotep I on the west wall, KANAWATI & EVANS (2017), Wekkhote (B2) publication forthcoming, pl. 87. These are two-thirds height registers with the figures measuring 17.0 cm from baseline to H.18 (just under one hand high). It should also be noted that the wall decoration of his predecessor Senbi I in tomb B1 is arranged on a four-register scheme for the north and south walls. Each register in tomb B1 is therefore correspondingly shorter than the one-cubit height of the B2 registers, measuring instead 33
are based on more than the simple relationship between fingertip and forearm dimensions alone.

The mathematical characteristics of the number 18 provide an indication of why this number was used for controlling proportion of the standing human figure in artistic representations, in particular its ability to be divided into halves and thirds by whole numbers. There are only three possible factor pairs of 18, these being (2,9), (3,6) and (1,18),\(^906\) with no other combination of integers (whole numbers) resulting in 18 when multiplied together. The significance of this observation is that the factor pair (2,9) divides the scale exactly in half (each half being 9 units) and the factor pair (3,6) divides the scale exactly in thirds (with each third being 6 units in size). An examination of the body proportions of the standing figures in the tomb demonstrates that key transitional points on the body are aligned to these numbers, with the transition between the torso and legs occurring halfway between the hairline and baseline, and the transitions between the proximal and distal extents of the legs and arms occurring at one- and two-thirds of the same compositional height respectively (see Fig. 5.18). Correspondingly, the horizontal gridline H.9 is used to control the placement of the base of the torso,\(^907\) H.6 the placement of the knees (the transition point between the proximal and distal parts of the leg) and H.12 the placement of the elbows (marking the proximal/distal transition point of the arms).\(^908\) In addition to this, the transition between the upper torso (the chest/ribcage) and the lower torso (abdomen) is also placed at the two-thirds mark, level with the elbows at H.12. In the case of female figures, this aligns with the small of the back and is the narrowest point of the female torso.

Grid systems based on integers adjacent to the number 18 (such as 16, 17, 19, 20 and 21) will not work to control the proportions of the human figure as outlined above, as their factor arithmetic does not permit whole-number divisions into halves as well as thirds, therefore they can’t be aligned to the key transitional points of the

---

\(^{906}\) Factor pairs in this case are sets of numbers that can divide 18 to achieve an integer (ie whole number) result, represented by the other number of the pair. For uniformly spaced gridlines, each grid element must be based on a whole number rather than fractional divisions.

\(^{907}\) ROBINS (1994), op. cit., 74, denotes this marker point as the ‘lower border of the buttocks’.

\(^{908}\) The proportions of these body points in relation to the half and one- or two-thirds height marks is observed by ROBINS (1994), op. cit., 76 and (1997), The Art of Ancient Egypt, 106-9.
body as described.\textsuperscript{909} Specifically, grids of 16 and 20 squares allow an exact (integer) division into halves but not thirds (hence they could delineate the transition from the torso to the legs, but could not locate the knees and elbows at specific points), the factors of a 21-square grid allow an exact division into thirds but not into half (thus locating elbows and knees, but not providing a transition point between torso and legs), while grids of 17 and 19 units do not have factor pairs corresponding to either thirds or halves of the whole number. Setting aside the modern terminology of factor arithmetic, the basic principles of division of whole numbers were obviously understood and applied by the tomb draftsmen, evidenced in their selection of the number 18 as the optimal grid spacing corresponding with the proportions of human figures as represented in the wall scenes.

The proportions of other parts of the body can be easily controlled by dividing the grid according to the factor pair of (18,1) as described above, where the single grid unit lengths are one-eighteenth of the total height to the hairline. Specific examples include the composition of the head, controlled by the top three gridlines spaced at unit values (from the top of the face/hairline at H.18, to the base of nose and ears at H.17 and junction of neck and shoulders at H.16. The base of the chin is placed in the middle of the grid square between H.17 and H.16 in these examples). The width of arms, also align to a single grid unit, as are the closed hand and the width of legs at the ankle.

The grid is used to control the positioning of the arms; when fully straight beside the body they measure 8 units (from H.16 to H.8 (with closed hand), and the base of the elbow located at H.12. When the hand is open and fingers straight, the finger tips reach an additional grid line further.\textsuperscript{910} When the forearm is at an oblique angle to the body (ie. the arm is bent holding a staff and held in front of the body), then the base of the elbow is still located at H.12, but the forearm descends at an angle to H.9 (three grids down) and three grids out from the shoulder. The grid conventions

\textsuperscript{909} Although out of scope for this thesis, artists grids from the Twenty-fifth Dynasty are attested with 21 squares, see ROBINS (1997), \textit{op. cit.}, 212, 237, 246 and (1994), \textit{op. cit.}, 198-99. The proportions of Late Period figures were not significantly changed from the Middle Kingdom examples studied here, however different body alignment points were used to fit into the 21-square grid (for example, the top line of the grid was aligned to the eyelid rather than the hairline), see ROBINS (1994), \textit{op. cit.}, 43-44, 197-200.

\textsuperscript{910} See Ukhhotep I standing, major scene on north wall, KANAWATI & EVANS (2017), \textit{Wekkhotepe (B2), forthcoming}, pl. 89, and on north and south faces of the north pillar, \textit{ibid.} pl. 93.
apply to the main figures of the tomb owner as well as to minor figures, where the proportions are maintained and the 18 square grid is scaled down to a smaller size.

Some figures depicted in tomb B2, including the major scene of the standing tomb owner on the north wall, illustrate that the positioning of transition points on specific gridlines could be adaptable, provided that the limb lengths are maintained in accordance with those corresponding to the canonical grid as described above. In this scene, the left shoulder is observed slouched downwards, one gridline below its normal point. The correct length of the upper (proximal) and lower (distal) arm is maintained, however, so that the elbow aligns with H.11 rather than the canonical H.12. The likely reason for this lowering of the arm is so that the extended fingertips line up with the bottom edge of the kilt, a result, which was presumably considered more artistically pleasing than depicting the hand in the middle of the kilt. The lowered left shoulder is repeated in other subsidiary figures on the same wall, although the need to align the outstretched fingers with a specific point is less evident in these depictions. As specific examples, both upper and lower officials standing behind Ukhhotep I echo their master’s stance in this regard, although both wear long kilts (see lower figure, Fig. 5.15), as does an official standing behind the seated figure of Ukhhotep I in the second register. In all three cases, the officials’ right arms are crossed over their chests with right hands resting on their lowered left shoulders, and their right elbows are also located below the canonical H.12 gridline, half way towards H.11.

**Human figures in other positions**

Although the 18-square grid for standing figures forms the basis for controlling body proportions in a composition, other scenes in tomb B2 demonstrate how the grid may be manipulated to suit the subject. Human figures in a seated posture display the same proportions of the head, torso and arms as represented on standing figures in the same tomb. In tomb B2 this is evidenced in the seated depictions of the tomb owner before an offering table on the west wall911 and inspecting musicians and a cattle procession the north wall (for the latter see Fig.

---

Although the remaining gridlines on the north wall depiction of the seated figure are insufficient for study, those on the west wall offering table scene are very well attested, and also show a smaller grid applied to the composition, dividing the horizontal and vertical gridlines into fifths. Examining this western wall offering table scene in detail, it is noted that it conforms to the standard 14-square grid that is well attested for seated figures and that uniform proportions of the upper body between this figure and the standing depiction of the tomb owner in the registers below are maintained by keeping the same number of gridlines from the hairline to the base of the torso. Thus, nine grid units are used for the upper body (torso, head and arms), exactly the same as for the standing figures. Because the chair seat is positioned at H.5, however, this results in a total of fourteen squares from the baseline to the hairline (H.14). The top of the knee is still positioned at H.6, and this allows for the upper leg to be horizontally placed along the length of the chair seat and retains the correct length of the lower leg at five squares (to the bottom of the knee). The upper leg increases in width to two grid squares at the groin, meeting the front of the belt at H.7 (the belt is more horizontal due to the sitting posture, so the distance of the front of the belt from the hairline is one square shorter at 7 squares than it is for a standing figure, although the back of the belt is the same distance from the hairline as on a standing figure.). The fact that the two scenes are drawn to different scales (the seated tomb owner is depicted in a single register while the standing tomb owner is double height) demonstrates the effectiveness of the grid system in preserving body proportions in scenes of different scales. This is further reinforced by the observation that the body proportionality of the seated tomb owner is also maintained with respect to the smaller scale officials standing behind, also drawn on their independent, scaled down 18-square grid drawn to 0.57 of the tomb owner’s grid.

The purpose of the overlay of the small grid on the seated tomb owner in the offering table scene is not clear. The grid overlay was accomplished by dividing each main square into twenty-five (by division of the vertical and horizontal scale into fifths). The fine grids are restricted to the area in which the tomb owner’s body

---

is represented, except for the one fifth division of the vertical lines only down the length of the rear chair leg. It is unlikely that these sub-grids were placed over the scene for training or assistance of less experienced artists, as it would be expected that only the best artists would work on the tomb owner’s image. The most probable purpose of the fine grid therefore would be to aid better positioning of fine body features, especially around the face, nose, eyes and ears. The overlay however appears to be a finer grade of division of the compositional space than would really be necessary for the accurate rendition of these small features and details. It is noted that there are no other examples of this grid subdivision in the tomb and the extremely well executed figures of the tomb owner on the north wall were otherwise drawn and cut on standard grids without the need for such a fine subdivision around the head or body.

The maintenance of the body proportions of the torso, head and arms is also observed in subsidiary figures depicted in other postures, such as the lector priests kneeling with their buttocks resting on their right feet (west wall top register)\(^\text{915}\) and the blind musicians squatting on the ground (north wall middle register).\(^\text{916}\) In both cases the distance from the base of the torso to the hairline is 9 grid squares.

When body proportions from tomb B2 are compared with contemporary Middle Kingdom examples, including those in Meir tomb C1 (which also attests surviving artists grids as discussed below), a high degree of correlation is observed indicating that the principle of the eighteen square grid was universally applied in tomb art throughout the period of construction of large decorated elite tombs.

**Case Study II – Meir Tomb C1 (Ukhhotep III) – Statue Recess North Wall**

The site of Meir is notable for the survival of well-preserved artists grids in two of its elite tombs, with the grids in tomb C1 providing a direct comparison of later styles to those of the chronologically earlier tomb B2 for changes in the use and application of grids at the site from the early Twelfth to the mid-Twelfth Dynasty.

\(^{915}\) KANAWATI & EVANS (2017) *Wekkhoptep (B2)*, pl. 87.

Reasonably complete grids are attested on several of the offering bearers on the bottom register of the north wall (see photo, Fig. 5.17), with traces of gridlines also visible on the fragmentary remains of the tomb owner hunting on the east wall and fowling on the west wall. The more substantial north wall grids are similar in style and application to those observed in the earlier tomb and, like those of B2, the offering scenes are arranged into three equally spaced horizontal registers with standing or walking offering bearers facing westward towards the major figure of the tomb owner. Sufficient gridlines survive to indicate that a uniform 18-square grid was applied prior to the execution of the composition. The use of three registers dividing the height of the compositional space along with the sizing of the figures within the registers suggests that the registers were probably based on a fingertip-to-elbow (small cubit) figure height from H.0 to H.18, with single phalange measurements defining the individual squares. The unit interval measurements however are shorter than the canonical small cubit and phalange, as is the case in some of the grids in tomb B2 referred to above, where varying sizes of grids nominally based on the small cubit length were observed to be notably smaller than 45 cm (equating to single square length of one phalange or 25mm). It is possibly the case in tomb C1, as suggested for the artists of B2, that this shortfall in measurement may reflect the physical stature of the draftsman, and represent the actual measurements of his forearm and finger joints in the drawing up of the grids, as each artist draws the grid based on his own forearm and finger joints.

In contrast to the main north and east walls of the chapel, the scenes in the statue recess are relatively complete and also demonstrate the best preserved grid systems in the tomb. These examples are of most interest from a chronological perspective as the depictions of subsidiary figures demonstrate a novel application of the artists grid which differs from those observed in the earlier tomb B2. The north and south walls contain major scenes of the tomb owner seated with one of his wives standing behind, faced by four registers of subsidiary figures. The layout of these walls are

---

917 BLACKMAN & APTED, Meir VI, pl. 18. Bottom register. The gridlines observed by the author are more extensive than those recorded by Blackman.

918 BLACKMAN & APTED, Meir VI, pl. 9. Note that Blackman does not reproduce these gridlines, however they are clearly visible around Ukhhotep III’s lower leg and foot, and indicate that a canonical 18-square grid was used.

919 BLACKMAN & APTED, Meir VI, pl. 13.

920 The smallest of which in B2 is the wrestlers grid, at 22.2 mm, while the other small-cubit grids range from 22.9 to 24.4 mm (just short of the canonical phalange measurement of 2.5mm).
essentially identical but mirrored images of each other, and the north wall is described in detail below with respect to the artists grids attested. The statue recess west wall on the other hand is not included in this case study as it depicts only two human figures (both wives of Ukhhotep III in squatting posture) and the grids are less evident and not directly comparable to those of tomb B2.

Divergent aspects of the grid as applied in the tomb C1 statue recess

The focus of the north wall scene is a double register-height scene of the tomb owner seated before an offering table accompanied by one of his wives standing behind. In terms of artists grids the surviving lines on this scene (and that of the corresponding identical scene on the south wall) indicate that for the depiction of major figures such as the tomb owner and his family, the conventional grid structure was adhered to. Facing the table scene are three registers of religious officiants (the only male figures in this tomb, apart from Ukhhotep III himself), with the top register depicting the sem priest followed by the chief lector priest (see photo, Fig. 5.16). The two registers below this contain two priests each (three being lectors and one an embalmer), all of whom are presenting offerings to the deceased in the form of geese or beef haunches. All of the figures in the three registers are in a standing pose, and are executed on an abbreviated artists grid, which is composed of several main horizontal lines only, with irregularly spaced gaps between them. Only horizontal gridlines H.0, H.6, H.9, H.10, H.16, H.17 and H.18 are observed in these registers (with H.5 also being present on the sem and chief lector priests of the top register, see Fig. 5.16). This reduced number of horizontal gridlines is reminiscent of the guidelines commonly used in the Old Kingdom, prior to the development of the 18-square grid, where only a several guidelines were drawn to correspond with the height in the composition of key parts of the body (typically the knee, buttocks, base of ribcage, armpits, junction of shoulder and neck and the hairline, although this system was not standardized and other lines were sometimes used). The major point of difference between these abbreviated grids in tomb C1 and their Old Kingdom counterparts however is that the full range of vertical

921 ROBINS (1994), Proportion and Style, 64-6.
922 ROBINS (1994), op. cit., 64. Other O.K. horizontal guidelines include one through the crown of the head, corresponding to just below the H.19 line on an 18-square grid.
gridlines are drawn (as demonstrated in photo Fig. 5.16), as opposed to the single axial vertical guideline employed in the Old Kingdom.923

The bottom register located below the offering table scene and the religious officiants contains four standing figures of minor divinities. As can be seen from the grid measurements (table below) the figures are executed at a slightly larger scale than those of the priests, and are drawn over similar abbreviated artists grids with the same horizontal gridlines evident.

Because the abbreviated grids contain only a subset of horizontal lines as described, the average horizontal unit measurements for each register were calculated by dividing the height from H.0 to H.18 by eighteen, as outlined below:

<table>
<thead>
<tr>
<th>Artists Grid Measurements – Meir Tomb C1 (Ukhhotep III) Statue Recess</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statue Recess - North Wall</strong></td>
</tr>
<tr>
<td><strong>Main figures:</strong></td>
</tr>
<tr>
<td>Tomb owner seated at offering table (grid not extant), wife standing behind (canonical 18-square grid attested).</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Subsidiary figures:</strong></td>
</tr>
<tr>
<td>Top register</td>
</tr>
<tr>
<td>Sem and chief lector priest standing (abbreviated grid).</td>
</tr>
<tr>
<td>Vertical divisions = 8.5mm</td>
</tr>
<tr>
<td>Horizontal divisions = 8.9mm</td>
</tr>
<tr>
<td>(based on height from H.0 to H.19 = 17.0cm).</td>
</tr>
<tr>
<td>Lower legs 9.3mm.</td>
</tr>
<tr>
<td><strong>Middle Registers (x2)</strong></td>
</tr>
<tr>
<td>Offering bearers – three lectors and one embalmer. (Second register and third register - abbreviated grid)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Bottom register</strong></td>
</tr>
<tr>
<td>Minor deity figures with offerings. (four standing – abbreviated grid)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

As noted above, the most important difference between the statue recess grids in this tomb as compared to those in the earlier tomb B2 are the abbreviated grids, where only selected horizontal lines are drawn to control the alignment of specific parts of the body. The parts of the figure considered important by this artist are the

923 ROBINS (1994), op. cit., 64.
head and shoulders, with all three gridlines H.18, H.17 and H.16 being drawn, the base of the torso and the top front of the kilt (H.9 and H.10), and the transition between the upper and lower leg at the top of the knee (at H.6). In the top register both knee lines H.5 and H.6 can be seen on the sem and chief lector priests (photo, Fig. 5.16) and in this register the lower leg of both figures is slightly elongated with a horizontal unit measurement of 9.3mm as opposed to the average horizontal measurement of 8.9mm. The lower legs of the figures in the other registers are in correct proportion to the rest of the body.

The omission of the H.12 line suggests that the artist controlled placement of the elbows and the transition point between the abdomen and upper torso by hand or by general estimate. The difficulty in controlling the dimensions of the arm without a gridline to locate it is particularly evident in the outstretched right forearm of the sem priest on the top register (photo, Fig. 5.16), where the elbow is placed above the position that would be dictated by a H.12 gridline, and the forearm is longer than is normally observed, at five grid units from elbow to finger tips. A correctly proportioned outstretched forearm at a similar angle can be observed for comparison on a musician in tomb B2,924 where the length of forearm from elbow to fingertip is four grid units.

The unit width dimensions of the statue recess grids indicate that vertical line spacing is the other major departure from the canonical grids described in tomb B2. Both the major and minor figures represented in this part of the tomb are drawn on grids where the vertical and horizontal unit measurements do not create a perfect square. Uniformly, the grid units are five to ten percent taller than they are wide. This results in figures which, although canonical from a horizontal perspective (with correct alignment of the key conventional transition points for neck and torso at H.16, base of torso at H.9 and knee at H.6) are in fact slightly narrower than the figures in the earlier tomb due to the shortening of the vertical grid dimension. This measured narrowness of the figures is compounded by the fact that the majority of figures in the tomb decoration are female, which are narrower at the waist than male figures drawn on the same grid, as well as the elongated lower legs of the sem and chief lector priests in the top register.

924 Middle register, north wall, KANAWATI & EVANS (2017), Wekkhote (B2), forthcoming, pl. 90.
Analysis of the Meir B2 and C1 Grids with reference to other tombs

Taking in the first case the standing figure of the tomb owner Ukhhotep I,\textsuperscript{925} it can be seen from the existing grid that the eighteenth horizontal line (denoted H.18) counting upwards from the baseline (H.0) intersects with the figure’s hairline on his forehead just above the eye (conforming to the Middle Kingdom canonical convention\textsuperscript{926} as detailed in the previous section). The intermediate horizontal grid lines also intersect the parts of the body as predicated by the convention, with the intersection of the neck and shoulders at H.16, the front of the belt of the kilt at H.10, and the halfway point from baseline to hairline being the base of the buttocks at H.9 (see Fig 15.8). The top of the knee is one third of the height to the hairline, at H.6. The primary vertical grid line is generally referred to as the median or axial line,\textsuperscript{927} denoted in this study as V.Axial (see Fig. 5.18), which intersects the standing figure in front of the ear and bisects the figure vertically down the middle. The vertical gridlines in front of V.Axial are termed in this study V+1, V+2 etc, and each successive one behind the axial vertical V-1, V-2 etc. Using the vertical lines to measure the width of the figure at key points, it can be seen that the armpits lie at V+2, V-2 (thus separated by four grids) and the maximum width of the body at the shoulders is seen at V+3, V-3 (making the body width six grids in total). The width at the small of the back is about 3 grids. By way of comparison, the standing figures of the tomb owners of the other Meir tombs are presented in Fig 5.18 alongside that of Ukhhhotep I and his wife, and the original gridlines are extended across these figures to illustrate that the same grid could apply to all, and that the proportions of the tomb owners remain identical from the first to the last tombs in the sequence, and that they are also consistent with the canonical Twelfth Dynasty form (the only difference observed is the change of clothing style which is discussed above).

A comparison of similar contemporary standing figures from the comparison sites of Beni Hasan, Deir el-Bersha, Asyut, Western Thebes and Saqqara also indicate a similar adherence to conventional proportions. The standing figures from the earlier tomb sequences at the comparison sites of Beni Hasan and Asyut generally

\textsuperscript{925} KANAWATI & EVANS (2017) \textit{Wekhhotep (B2), forthcoming}, pl. 89; BLACKMAN, \textit{Meir II}, pl. 2. Here depicted standing with his wife, with the original grid marking out the compositional field.

\textsuperscript{926} ROBINS (1994), \textit{op. cit.}, 70-86.

\textsuperscript{927} ROBINS (1994), \textit{op. cit.} 74; IVERSEN (1975), 33-7.
show a close degree of adherence to the canon, with some small observable differences. There are no other gridlines similar to those of Meir tomb B2 attested prior to the Twelfth Dynasty for drawing the human form, however, Old Kingdom examples of a system of guidelines exist which control the proportions of a figure and from which it has been suggested the system of gridlines developed. Given the relative uniformity of the key dimensions observed for the standing male figures in the earlier tombs dating from the Ninth to late Eleventh Dynasties (see table below) it is likely that, with the exception of a single depiction of Khety (BH17) noted, they were drawn using the Old Kingdom style guidelines.

<table>
<thead>
<tr>
<th>Tomb</th>
<th>Owner</th>
<th>Hairline (top of face)</th>
<th>Shoulders</th>
<th>Belt front</th>
<th>Base of torso (buttocks)</th>
<th>Top of Knee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moalla Mo1</td>
<td>Ankhtify</td>
<td>H.18</td>
<td>H.16</td>
<td>H.11</td>
<td>H.9</td>
<td>H.6</td>
</tr>
<tr>
<td>As4</td>
<td>Khety II</td>
<td>H.18</td>
<td>H.16</td>
<td>H10.5</td>
<td>H.9</td>
<td>H.6</td>
</tr>
<tr>
<td>BH29</td>
<td>Baqet I</td>
<td>H.18</td>
<td>H.16</td>
<td>H.11</td>
<td>H.9</td>
<td>H.6</td>
</tr>
<tr>
<td>BH15</td>
<td>Baqet III</td>
<td>H.18</td>
<td>H.16</td>
<td>H10.5</td>
<td>H.9</td>
<td>H.6</td>
</tr>
<tr>
<td>BH17</td>
<td>Khety</td>
<td>H.18</td>
<td>H.16.5</td>
<td>H11.5</td>
<td>H.10</td>
<td>H.6</td>
</tr>
</tbody>
</table>

The general observation from these measurements is that the waist is slightly higher than the equivalent lines seen on the Twelfth Dynasty figures at Meir, discussed above. With the exception of the marsh scene figure of Khety in BH17, all figures conform to the standard canon of the base of the buttocks being half the height to the hairline, on H.9 (see comparison, Fig. 5.19). The buttock area in all of these figures is elongated however, with the front of the belt seen one half or one whole grid square higher, with a consequent slight raise in the height of the waist. The marsh figure of Khety of BH17 however is noticeably out of proportion, with longer, fatter legs and elongated torso reflected in the respective buttock, belt and shoulder heights (Fig. 5.19). It should be noted that this is the only figure of the

---

929 ROBINS, *ibid*.
930 ROBINS (1994), *op. cit.*., 70.
931 KAHL (2103), *Proportionen und Stile*, 145, notes the higher waist in the 11th Dynasty Asyut tomb N13.1 (Iti-ibi-iqer), and identifies a local style of narrow waists in F.I.P. Asyut tombs.
932 NEWBERRY, *Beni Hasan II*, pl. 11.
tomb owner in BH17 which is so evidently out of proportion, as the proportions (as measured by hypothetical grid lines) of other standing figures of Khety in the same tomb more closely agree with those of his predecessor Baqet III of BH15 (and were probably executed by a different artist following convention). Further emphasizing the small head shoulders on the figure of Khety, his armpit and outer shoulder measurements on the vertical grid are also noticeably narrower, at 3.4 grids and 4.5 grids respectively, than the standard convention for these parts of the body. All of the other tomb owners of the early group conform to the standard dimensions of 4 grids wide at the armpits and 6 grids wide outside the shoulders.

Previous studies indicate that standing female figures follow the same horizontal proportions as their male counterparts, although they are generally more slender at specific points of the body with reference to the vertical axial line. The first impression of Meir tomb C1 is that the representation of the human form conforms to a new convention, with more elongated bodies. When compared against the existing examples using original gridlines in tomb B2, however, the case studies above conclusively show that this is not the case, and that the artists of tomb C1 closely followed the canonical Twelfth Dynasty style for alignment to horizontal gridlines. The apparent perception of taller, elongated representations is partly due to the fact that the great majority of figures in the tomb are of standing females, although the case study of the tomb C1 statue recess (presented previously in this chapter) demonstrates a shortening of the vertical grid dimensions which would lead to an actual narrowing of figures by five to ten percent on the grids analysed.

A comparison between earlier and later representations of the female form at Meir is presented in Fig. 5.20, which sets a typical figure from C1 against one from B2 with adjacent original gridlines. Both figures conform to the conventional body markers at H.6, H.9, H.16 and H.18, and both exhibit the narrow armpit (V-1.5, V+1.5) and shoulder width (V-2.5, V+2.5) as expected from prior scholarship. The narrowest part of the body at the small of the back also occurs higher (at H.12) in both figures than is generally observed on male representations (with a consequent larger buttock area in relation to the height of the figure), and is consistent with real

---

933 ROBINS (1994), op. cit., 79.
934 See depictions of female figures, BLACKMAN & APTED, Meir VI, pl. 10, 12, 18.
935 ROBINS, ibid.
life observations. It is here that the only discernable difference between the B2 and C1 female figures is observed, with the C1 figure having a more slender waist (1.3 grids as opposed to 1.5), although both are within accepted canonical limits for the mid Twelfth Dynasty.

**Grids in Other (non-human) Representations**

The manipulation of the grid to suit human subjects in varying postures has been discussed above, however the application and manipulation of the grid to control composition of animals and objects is also evident in tomb B2.

In the case of the cattle procession on the top register of the north wall, the figures of the cattle are integral to the same composition as the leading Beja herder and the cattle overseer at the rear (see photos, Figs. 5.3 and 5.4), and a single 18-square artists grid can be seen extending the full length of the scene, used to control proportions and placement of both the animal and human figures. This grid is effectively identical in scale to those of the registers below, with a single square measuring 24.1 mm (equating to one medius phalange) resulting in a height from the baseline to H.18 of almost one small cubit (in this case 43.5 cm, possibly a result of the actual finger and forearm measurements of the artist being shorter that the canonical phalange and small cubit, as discussed previously). The transition points between the cattle’s legs and bodies is aligned in this scene to H.6, in line with the top of the overseer’s knees. Elsewhere in tomb B2 the fighting bulls on the bottom register of the west wall are depicted on a smaller scale than their overseers and are evidently composed on a smaller, unconnected grid system that overlays the main grid for the composition, as seen from the surviving remains of the two superimposed grid patterns associated with the bulls. In terms of the main grid for the scene, the transition between the cattle’s body and legs occurs at the level of H.4, making these animals approximately two-thirds scale compared to those in the cattle procession on the north wall. A similar cattle procession to that on the north wall also exists on the south wall, although there are no surviving gridlines associated with the south wall scene. The cattle in this procession (see photo, Fig.

---

936 Also observed in prior scholarship, see ROBINS, *ibid.*
937 KANAWATI & EVANS (2017), *Wekkhatep (B2), forthcoming*, pl. 88. The surviving gridlines behind the bulls are too fragmentary to obtain an accurate measurement of the grid square height.
5.5) are depicted on an even smaller scale compared to the overseer, than those in the bull fighting scene, and even the beja herder is depicted at a smaller scale than the overseer in this case.\footnote{KANAWATI & EVANS (2017), \textit{Wekhhotep (B2)}, forthcoming pl. 86.}

Remains of gridlines on the west wall offering table provide insight into the drawing of the upright loaves on the table top. The surviving black lines show that a rectangle was drawn the full width of the table, with the table top as its base. This rectangle was divided by nine vertical lines, into ten vertical rectangles as the basis of the ten upstanding loaves. The curve of the tops and bottoms of the loaves was then drawn in by freehand, to provide the outline of the final form for the sculptor to incise into relief (which would also remove the original rectangular guidelines).\footnote{Author’s observations & site notes. See KANAWATI & EVANS (2017), \textit{Wekhhotep (B2)}, pl. 87.}

A well preserved grid system is also attested in the entire compositional space of the clapnet depicted in the middle register of the north wall. The size of the individual grid squares is significantly smaller (at 15.4 mm) than the adjacent grids for human figures, presumably to control the composition of numerous overlapped figures of waterfowl in the net. The process of filling in the waterfowl was never completed, with only seven ducks observed in the top right hand corner of the net.\footnote{KANAWATI & EVANS (2017), \textit{Wekhhotep (B2)}, pl. 92. The top three duck are barely visible in black outline only.}

\textit{Grids Used to Copy Old Kingdom Scenes}

Evidence exists at Meir of the intentional copying of parts or vignettes of Old Kingdom scenes for probable application to tomb scenes in the Twelfth Dynasty tombs at the same site.

Kanawati describes square gridlines drawn over the top of completed reliefs in the Old Kingdom tomb of Pepyankh-Henykem (tomb A2), which were probably executed by later artists to aid in copying the motifs into their own work.\footnote{KANAWATI (2011) ‘Art and Gridlines: the copying of Old Kingdom scenes in later periods’, in Barta \textit{et al.} (eds.), 491, 493-5.} The most obvious example cited is the gridlines drawn over the fish on the end of the tomb owner’s spear in the spearfishing scene of that tomb,\footnote{BLACKMAN & APTED, \textit{Meir V}, pl. 24; KANAWATI (2011), op. cit., 491 & Fig 9.} which has been
definitively shown to be executed after the scene was completed, as the lines clearly run on top of the cut and painted surface of the relief. The lines were also found beneath the layers of fouling that has only been cleared from the scene in modern times, indicating they were added by ancient copyists prior to the accretion of the fouling.\textsuperscript{943} The fish, a tilapia and a Nile perch, correspond very closely in layout and positioning to the same fish in a very similar scene in the Middle Kingdom tomb B4 of Ukhhotep II.\textsuperscript{944} There are no gridlines evident on the scene in tomb B4, however, the scene exhibits some general similarities to that in tomb A2. Both are single complete scenes of the tomb owner spearfishing on a reed skiff, rather than half scenes within a combined fishing and fowling scene as attested in the other Middle Kingdom tombs B1, B2 and C1.\textsuperscript{945} Other similarities include the close compositional packing of the water band and water mound with numerous smaller fish, and the detail of the subsidiary figures in a separate small-scale skiff fishing with a hand net. The tomb B4 scene is not an exact copy of the earlier example however, as only the two fish on the end of Ukhhotep II’s spear are very close approximations of those under the gridlines in the original work (more so than the equivalent representations in tombs B1 and C1, particularly noted in the relative proportions of the fishes bodies and the line of the perch’s back near the dorsal fin). The most important difference between the two tombs is that the scene in tomb B4 is a mirror image of that in the earlier tomb (in that its orientation has been transposed from left facing to right facing).\textsuperscript{946} The small fish are in different positions in both scenes and the angle of the spear is greater in tomb B4 due to the water mound being lower with respect to the tomb owner than is seen in tomb A2.\textsuperscript{947} It should be noted that the gridlines would have facilitated the accurate transposition of this vignette from left to right orientation, if this part of the scene in tomb B4 was indeed copied from tomb A2.

\textsuperscript{943} KANAWATI (2011), \textit{op. cit.}, 495.
\textsuperscript{944} BLACKMAN, \textit{Meir III}, pl. 6; Kanawati notes the similarity of this scene to the original in tomb A2 and suggests it may have been partly copied from it, based on the presence of the gridlines, \textit{ibid.}, 495.
\textsuperscript{945} BLACKMAN, \textit{Meir I}, pl. 2, \textit{Meir II}, pl. 4 (scene mostly lost); BLACKMAN & APTED, \textit{Meir VI}, pl. 13.
\textsuperscript{946} The tomb owner oriented to face right is in fact in agreement with the typical spearfishing representation from all periods.
\textsuperscript{947} This lower water mound may simply be due to the lack of wall space on the south wall of tomb B4, resulting in the need to bring this motif closer to the tomb owner.
A second scene in the same Old Kingdom tomb A2 (Pepyankh-Henykem) also displays what is evidently a Middle Kingdom 18-square grid on a register depicting a priest and offering bearers in a funerary procession. As this scene is only drawn in black outline without incision, the case that the grid was applied over it at a later date cannot be made by observation of the gridlines running over cut relief (as is evident for the fishing scene described above). It is well established however that 18-square grids are not attested prior to the early Twelfth Dynasty, and that the grid observed in tomb A2 must therefore be a Middle Kingdom addition, probably for copying the proportions of standing figures. There are no near or exact matches of an identical group of figures that can be defined with any certainty in the Twelfth Dynasty tombs, however, all of these tombs do attest numerous examples of standing subsidiary figures of similar scale in various activities, including processions. It is likely therefore that the 18-square grid was applied to the study of body proportions in this register of tomb A2 for the purpose of broader application to the numerous standing figures in the tombs of the B group (and possibly also tomb C1). Similar grids observed on specific scenes in Old Kingdom mastabas at Saqqara and Giza indicate that the study of proportion of standing figures was not limited to the artists of Meir. Although one of the grids in the tomb of Irymery at Giza is clearly a late period insertion (based on the observed 21 lines to the eyelid), the grid observed in the tomb of Ptahhetep I at Saqqara may, like that in tomb A2 at Meir, date to the Middle Kingdom as it conforms to an 18-square

---

948 BLACKMAN & APTED, Meir V, pl. 42 (gridlines not represented); See photo KANAWATI (2011), op. cit., 495, Fig. 10 for clear depiction of the grid.
950 ROBINS (1994), op. cit., 73, citing the earliest definitive square grids to the reign of Senusret I.
951 Processions similar (but not identical to) the copied register are observed as follows (BLACKMAN): In tomb B1: Meir I pl. 2; tomb B2: Meir II pl. 15; tomb B4: Meir III pl. 17; tomb C1 Meir VI pl. 10.
952 KANAWATI (2011), op. cit., 489-90 & 493, suggests that the quality of these figures would have made them an excellent model for training purposes in the drafting stage, and that the original artist may even have left certain scenes in the preliminary stage as a record of his technique.
953 KANAWATI (2011), op. cit. 491, Figs. 7-8, cites an example in the tomb of Ptahhetep I at Saqqara. The line drawing of Fig. 8 shows that the grid was drawn in two-unit intervals (ie. nine lines from baseline to hairline).
954 WEEKS (1994), Mastabas of Cemetery G 6000, (referenced by KANAWATI, ibid., 491). There are numerous grids drawn over the reliefs of mastaba g 6020 of Irymery, in the first chamber. Fig. 30 shows a 21-square grid on a carpenters scene (hence must represent a late period copy). Figs. 31 & 34 show grids on cattle and storks. Fig. 38 shows a grid of indeterminate period on a grape pressing scene.
955 WEEKS (1994), op. cit. Fig. 30, carpenters scene.
956 ROBINS (1985), SÄK 12, 102, 107-14.
format, although with every second line being drawn.\textsuperscript{957} If a Middle Kingdom dating is indeed the case, then the proximity of the site of Saqqara to the royal court of the Twelfth Dynasty at \textit{Itj-t}"wy may suggest that the tomb of Ptahhotep I could have provided a model for re-establishment of Old Kingdom proportionality into the Twelfth Dynasty court style. Seen in this light, the similar copying observed at Meir may have also been in line with the establishing of uniform artistic standards based on Old Kingdom models, as adopted by the central administration.

\textbf{IV. Chapter Summary}

By firstly examining the compositional principles evident in the wall decoration of the Middle Kingdom tombs at Meir, it is demonstrated that strict adherence to long standing Old Kingdom canonical conventions was observed. Primary amongst these is the principle of ‘typical aspect’ which is universally applied in the representation of all human and animal figures as well as other objects, as discussed with reference to examples from the decoration of tomb B1. Minor variations to canonical representations are identified for specific figures of workers and foreigners, especially in tombs B1 and B2. The use of patterns, balance and spatial distribution within the wall scenes at Meir was discussed, and compared to similar aspects of composition in both late Eleventh Dynasty and contemporary Twelfth Dynasty examples at other Upper Egyptian sites. The compositional density of the scenes in B1 and B2 in particular reflect a broader style seen in other early Twelfth Dynasty examples, with the hunting/desert tableau scene in tomb B2 being an extreme example.

A comparison was made of stylistic features of individual traits in human subjects, from a range of Upper Egyptian sites dating from the First Intermediate Period through to the mid Twelfth Dynasty. Details of facial features indicate that the Meir artists followed the style set by the court artists of Mentuhotep II in terms of interior sculpted detail, although the relief follows a flatter style in line with other works dated to Amenemhat I. Tomb B2 was identified as the culmination of the early Twelfth Dynasty local relief style evident at Meir and specific scenes are discussed

\textsuperscript{957} KANAWATI (2011), \textit{op. cit.} Fig. 8, butchers, east wall.
in detail in the form of a case study, outlining the achievements of the artist and comparing them to examples from other Meir tombs and those at comparison sites.

The final part of the chapter discusses the conventions applied by the artists to control the compositional space, commencing with the application of registers and baselines, leading into case studies of the artists' grids, which are well attested in both tombs B2 and C1. The grids of tomb B2 provide insight into the development and application of this technique early in the Twelfth Dynasty, and demonstrate that its use was well developed by the reign of Senusret I. Differences in the application of artists grids are noted in the later tomb C1, particularly with the drawing of subsidiary figures in the statue recess as discussed in the second artists grid case study, and point to a less rigid application being observed, perhaps more appropriate to a decoration programme executed entirely by drawing and painting rather than relief.
Chapter Five Photographs and Figures (Figures 5.1 to 5.20)

**Fig 5.1 Wing Detail from Pintail Duck – Tomb B1 (Senbi I)**
Position: South Wall bottom Register. Note incised detail and modeling of wing and tail feathers, as opposed to painted internal detail.
(Photo by author, 2011).

**Fig 5.2 Procession of Cattle – Tomb B1 (Senbi I)**
Position: South Wall Middle Register. Note internal detail denoted by painted lines and patches of colour (brown pigment is seen as the darker patches on the bodies of cattle in the monochrome image).
(Photo by author, 2011).
Fig. 5.3 Procession of Cattle – Tomb B2 (Ukhhotep I)
Position: North Wall Upper Register. Note extensive internal sculpted modeling of neck folds, knee joints, face and musculature.

(Photo by author, 2011).

Fig. 5.4 Beja Leading Cattle – Tomb B2 (Ukhhotep I)
Position: North Wall Upper Register. Note realistic depiction of crippled leg, scarifying body marks and tendons/musculature of arms and legs.

(Photo by author, 2011).
Fig. 5.5  Leading Cattle – Tomb B2 (Ukhhhotep I)
Position: South Wall Middle Register. Note internal modeling around eyes and neck, and complex overlapping of cattle and rope halters.
(Photo by author, 2011).

Fig. 5.6  Tomb Owner Seated – Tomb B2 (Ukhhhotep I)
Detail of torso, arms, head and wig.
Position: North Wall, Centre. Note flat raised relief with fine sculpted modeling of musculature of arms and torso, contrasting with deep cut of wig sculpture.
(Photo by author, 2011).
Fig. 5.7 (a) Tomb owner seated, with wife at feet, and (b) detail of wife.  
Note wife turned to look at husband. Transmission of expression.  
(Photos by author, 2011).

Fig. 5.8 Divergence from Canon – Facial Features (a) Blind Musician, (b) Beja herdsman  
Tomb B2 (Ukhhotep I)  
Position: (a) North Wall, middle register (musician), (b) South Wall, middle register (Beja).  
Note closed eyes of otherwise canonical musician opposed to non-canonical realistic depiction of Beja.  
(Photos by author, 2011).
Fig. 5.9  Transmission of Expression in animal figures – Tomb B2 (Ukhhotep I)
Note desert hare turned towards hunter. Enlarged round eye and sunken cheek conveys a sense of alarm and fear on this minor animal figure.
(Photo by author, 2011).

Fig. 5.10  Divergence from Canon in Posture of minor figure – Tomb B1 (Senbi I)
Position: South Wall bottom register. Note hunched posture with chin depicted below shoulder level, emphasizing the force he is exerting on the trussed bull by leaning on his left knee.
(Photo by author, 2011).
Fig. 5.11 Bringing Down a Bull (Detail) – Tomb B2 (Ukhotep I)
Position: North Wall top register. Demonstrates the artist’s achievement in conveying movement. Note specifically the complex overlaying of the two figures (faces destroyed) restraining the bull’s foreleg.
(Photo by author, 2011).

Fig. 5.12 Duelling Boatmen (Detail) – Tomb B2 (Ukhotep I)
Position: North Wall bottom register. Demonstrates the artist’s achievement in conveying movement. Note the two grappling figures from the opposing boats and pattern formed by crossed boat staves.
(Photo by author, 2011).
Fig. 5.13 Painted Representation of tomb owner’s wife - Tomb C1 (Ukhhotep III).
Position: Statue Recess south wall. Note the technique is wholly executed in paint on plaster, compared to sculpted high relief in tombs B1, B2 and B4. Demonstrated on this figure are painted details of curl of nostril, lips, medial line from nose to lips, and ear (helix, lobe and opening to ear canal). Artists grid also in evidence.
(Photo by author, 2011).

Fig. 5.14 Female offering bearer – Tomb C1 (Ukhhotep III).
Position: north wall. This figure demonstrates a similar level of internal detail as the tomb owner’s wife (above) showing the same facial features. Note enlarged eye. Hairstyle remains unfinished, in outline only. Artists grid in evidence.
(Photo by author, 2011).
Fig. 5.15 Artists Grid for composition of Tomb Owner’s Official (detail) - Tomb B2 (Ukhhotep I).
Position: North Wall Western End, lower figure behind standing tomb owner. Note gridlines in red paint defining the compositional space. The composition of the figure has commenced by outlining in black paint, prior to cutting of relief. (Photo by author, 2011).

Fig. 5.16 Artists Grid behind Sem priest and chief lector – Tomb C1 (Ukhhotep III)
Fig. 5.17 Full (18-square) artists grid behind offering bearers – Tomb C1 (Ukhhotep III)

Position: North wall, bottom register. Note the presence of the full artists grid used for the compositions of subsidiary figures on the north wall, as opposed to the partial grids utilised in the statue recess (see Fig. 5.16)

(Photo by author, 2011).
Fig. 5.18  Comparison of Standing Main Figure – Meir Tombs B1, B4 and C1 with Tomb B2 (Ukhhotep I)

Original Grid in Tomb B2 provides confirmation of intersection points on main figure for key horizontal and vertical lines. Extrapolation to equivalent figures confirms adherence to the same grid scheme in all tombs in the sequence.

Fig. 5.19  Comparison of Standing Main Figure – Meir Tomb B2 (Ukhhotep I) with Beni Hasan Tomb BH17 (Nomarch Khety)

Similar extrapolation of original gridlines from Tomb B2 confirms non-canonical dimensions of the standing figure of Khety in Tomb BH17
Fig. 5.20 Comparison of Female Subsidiary Figures from Meir Tombs B2 (Ukhhotep I) and C1 (Ukhhotep III)

Note original gridlines adjacent to female figure in Tomb B2. Extrapolation to the figure in Tomb C1 indicates that horizontal convention is maintained through the sequence. The only vertical differentiation is a slightly narrower waist (at H.11.5) in the figure of Tomb C1.
CHAPTER SIX:

ICONOGRAPHY OF THE TOMB OWNER IN SCENES OF DAILY LIFE

The objective of this chapter is to identify chronological aspects of the motifs that characterise scenes of the tomb owner engaged in two common daily life activities. The two most prominent and widely attested themes in this category depict the tomb owner engaged in a desert hunt and fishing and fowling in a papyrus thicket from a reed skiff. As major elements of a tomb’s decorative programme, these scenes are portrayed in large scale and occupy a significant part of the available compositional space, exceeded only by the depictions of the tomb owner at the offering table or standing and inspecting or receiving offerings. While the offering scenes are fundamental to the tomb owner’s mortuary cult and display a great degree of uniformity over time, the desert hunt and fishing and fowling scenes show small but significant changes between tombs which may be analysed from a chronological perspective. The typological data thus constructed can be compared against the chronological sequence derived in Chapter Three from the analysis of texts. Elements of the two scenes that are common between the tombs of Meir and the comparison sites specific to the Twelfth Dynasty are identified.
I. THE DESERT HUNT

The depictions of desert hunting in the tombs of the Middle Kingdom and those of their Old Kingdom predecessors can be categorised into two broad iconographic traditions. While both may be categorised as scenes of daily life, they can be differentiated thematically into scenes of the tomb owner hunting as a pastime or as scenes of hunting as a professional activity (by gamekeepers, often being observed by the tomb owner). Although the distinction can be made between the professional activity and the pastime, both types of scene share common core motifs and in some cases, both aspects can be depicted in the one scene, generally with the pastime of the tomb owner being the dominant of the two themes depicted. These aspects are discussed further below.

Hunting scenes that are categorised as pastimes of the tomb owner are a major part of a tomb's decorative programme and focus on the large-scale tomb owner actively engaged in the core activity hunting with a bow and arrows. Those depicting hunting as a profession may also have a large scale figure of the tomb owner, however in these cases the tomb owner is standing passively observing the activities of gamekeepers, who are represented on the same scale as workers in other scenes. While scenes of both types are represented in tombs examined at the comparison sites, the hunting scenes at Meir fall into the former category.

a) Overview of the Data Set

The desert hunt is represented in all four fully decorated Middle Kingdom tombs at Meir, with the scenes in the first two tombs (B1 and B2) surviving in their complete state. The scenes in the two later tombs (B4 and C1) are fragmentary, however, there are sufficient remains to demonstrate that they follow the iconographic tradition of their predecessors at Meir.

At the site of Beni Hasan, hunting in the desert is a commonly attested theme, but (with the exception of the last tomb BH3), is typically located in the top register of the north wall, and clearly follows an iconographic tradition with local origins.
Other Twelfth Dynasty examples of the scene are included in the analysis from the comparison sites of Western Thebes and Deir el-Bersha, and an early example of the scene from the pre-unification tomb of Sebekhotep at Moalla is included. The data set is listed below:

<table>
<thead>
<tr>
<th>Data Set for Seriation of the Desert Hunt scene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nome and Site</strong></td>
</tr>
<tr>
<td>U.E. 3 Moalla</td>
</tr>
<tr>
<td>U.E. 4 Thebes</td>
</tr>
<tr>
<td>U.E. 14 Meir</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>U.E. 15 Deir el-Bersha</td>
</tr>
<tr>
<td>U.E. 16 Beni Hasan</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Additional Sources (incomplete, but with typologically significant features)

El-Kab Tomb of Senwosret972

b) Results and Interpretation of the Constrained Seriation

Two seriation procedures are carried out on the data set, so that the chronologically ordered results from the constrained seriation (Table 6.1a), in which the positions of

958 VANDIER, Moalla, pl. 42.
959 DAVIES, Antefoker, pl. 5a, 6, 7.
960 BLACKMAN, Meir I, pl. 6.
961 BLACKMAN, Meir II, pl. 8; KANAWATI & EVANS (2017), Wekhhotep, publication forthcoming, pl. 84.
962 BLACKMAN, Meir III, pl. 15.
963 BLACKMAN, Meir VI, pl. 9.
964 NEWBERRY, Bersheh I, pl. 7.
965 NEWBERRY, Beni Hasan II, pl. 28, 29.
966 NEWBERRY, Beni Hasan II, pl. 35.
967 NEWBERRY, Beni Hasan II, pl. 4.
968 NEWBERRY, Beni Hasan II, pl. 13, 14.
969 NEWBERRY, Beni Hasan I, pl. 46.
970 NEWBERRY, Beni Hasan I, pl. 13; KANAWATI & EVANS, Beni Hassan III, pl. 81.
971 NEWBERRY, Beni Hasan I, pl. 30; KANAWATI & EVANS, Beni Hassan I, pl. 105-6.
972 DAVIES & O’CONNELL (2012), BMSAES 19, 59, fig. 2
the tombs are fixed as defined in Chapter Three, can be compared to the purely typological seriation resulting from the unconstrained procedure (Table 6.1b), where both the tombs and the attributes are re-ordered to obtain an optimal sequence that is purely based on typological differences.

a) Constrained Seriation

b) Unconstrained Seriation

Table 6.1  Seriation of the Desert Hunt Scene

The constrained seriation plot demonstrates that the majority of the features which characterise the desert hunting scene are broadly attested across tombs of all periods in the study, and are therefore inessential attributes for the purpose of seriation. Furthermore, there are a significant number of embedded absences within the data lines for the inessential attributes, resulting in a scattered
appearance for much of the plot. This is partly due to local variations in the scene (for example, attribute 624\(^973\) is attested in all of the Eleventh and Twelfth Dynasty Beni Hasan tombs, as well as in tomb Be2 at el-Bersha, but is only seen in Meir tomb B4), and partly due to missing data as a result of poorly preserved sources. No attributes could be identified which are unique to tombs prior to the Twelfth Dynasty, however a small group of attributes can be identified at the bottom of the plot which are restricted to Twelfth Dynasty tombs. These are grouped as follows:

### Iconographic attributes of chronological significance

<table>
<thead>
<tr>
<th>Desert Hunt attributes widely attested in 12th Dynasty Tombs</th>
<th>Group 1 – Commonly attested: in 5 or more (of 9) 12th Dynasty tombs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attribute #</strong></td>
<td><strong>Attribute Description</strong></td>
</tr>
<tr>
<td>601</td>
<td>Tomb owner is the major figure, depicted in large scale</td>
</tr>
<tr>
<td>602</td>
<td>Tomb owner is actively participating with a bow</td>
</tr>
<tr>
<td>604</td>
<td>A son (or attendant) accompanies the tomb owner</td>
</tr>
</tbody>
</table>

**Attested in 3 tombs:**

| 638              | Stones are represented on the desert tableau by stippling     |

**Group 2 – Less commonly attested: in only 2 tombs (of 9)**

| 605              | Tomb owner is leaning forward in active stance (Meir only)    |
| 606              | Tomb owner’s front knee is bent (Meir only)                   |
| 607              | Tomb owner wears a shendyt kilt (Meir only)                   |
| 609              | Hunting sporran replaces kilt (Meir and Beni Hasan)            |
| 634              | Baseline registers of the desert tableau are very irregular (Meir and Beni Hasan) |

**Attributes specific to the later 12th Dynasty tombs**

<table>
<thead>
<tr>
<th>Group 3 – Only attested in the later mid-12th Dynasty tombs</th>
</tr>
</thead>
<tbody>
<tr>
<td>610</td>
</tr>
<tr>
<td>611</td>
</tr>
</tbody>
</table>

The data indicates that the desert hunt scene is influenced significantly by local precedents. This is confirmed by the ordering of the tombs in the unconstrained seriation, which results in all of the Beni Hasan tombs (with the exception of BH3) being grouped together on the left of the plot and the Meir tombs on the right. The other two Twelfth Dynasty tombs in the analysis (TT60 and Be3) are positioned between the Beni Hasan and Meir groups. Only tomb BH3 is placed in this middle group, next to the Meir tombs, suggesting that the desert hunting scene in this tomb

\(^973\) Attendants or gamekeepers are depicted on the desert tableau.
is typologically more closely related to those of the Meir group than those of its predecessors at Beni Hasan.

c) The Iconographic Tradition and Old Kingdom Antecedents of the Desert Hunt

Alignment of the iconography of Meir tombs B1 and B2 with canonical motifs

In the depiction of the desert hunt, the tradition followed at Meir is a derivative of the royal canonical type set in the Fifth Dynasty, the earliest surviving example of which is the desert hunt relief of King Sahure (Berlin 21713) from his pyramid funerary complex at Abusir. The canonical form of the scene, as exemplified by the Sahure relief, incorporates five major motifs, which can be closely aligned to the Meir iconography as described.

The first of these depicts the main figure of the king (or the tomb owner in the Meir tombs) in large scale, conventionally to the left of the composition, facing a desert tableau filled with animals on multiple registers. The king (or tomb owner) stands upright with legs spaced apart on the bottom ground line, right foot raised at the heel giving the impression of forward movement or countering the draw of his hunting bow. An arrow is nocked and drawn to shoulder height preliminary to aiming and release. The Sahure relief is the first to introduce the main figure as an active hunter with a bow, as opposed to a passive observer or unarmed coordinator of the hunt. This motif is adopted with an innovation in stance by the artist of the first Middle Kingdom tomb at Meir, B1. The figure of Senbi I is shown with a pronounced forward lean into his bow and the shaft of the arrow aligned with his eye, in an attempt to show a realistic pose of drawing and aiming the bow. Senbi’s front knee is bent to accommodate the forward lean, which seems to be approaching the point of overbalance. A similar stance is repeated in the tomb of his successor (Ukhhotep I, B2), but with the potential overbalance of the tomb owner corrected, for a more realistic pose which still effectively conveys the action of the hunt, and which was subsequently replicated in the later Meir tombs B4 and C1. Blackman

974 BORCHARDT (1913), Das Grabdenkmal des Königs S’ahu-Re’, Vol II: pl. 17. This scene was located on the south wall of the south passage surrounding the hypostyle hall of the mortuary temple.
975 BLACKMAN, Meir I, pl. 6.
976 BLACKMAN, Meir II, pl. 8.
977 BLACKMAN, Meir III, pl. 5 (tomb B4, Ukhhotep II) and BLACKMAN & APTED, Meir VI, pl. 9 (tomb C1, Ukhhotep III).
suggests that the angle of the lower leg of Ukhhotep II (B4) indicates the figure was posed in a forward leaning posture like that of Senbi I, however, that is difficult to verify from the relief remains in-situ or from Blackman’s tracing. A further tomb far removed from Meir, that of Senwosret of el-Kab, definitively shows the tomb owner’s bent front leg in a fragmentary desert hunt scene, suggesting the possible influence of the Meir relief style at this site. The angle of Ukhhotep I’s half drawn bow appears correct in relation to the face before it is drawn and brought up to aim. In both tombs B1 and B2, the tomb owner is accompanied by an attendant, (possibly a son), with Senbi’s companion unusually being represented at a similar scale to the tomb owner. Ukhhotep II (B4) is accompanied by his young son Senbi (wearing the child’s sidelock). In tomb C1 (Ukhhotep III) notable additions to the main figure, not present in the prior examples of the scene at Meir, are sandals on the tomb owner’s feet. This is a late feature which only becomes relatively common during the New Kingdom (although is also seen on Senwosret of el-Kab and on Khnumhotep II of Beni Hasan tomb BH3).

The second motif is the desert tableau, set within multiple registers (four registers in the Sahure relief, but variable in the tombs of the study). The desert landscape is depicted by undulating ground lines rising from the base of each register, incorporating desert shrubs and emphasising the uneven surface. In Sahure’s relief, a vignette consisting of a recumbent gazelle hiding from the hunter is inserted on its own ground line at the top of the middle register. Three other subsidiary inserts on the other two registers depict small desert animals. Collectively, these insertions have the effect of reinforcing the irregular nature of the ground lines, and serve to depict background activities taking place during the hunt. The highly undulating ground lines are reproduced in Senbi’s tomb (B1), however, this is taken a step further by some baselines having random points of origin within the desert enclosure, and with two ground lines diverging from a single point of origin, or two ground lines converging to join into a single baseline, thus further emphasising the chaos embodied by the desert. Red spots of paint are used to represent loose rocks on the surface. As the evenly spaced linear registers have disappeared so have the

978 BLACKMAN, Meir III, 13
979 DAVIES & O’CONNELL (2012), BMSAES 19, 59, fig. 2. Senwosret also wears a sandal like Ukhhotep III in tomb C1.
980 The use of spots below the ground line to represent loose rocks has precedent in the First Dynasty, c.f. ivory label of Den (British Museum EA 55586) showing stippling below ground line.
subsidiary inserts depicting background animals, as apparent in the Old Kingdom example above. Instead, the small desert dwellers (hares and hedgehogs) share the irregular ground lines with the major game animals, and join them in fleeing from the hunter. Ukhhotep I’s scene in tomb B2 makes a departure from the convention with the total absence of drawn baselines in the desert tableau. In this feature it is reminiscent of the loosened canonical conventions in hunting scenes of the First Intermediate Period, however, the feet of the animals in rows align to points on the composition where wavy groundlines would otherwise be expected. The invisible groundlines of tomb B2 are, however, not attested in succeeding tombs either at Meir or at the comparison sites.

The third core motif is the game enclosure, where the desert tableau is separated from the tomb owner by a fence constructed of rope netting supported by poles. The enclosure fence is a recurring motif in all iconographic forms of the hunting scene from the Fifth Dynasty, and illustrates the active management of the desert domain for harvesting of important game species. The fence is a portable structure used to enclose areas of desert for game management, including in this case the containment of animals for the king’s sport. In the Sahure relief, the game management aspect is introduced as a secondary theme by four gamekeepers depicted in two registers, observing the hunt from outside the enclosure fence on the opposite side of the desert tableau to the king. The gamekeepers hold lassos and staves, which in contemporary scenes are used in conjunction with fenced enclosures for live capture of game animals. Senbi’s desert hunt in Meir tomb B1 faithfully represents the enclosure fence as it is seen in the Sahure relief, and this motif is also rendered in the later tombs B4 and C1. Of particular note, however, is the omission of the game enclosure from the desert hunt of Senbi’s son and successor, Ukhhotep II (tomb B2). In neither tomb, however, are gamekeepers depicted, either within the enclosure (in the case of tomb B1) or otherwise accompanying the tomb owner (the tomb owner’s companion is not a gamekeeper and is represented in a larger scale than these workers). At Meir, gamekeepers are however attested inside the desert enclosure depicted in tomb B4 (Ukhhotep II),

981 See for example the tomb of Sebekhotep at Moalla. VANDIER (1950), Moalla: pl. 42.
982 Besides being introduced in royal hunting scenes by the Sahure relief, the enclosure fence is also depicted in the Fifth Dynasty private tomb of Niankhkhnum and Khnumhotep. See MOUSSA & ALTEMÜLLER (1977), Das Grab des Nianchchnum und Chnumhotep, pl. 38, 40
983 HERB & FÜRSTER (2009), IN: Desert Animals in the Eastern Sahara: 17-44
presenting captured animals to the tomb owner. The gamekeepers represent a common link to the earlier and contemporary tombs at Beni Hasan, where they are depicted snaring wild animals and bowhunting, and to the later hunt scene of Djehutyhotep at El-Bersha (tomb Be2), which otherwise follows a different iconographic tradition of the tomb owner as observer rather than active participant.

The absence of an enclosure fence in tomb B2 gives the artist scope to seamlessly connect the desert tableau containing game animals being hunted by the tomb owner with a broader desert landscape inhabited by wild animals in one sweeping composition. The animal landscape of tomb B2 continues from the desert hunt at the eastern end of the tomb towards the centre of the south wall, occupying the space of the bottom register, with one row of animals grounded on the register baseline and a second ungrounded line (including the copulating animals) floating irregularly above it, almost merging at one point with the procession of domesticated cattle in the second register immediately above.

The fourth core motif consists of wild animals depicted in standard poses on the desert tableau ground lines. The most important animals represented are game species, being predominantly medium and large grazing bovids (wild bulls, ibex, gazelles, hartebeest, barbary goat, oryx and addax) and cervids (deer). Also represented in the Sahure relief are small desert dwellers (hedgehog, badger and jerboa) and wild predators (a hyena and jackal or desert fox). The game animals are facing in both directions with most depicted fleeing from the hunter, having been shot by arrows. These animals still conform to the convention of having all four feet in contact with the ground line, although movement is suggested by their stance being slightly elongated. Only in one case does a shot gazelle lift its front legs slightly off the ground line, while a shot hyena does the same in a more dramatic fashion on the bottom register. The shot gazelle on the top register also adopts a pose of turning its head towards the hunter, which becomes a standard vignette in later depictions. The gazelles, and to a lesser extent the oryx in the scene are depicted in overlapping pairs, a feature which also becomes a characteristic in later scenes. The major game animals in Senbi’s desert enclosure (Meir tomb B1) conform

---

984 For an analysis of the animals found in royal and private relief and their contexts, see STRANDBERG (2009), The Gazelle in Ancient Egyptian Art. Image and Meaning, Uppsala: 8-32
to the standard motifs for the desert hunt, including the prominent vignette taken
directly from the Sahure original of a rearing hyena shot with arrows through the
snout and haunches. Greater complexity of representational technique and an
expanded repertoire of motifs of hunting dogs at the throats of game animals is
apparent in this scene compared with its Old Kingdom predecessors. A standing
ibex shot with an arrow is shown pulling against a hunting dog, which is
represented with complex layering as seizing the back of the neck of the ibex, its
head and forelegs obscured behind the prey animal. Another vignette shows a dog
grasping the muzzle of a gazelle in its mouth, in a similar manner to a wild
predator. Complex layering is also used in a group of three oryx, with the centre
of the three animals being shot by an arrow and turning its head towards the direction
of the hunter. The depiction of oryx in groups of three is an innovation over the
more conventionally shown paired animals, and the middle animal’s legs do not
quite line up with its rearward turned head between the overlapped bodies in this
group. On the groundline above are a second trio of antelopes (in this case gazelles). Elsewhere, the more established conventions of game animals in pairs are
shown, with a pair of shot ibex on the second groundline near Senbi, and a pair of
shot gazelles on the bottom ground line near the far enclosure fence. A variation on
the leaping animal motif is provided by one of the hares in the enclosure, which has
its forelegs on the ground line and its rear legs stretched in the air, giving the
impression of it leaping in flight from the hunter.

An innovation in the Senbi desert hunt is the seamless combination of game being
hunted (following the Sahure model) with an animal landscape depicting motifs of
birth and renewal (deriving from the royal relief of Niuserre and private relief as
exemplified by Ptahhotep, discussed below). The area of the hunt subtly transforms
into the animal landscape in the upper right hand quadrant, furthest from the
hunter. Although this area is still depicted inside the desert enclosure (perhaps due
to the lack of further wall space at this southeast corner), the animals within it are
are not subject to attack by hunting dogs or arrows, and go about their natural
activities unmolested. Depicted are a pair of leopards copulating, an antelope
giving birth and a gazelle suckling its young. Completing the sequence of animal
lifecycle motifs is one of death: the depiction of a lion grasping the muzzle of a wild
bull in its jaws (as is seen in the Sixth Dynasty hunting scenes of Mereruka and Ptahhotep). The bull pulls against the lion in a similar manner to the ibex resisting a dog at the opposite side of the enclosure, providing a balance to the composition. The angle of the bull’s legs conveys a stronger sense of the struggle than does its Sixth Dynasty predecessors.

The animals depicted in the desert hunt of Ukhhotep I (tomb B2) generally follow the style of his predecessor, however the invisible groundlines make those closest to the tomb owner appear to be randomly positioned. The game animals (in this case oryx, gazelle and a desert hare) are shot with arrows and are being attacked in the conventionally depicted manner by hunting dogs biting the neck or muzzle. One vignette shows two dogs seizing a shot gazelle, in a scene reminiscent of that of the Old Kingdom tomb of Mereruka (see below) where a prostrate animal is attacked by multiple dogs. In each of these cases the overlap of dog and game is not as complex as those of Senbi I’s scene and the appearance of movement is not as pronounced, however, the effect of the animals apparently floating ungrounded on the field with wide spaces between them, with some of the groups at a slight angle to the horizontal, have the effect of conveying the chaotic nature of the desert even more effectively than the irregular baselines of Senbi’s scene. This is emphasised by the absence of enclosure fences (which are otherwise almost universal in hunting scenes), suggesting that the desert domain in this scene is truly wild and not subject to management by gamekeepers. The absence of enclosure boundaries enables the artist to seamlessly move some of the established motifs of the hunting scene into the subsidiary animal landscape scene. These motifs mainly depict wild carnivores prowling and other wild animals (including a monkey) giving birth. The two motifs are combined in one of the groups, which depicts a jackal ready to take a wild ass foal as the mother gives birth. Opportunity is made of the greater space to include a wider variety of exotic animals, including giraffe, deer, monkey and mongoose, and to depict another established convention of copulating predators and game animals (in this case lions, ibex and gazelles).

985 DUELL (1938), *Mereruka I* pl. 23b, 24, 25; KANAWATI et al., *Mereruka and his Family I*, pl. 19, 73.
Finally, the fifth essential motif is that of a hunting dog seizing a game animal. This motif has its origins in predynastic art and is evidenced in all Old and Middle Kingdom hunting iconographic traditions. In the Sahure scene, a dog wearing a collar is shown biting the throat of a downed gazelle lying on its back. This motif is also directly copied in Senbi I’s tomb (B1), at the forefront of the relief on the bottom register, and shows an ibex (in this case) lying prostrate on its back with the dog seizing its throat. This is one of two canonical forms of the motif, the other being of a dog leaping up and seizing a game animal at the back of the neck (four depictions in Senbi’s scene). The depiction of similar motifs in tomb B2 of Ukhhotep I is discussed above.

d) Other iconographic influences in the desert hunt

A further royal example of the desert tableau from the Fifth Dynasty is that from the Niuserre Sun Temple at Abu Ghurob. This partial relief (Berlin 20036) was located on the west wall of the Room of the Seasons, associated with the Harvest sequence, and displays additional themes of an animal landscape, which are incorporated into the Middle Kingdom hunt scenes at Meir. The theme of the surviving blocks is one of birth and fecundity, and shows game animals (oryx, addax, gazelles and aurochs) on an open desert landscape giving birth. Continuing the theme of fecundity, large felid predators (a lioness and a panther) are also shown giving birth. At the edge of one of the blocks stand two hunting dogs wearing collars, along with fragments of a gazelle in a basket, thus suggesting that an adjacent (now lost) scene probably depicted gamekeepers engaged in hunting and live capture.

While firmly based in the royal iconographic tradition, the Middle Kingdom Meir examples also extend elements of the desert hunt scenes of elite tombs of the Sixth Dynasty. The relief on the west wall of Mereruka’s Chamber A3 shows the tomb owner observing a gamekeeper and dogs hunting in a desert enclosure. The depiction of the desert tableau, the game enclosure and the dogs attacking antelopes are motifs in common with the royal scenes described above, although the scene is

---

986 the Two Dogs Palette (Ashmolean E.3924) which, as well as mythic creatures and wild predators, depicts three collared hunting dogs attacking ibex, oryx and two gazelles. Canids are also shown attacking antelopes on the Stockholm Palette (EM 6000) and the Hunters Palette (British Museum EA 20792 & Louvre E 11254).

987 VON BISSING (1956), ASAE 53, 319-338, pl. X1 a-b

988 DUELL (1938), Mereruka I pl. 23b, 24, 25; KANAWATI et al., Mereruka I, pl. 19, 73
notable for the extension of the motif of dogs attacking game. No less than nine dogs are shown surrounding an antelope laying prostrate on the ground, biting the animal on the snout, neck and all four legs. The artist has achieved the effect within the constraints of a formal register scheme by inserting a subsidiary base line above the animal (which then straddles the insert), to which the dogs on the other side of the antelope are grounded. Also introduced on the lower register, between hunting dogs attacking paired antelopes, is a vignette of a lion seizing a wild bull by the muzzle. Large predators (leopards and foxes) are also depicted in the tomb of Ptahhotep\textsuperscript{989} copulating, in another motif which is incorporated in the desert hunt repertoire at Meir.

These later Old Kingdom elite tomb hunting scenes follow models in Fourth Dynasty tombs\textsuperscript{990} where these early examples depict the hunter in a passive pose observing the hunt (or inspecting gamekeeping activities), however, depiction of the desert landscape is less well developed and the desert animals are shown standing passively with all four feet grounded on flat register baselines. Desert enclosures are not depicted as the early scenes pre-date the incorporation of an enclosure fence as an iconic motif. Contrasting with these prior examples, the royal hunting relief of Sahure introduces the main figure as an active hunter and incorporates the motifs of rearing animals with forelegs above the ground line, representing movement, and hunting dogs biting the throat of their prey. The chaotic nature of the desert is emphasised by the highly undulating ground lines, to which are attached scrubby desert vegetation. All of these themes are adopted and extended in the Middle Kingdom scenes at Meir.

**Early Twelfth Dynasty Contemporary Sites**

The hunting scenes from the contemporary tombs at Beni Hasan, BH14 (Khnumhotep I)\textsuperscript{991} dated to Amenemhat I, and BH17 (Khety)\textsuperscript{992} dated to late Eleventh/early Twelfth Dynasty\textsuperscript{993} both exhibit a continuation of an earlier local

\textsuperscript{989} DAVIES (1900), *Ptahhotep & Akhetetep I*: pl. 21.
\textsuperscript{990} See for example Rahotep at Meidum [PETRIE (1892), Medum: pl. 9]; DAVIS (1989), *Canonical Tradition*: 70-72
\textsuperscript{991} NEWBERRY, *Beni Hasan I*, pl. 46.
\textsuperscript{992} NEWBERRY, *Beni Hasan II*, pl.13, 14.
\textsuperscript{993} BROVARSKI (2010) *The Hare and Oryx Nomes*, 47-50
style first attested in the mid Eleventh Dynasty tomb BH29 (Baqet I). These scenes are depicted on one single height register (being the topmost register on the wall) and typically show small scale bowmen shooting arrows into game animals on a mildly undulating baseline representing the desert. Other gamekeeping activities such as snaring wild oxen may be included in these registers, and in all cases a desert enclosure fence is shown in a short register above, indicating that the activity is occurring in a managed game enclosure. In terms of canonical composition and included motifs the Beni Hasan hunting scenes from this period bear little relationship to the Meir scenes, and clearly follow a distinctive local style with little reference to the royal Fifth Dynasty iconographic tradition.

**Mid Twelfth Dynasty Contemporary Sites**

The hunting scene from Djehutyhotep at El-Bersha shows few commonalities with the Meir desert hunts, and none of the naturalistic variations to convention exhibited in either Senbi’s or Ukhhotep I’s scenes. Thematically it derives more from the private hunting relief of the Fifth and Sixth Dynasties rather than the conventions established by the royal relief of Sahure. The tomb owner stands outside the hunting enclosure passively observing the scene. The bow hunting and snaring of wild oxen is carried out by small scale minor figures (gamekeepers) within the enclosure, and the animals are represented according to strict adherence to baselines, with no variations expressing movement. The baselines are scarcely undulating and highly regular and the overlapping of herd animals is basic by comparison to those of Senbi. A prowling lioness within the enclosure is one conventional motif that is included.

The late tombs at Beni Hasan, BH2 of Amenemhat and BH3 of Khnumhotep II, are approximately contemporary with that of Djehutyhotep at El-Bersha and Ukhhotep III at Meir. Amenemhat’s hunting scene continues the established Beni Hasan convention of a single height top register containing minor figures of bowhunters and gamekeepers with lassos, with an enclosure fence depicted above. As is typical for the site, this scene is located at the top of the north wall. The register baseline is

995 NEWBERRY, *Bersheh I*, pl. 7
straight and well-defined but includes an undulating subsidiary ground line with spots representing loose rocks. The desert animals are fully grounded on the undulating line with no attempt to convey motion, and only one lion raising a paw towards a prey animal in an unconvincing attempt to display aggression. Khnumhotep II’s scene expands the Beni Hasan convention to incorporate two registers for depiction of the desert, each divided into two unequal subregisters. The animals are represented with greater realism than previously evidenced at the site, although still more restrained than the naturalistic styles of the earlier Meir tombs. A greater variety of poses, including animals facing the hunters, are introduced, as are more conventional scenes of carnivores attacking game (including the conventional scene of a jackal about to steal a calf being born). One non canonical innovation specific to Beni Hasan is the inclusion of a winged mythical animal on the top desert register. The most significant innovation for Beni Hasan hunting iconography is the depiction of the tomb owner as a major figure, three registers in height, facing the desert scene with bow in hand, standing in the canonical style of Sahure. The figure is fully upright, with bow fully drawn and nocked arrow held at the chest with no attempt to portray a naturalistic aiming posture (comparable with the depiction of Intefiqer in Theban tomb TT60, in which the iconography of the desert hunt closely follows the Sahure tradition). The feet are spaced apart with the rearward right heel elevated off the baseline, following the fully conventional style. An important inclusion, to be compared with Ukhhotep III at Meir (below) are sandals on Khnumhotep II’s feet. These scenes demonstrate that the three key Upper Egyptian sites each follow distinct iconographic traditions for depiction of the desert hunt, and from a chronological perspective only a few motifs of each style are comparable. Of the three sites, only the iconographic tradition of Meir follows the canonical court style established in the Fifth Dynasty.

The Final Example at Meir: The Desert Hunt of Ukhhotep III

The last of the governors’ tombs at Meir (and also one of the last major provincial Middle Kingdom tombs) is tomb C1 of Ukhhotep III. The representation of the desert hunt as a major block scene near the entrance of the tomb is continued

---

according to the precedents set in the earlier Meir tombs. Two similar desert hunt scenes of the conventional type are depicted on the northern end of the east wall beside the entrance to the tomb chapel, one above the other. The lower scene\textsuperscript{998} shows Ukhhotep III as the main figure standing upright, consistent with the more conventional form for this scene. The bow is pulled fully back with the nock of the arrow held at the chest, without any reference to a naturalistic aiming pose exhibited by the earlier Meir examples (this depiction is more comparable to that of Intifiqer and Khnumhotep II above). Little remains of the desert animals to assess the degree of naturalism portrayed, although what remains of the scene suggests that naturalistic depiction is restrained throughout. As previously discussed, the lower scene is the only example at Meir where sandals are depicted on the tomb owner’s feet. This is a late feature which only becomes relatively common during the New Kingdom. Much less survives of the hunting scene above,\textsuperscript{999} except that it can be determined that it is on the same scale as the lower hunting scene. The main figure is of the same size, in the same stance, similarly clothed, with the exception that he is unshod. A notable point of difference between these depictions and the earlier desert hunts at Meir is the absence of a hunting companion standing behind Ukhhotep III. In this regard, the motif is closer to that of Khnumhotep II (BH3) who does not have a larger-scale attendant (although two small scale armed guards and a dog handler stand on the lower register behind him). Intifiqer’s scene in contrast has a half-height hunting companion, similar to Ukhhotep I’s two-thirds height companion.

In summary, from the surviving fragments of the two desert hunt scenes in tomb C1, it can be established that they continue the same iconographic tradition as the earlier scenes in the chapels of B1, B2 and B4, however the naturalistic styles of B1 and B2 are constrained, with a return to orthodox and rigid canonical conventions.

\textsuperscript{998} BLACKMAN & APTED, Meir VI: pl. 9.
\textsuperscript{999} BLACKMAN & APTED, Meir VI: pl. 9.
II. THE TOMB OWNER FISHING AND FOWLING

Depictions of marsh and riverine scenes occupy a greater amount of wall space and cover a greater variety of themes than do those of desert hunting activities. Like the desert hunt, these can be grouped thematically into scenes of the tomb owner engaged in the pastimes of fishing and fowling, or into a diverse group of scenes depicting professional activities by fishermen, fowlers, boatmen, boat builders, papyrus gatherers and other working activities carried out in the marshlands. The scenes of the tomb owner spearfishing and fowling are (with rare exceptions) large scale compositions forming a major part of a tomb’s decorative programme, and may serve as a focus for subsidiary marsh scenes depicting workers engaged in marsh and riverine activities.

The fishing and fowling scenes are depicted as major scenes in all four of the decorated Middle Kingdom tombs at Meir, and will be shown below to conform with stylistic conventions observed in Old Kingdom predecessors as well as in contemporary examples at other sites.

a) Overview of the data set

Besides the Meir tombs, comparative tombs from other sites dating from the Ninth to Twelfth Dynasties incorporating the major figure fishing and fowling are identified as listed in the data set below. As observed previously, the available corpus of First Intermediate Period and Middle Kingdom sources is relatively small in comparison to those extant from the Old Kingdom. Of these, a subset of fourteen tombs have sufficiently preserved examples of the scene to be included as principal sources for the comparative analysis for this theme. They are listed as follows, with the tomb identifier assigned for the seriation:

1000 See for example the tomb of Baqet III at Beni Hasan in this analysis.
1001 This is particularly evident in the early Beni Hasan series of tombs of Baqet I, Baqet II, Baqet III and Khety, and is also observed at Meir in Ukhhotep I and Ukhhotep II. This association of themes follows precedents set in the Old Kingdom. HARPUR (1987), Decoration in Egyptian Tombs, 139, notes however that such labour scenes may also be seen as independent activities and can often be depicted near unrelated subjects. This observation may be carried over to Middle Kingdom tombs, for example the seine netting and clapnet scenes in tomb Be2 (Djeuhutihotep, el-Bersha) on the inner chamber right hand wall are not associated with the combined fishing and fowling scene on the tomb’s portico rear wall (see NEWBERRY, Bersheh I, pl. 8, 9, 12).
1002 The tomb numbers for Meir are those assigned by Blackman. For comparative sites, the tomb numbers are based on Porter & Moss (unless otherwise stated) with an added prefix denoting site for
Data Set for Seriation of the Tomb Owner Fishing and Fowling

<table>
<thead>
<tr>
<th>Nome and Site</th>
<th>Tomb Identifier, Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.E. 1 Qubbet el-Hawa</td>
<td>QH36, Sarenput I&lt;sup&gt;1003&lt;/sup&gt;</td>
</tr>
<tr>
<td>U.E. 3 Moalla</td>
<td>Ankhtify&lt;sup&gt;1004&lt;/sup&gt; (Mo1 in this seriation)</td>
</tr>
<tr>
<td>U.E. 4 Thebes</td>
<td>TT60, Intefiqer (tomb of his mother Senet)&lt;sup&gt;1005&lt;/sup&gt;</td>
</tr>
<tr>
<td>U.E. 13 Asyut</td>
<td>As1, Djefaihapi I&lt;sup&gt;1006&lt;/sup&gt;</td>
</tr>
<tr>
<td>U.E. 14 Meir</td>
<td>B1, Senbi I&lt;sup&gt;1007&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>B2, Ukhhotep I&lt;sup&gt;1008&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>B4, Ukhhotep II&lt;sup&gt;1009&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>C1, Ukhhotep III&lt;sup&gt;1010&lt;/sup&gt;</td>
</tr>
<tr>
<td>U.E. 15 Deir el-Bersha</td>
<td>Be2, Djehutihotep II&lt;sup&gt;1011&lt;/sup&gt;</td>
</tr>
<tr>
<td>U.E. 16 Beni Hasan</td>
<td>BH29, Baqt I&lt;sup&gt;1012&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>BH33, Baqt II&lt;sup&gt;1013&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>BH15, Baqt III&lt;sup&gt;1014&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>BH17, Khety&lt;sup&gt;1015&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>BH3, Khnumhotep II&lt;sup&gt;1016&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Additional sources (incomplete, but with typologically significant features):

- U.E. 4 Thebes TT386, Intef<sup>1017</sup>
- U.E. 21 Lisht North LN384, Rehuerdjersen<sup>1018</sup>

Of the above sources, the subject matter in tomb BH3 of Khnumhotep II is virtually fully preserved, however, the remainder are in varying states of partial the purposes of this investigation. The Moalla tombs have no numbering system, so Ankhtify’s tomb is denoted as Mo1 for identification in the seriation plot.

<sup>1003</sup> MÜLLER (1940), Die Felsengräber der Fürsten von Elephantine, pl. 5.
<sup>1004</sup> VANDIER, Moalla, pl. 40.
<sup>1005</sup> DAVIES, Antefoker, pl. 4.
<sup>1006</sup> EL KHADRAGY (2007), BACE 18, fig. 5, 6.
<sup>1007</sup> BLACKMAN, Meir I, pl. 2.
<sup>1008</sup> BLACKMAN, Meir II, pl. 4; KANAWATI & EVANS (2017), Wekhhotep, publication forthcoming, pl. 92.
<sup>1009</sup> BLACKMAN, Meir III, pl. 4, 6, 7.
<sup>1010</sup> BLACKMAN, Meir VI, pl. 13.
<sup>1011</sup> NEWBERRY, Bersheh I, pl. 8, 9.
<sup>1012</sup> NEWBERRY, Beni Hasan II, pl. 29.
<sup>1013</sup> NEWBERRY, Beni Hasan II, pl. 35.
<sup>1014</sup> NEWBERRY, Beni Hasan II, pl. 4 (atypical: single register, small scale fowling scene – tomb owner wears collar, standing on large boat being rowed in a papyrus thicket - bottom register north wall).
<sup>1015</sup> NEWBERRY, Beni Hasan II, pl. 11.
<sup>1016</sup> NEWBERRY, Beni Hasan I, pl. 32, 34; KANAWATI & EVANS, Beni Hassan I, pl 132, 133, 135, 136.
<sup>1017</sup> JAROŠ-DECKERT (1984), Das Grab des Jnj-jjt.f, Die Wandmalereien, pl. 22.
<sup>1018</sup> ARNOLD (2008), Middle Kingdom Tomb Architecture at Lisht, 66, pl. 124.
preservation, leading to some incomplete entries in the occurrence matrix of identified attributes (listed in Appendix A-4). Other tombs, such as TT386 of Intef include fishing and fowling in the decorative programme, however, the surviving subject matter is too fragmentary to be included in the principle sources. This is also the case for the royal court tomb LN384 ascribed to Rehuerdjersen at Lisht North, although individual motifs show typological significance and are discussed in the comparison. A further Lisht North tomb, LN758 of Senwosret, has partial remains of the scene which does not include attributes of chronological significance.

For the purposes of the comparative analysis, the major iconographic elements that comprise the theme are identified as described below, and the presences or absences of each element from the principal sources are tabulated in an occurrence matrix (see Appendix A-4). The computational technique of seriation is applied to the resulting matrix as a means of identifying specific features that form typological groupings which, in a constrained seriation, are chronologically significant.

b) Results and Interpretation of the Constrained Seriation
As with the seriation of the Desert Hunt, a constrained seriation (table 6.2a) pre-orders the tombs in the chronological sequence suggested by the analyses of texts (see Chapter Three), while a purely typological ordering is obtained for comparison by the second, unconstrained procedure (table 6.2b).

1019 ARNOLD (2009), Architecture at Lisht, 64
1020 The surviving block of Rehuerdjersen displays features of the papyrus skiff and water band that can be compared to the principal sources, see ARNOLD (2009), Architecture at Lisht, 66, pl. 124. The surviving fragment of Senwosret is a small piece of papyrus thicket unsuitable for comparative purposes, ibid. 79, Pl. 155. A further tomb with fragments of a marsh scene, Menuhotep can not be confirmed as belonging to a fishing and fowling scene, instead suggesting a fish netting activity.
1022 The constrained seriation places the sources in a fixed, known chronological order (established in chapter three). The theory of the seriation technique is explained in chapter two, part III.
Table 6.2 Seriation of The Tomb Owner Fishing and Fowling
**Iconographic attributes of chronological significance**

The following attribute groups are identified on the constrained seriation plot. The first groups shows features in the tombs of the study which characterise the fishing and fowling scene prior to the Twelfth Dynasty, the second shows features which continued to be attested in the early Twelfth Dynasty, and the other groups show features which may assist to date a scene to the early or mid Twelfth Dynasty:

### Group 1 - Attributes restricted to tombs prior to the 12th Dynasty
Moalla (Ankhify) and Beni Hasan (Baqet/Khety family) tombs

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>514</td>
<td>Shoulder length wig</td>
</tr>
<tr>
<td>518</td>
<td>Holds harpoon tether with handle</td>
</tr>
<tr>
<td>504</td>
<td>Single fishing scene only (no fowling scene attested)</td>
</tr>
<tr>
<td>547</td>
<td>One fish only on spear point</td>
</tr>
<tr>
<td>505</td>
<td>Single fowling scene only (no fishing scene attested)</td>
</tr>
<tr>
<td>521</td>
<td>Attendants on skiff behind major figure</td>
</tr>
<tr>
<td>507</td>
<td>Major figure not depicted on a skiff</td>
</tr>
</tbody>
</table>

### Group 2 - Attributes attested in FIP/11th Dynasty and early 12th Dynasty tombs

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>550</td>
<td>Narrow papyrus thicket</td>
</tr>
<tr>
<td>511</td>
<td>Shendjit kilt with royal style apron</td>
</tr>
<tr>
<td>531</td>
<td>Fish absent in water band below skiff</td>
</tr>
</tbody>
</table>

### Group 3 - Attributes with wide attestation in 12th Dynasty tombs (but not prior to 12th Dynasty)

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>544</td>
<td>Tall water mound</td>
</tr>
<tr>
<td>562</td>
<td>Numerous birds prominent in the compositional space</td>
</tr>
<tr>
<td>543</td>
<td>Broad water mound</td>
</tr>
<tr>
<td>555</td>
<td>Birds flying above thicket</td>
</tr>
<tr>
<td>557</td>
<td>Birds perched on open umbels</td>
</tr>
<tr>
<td>558</td>
<td>Birds perched on nests within the thicket</td>
</tr>
<tr>
<td>559</td>
<td>Eggs and/or chicks in nests</td>
</tr>
<tr>
<td>542</td>
<td>Narrow water mound</td>
</tr>
<tr>
<td>549</td>
<td>Broad papyrus thicket</td>
</tr>
<tr>
<td>560</td>
<td>Mongoose or genet climbing papyrus stalks to raid nests</td>
</tr>
<tr>
<td>561</td>
<td>Insects within or above thicket (dragonflies and/or butterflies)</td>
</tr>
<tr>
<td>522</td>
<td>Attendants on subsidiary register behind major figure</td>
</tr>
</tbody>
</table>
### Group 3 - Attributes with wide attestation in 12th Dynasty tombs
(but not prior to 12th Dynasty)

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>510</td>
<td>Major figure wears shendjit kilt with marsh hunting apron</td>
</tr>
<tr>
<td>512</td>
<td>Medium length semitransparent outer kilt worn over hunting kilt</td>
</tr>
<tr>
<td>520</td>
<td>Three or more family members depicted on the skiff</td>
</tr>
<tr>
<td>535</td>
<td>Free floating plants and/or lotus buds in the water band</td>
</tr>
<tr>
<td>538</td>
<td>Crocodiles depicted in the water band</td>
</tr>
<tr>
<td>540</td>
<td>Wading birds depicted in the water band</td>
</tr>
<tr>
<td>548</td>
<td>Additional fish depicted in water mound (besides those on the spear)</td>
</tr>
</tbody>
</table>

### Group 4 - Attributes specific to the earlier 12th Dynasty tombs

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>556</td>
<td>Birds being struck by throw stick</td>
</tr>
<tr>
<td>501</td>
<td>Combined scene with antithetic composition</td>
</tr>
<tr>
<td>527</td>
<td>Inward recurved short prow and stern ends</td>
</tr>
<tr>
<td>552</td>
<td>Papyrus umbels irregularly spaced within thicket</td>
</tr>
<tr>
<td>523</td>
<td>Long high prow curved upwards</td>
</tr>
<tr>
<td>525</td>
<td>Long high stern curved upwards</td>
</tr>
</tbody>
</table>

### Group 5 - Attributes specific to the later 12th Dynasty tombs

<table>
<thead>
<tr>
<th>Attribute #</th>
<th>Attribute Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>536</td>
<td>Water weed trailing stern of skiff</td>
</tr>
<tr>
<td>539</td>
<td>Turtles, frogs and small aquatic animals in the composition</td>
</tr>
<tr>
<td>530</td>
<td>Deck boards depicted on skiff</td>
</tr>
<tr>
<td>524</td>
<td>Skiff has a long straight prow</td>
</tr>
<tr>
<td>526</td>
<td>Skiff has a long straight high stern</td>
</tr>
<tr>
<td>502</td>
<td>Joint fishing and fowling scenes are separated on either side of a doorway (or portal opening, eg. statue recess), with the major figures of each scene antithetically posed</td>
</tr>
<tr>
<td>517</td>
<td>Major figure wears a beard</td>
</tr>
<tr>
<td>553</td>
<td>Papyri may be depicted with flat top open umbels (tomb BH3 only)</td>
</tr>
</tbody>
</table>

In addition to the grouped attributes above, a number of data lines can be identified as inessential attributes, which are broadly attested across all the sources in the seriation. These relate to diverse motifs including the attire of the major figure, the number of subsidiary figures, details of the skiff, contents of the water band and the papyrus thicket. Because these attributes are relatively invariant across the
CHAPTER 6 - Iconography of the Tomb Owner

chronological range, they are of limited value in a dating study. The scatter noted on the plot data for this group is due to the broad distribution of these attributes on the timeline, combined with incomplete or fragmentary preservation of the scenes in the study. There are proportionately less inessential attributes in the fishing and fowling scene than were observed in the desert hunt, suggesting that the fishing and fowling scene exhibited a greater degree of chronological change in the period under study, whereas the desert hunt was less susceptible to change over time.

The test score obtained for the constrained seriation is .50, signifying a moderate degree of correlation, which is confirmed by a visual inspection of the plot. It is noted that the correlation of the Twelfth Dynasty attributes is tighter than that for the prior tombs which show a more significant scatter (noted by a wide range of attestation with numerous embedded absences in the data lines). The greater variability in these group 1 attributes points to a lessened adherence to canonical motifs for the scene prior to the Twelfth Dynasty, but can also be explained by the poorer state of preservation of the Eleventh Dynasty scenes (and consequently missing data points).

Group 1 attributes are characteristic of the Eleventh Dynasty Beni Hasan tombs, and reflect the divergence of an early local style from conventions for this scene established in the Old Kingdom elite cemeteries associated with the Memphite royal court. The primary identifying attributes of this group are the representation of a single rather than combined scene (which may be either spearfishing or fowling) and simpler composition than observed in the later scenes. One innovation observed in tombs BH17 at Beni Hasan and Ankhtify at Moalla is a tether cord with handle attached to the spear. The harpoon tether cord is also present in the Theban tomb of Intef, but is not evident in later tombs.

The final two groups show the attributes, which may be considered as relative

---

1023 The purely typological sequence obtained in the unconstrained seriation returns a test score of .58, which is only marginally better than the chronologically sequenced plot, and indicates that local influences are not a major factor in the development and transmission of the fishing and fowling scene in the tombs of the study.

1024 JAROS-DECKERT (1984), \textit{Ini-ly-ittf}, pl. 22. Dating to the late Eleventh Dynasty, this scene was not included in the seriation due to its fragmentary nature. It is a combined scene unlike the Eleventh Dynasty counterparts at Beni Hasan.
CHAPTER 6 - Iconography of the Tomb Owner

dating indicators for placing a tomb in the early or mid Twelfth Dynasty. Group 4 includes those attributes, which are specific to the early Twelfth Dynasty, the most notable of which are the tomb owner’s throw stick striking a bird in flight, and the distinctive backwards-curved style of the stern and prow ends of the skiff. Group 5 lists the attributes, which are only observed in the latest tombs in the study, dating to the mid Twelfth Dynasty. Besides the innovation of a beard on the major figure, these are mainly concerned with details of the skiff and water band, such as the straight stern and prow, and the greater range of aquatic animals and plants represented. Placement and orientation is also more likely to be arranged as a joint scene around an entrance doorway or entrance to a statue recess.

A broader range of attributes listed in Group 3 are attested in both early and late Twelfth Dynasty tombs. Of these however several features of the major figure’s attire are more commonly observed in the later tombs at most of the studied sites, including the ‘marsh hunting’ style apron over the shendjit kilt and the innovation of the medium length semitransparent outer kilt. These specific features of the tomb owner’s dress are only seen in tomb A31 of Djefaihapi I among the earlier Twelfth Dynasty tombs, and suggest that this tomb may have had an influence on the wider adoption of these features in later tombs at other sites (including BH3 at Beni Hasan and C1 at Meir).

c) Observed Elements of the Scene in Old Kingdom Antecedents

Fifth Dynasty royal mortuary temples
Like the Desert Hunt theme, the iconographic traditions of the Tomb Owner Fishing and Fowling were set in tombs of the elite officials of the Fifth Dynasty, having been appropriated from royal iconography. The earliest surviving royal example of the fishing and fowling scene that provides evidence of established motifs is the relief from the north wall of the northern side of the enclosed passage surrounding the pillared courtyard of Sahure’s mortuary temple at Abusir[^1025], although there are fragmentary remains from the funerary complex of his predecessor Userkaf[^1026] suggesting these reliefs may have been the original basis of the tradition. The

[^1025]: BORCHARDT (1913), Sahure Vol II: Pl. 15, 16
[^1026]: LABROUSSE & LAUER (2000), Ouarkaf et Néferthétépès, Vol II, Fig. 99 –115
fishing and fowling scenes in Sahure’s northern passage complement the desert hunt scene depicted in the opposite position in the southern passage and which served as the likely prototype for the desert hunt scenes in the Meir tombs, as demonstrated in the previous section.

The canonical motifs demonstrated in this scene include the deceased in large scale standing on a reed skiff, accompanied by family members in smaller scale. From the fragmentary remains it can be deduced that the king is depicted twice, with one figure spearing fish and the other fowling (most likely with a throwstick), although it is evident that both figures are oriented towards the right, facing the eastern entrance of the corridor. Water is shown rising into a mound to the right of one of the skiffs, and a single *Tilapia nilotica* is shown with evidence of a spear piercing its head above the eye. Fish of several species are shown under the water mound. Fragments of a papyrus thicket survive, with closely spaced vertical lines representing the papyrus stalks overlaid by a regularly spaced pattern of closed and open umbels (upon which several marsh birds are standing). Although nothing remains of the spearfishing figure (apart from his skiff and the speared tilapia), the surviving lower leg of the fowling figure demonstrates the striding stance and his raised left hand is clutching live decoy birds by their tied feet. The torso of one of the figures shows the king wearing a pleated royal kilt.

Conventional forms of the scene in Old Kingdom Memphite tombs.

In the corpus of Old Kingdom fishing and fowling scenes two conventions are evident for its compositional form. The first is the combined scene, where the the two major figures of the tomb owner are posed facing inwards towards the central papyrus thicket (the so-called antithetic composition), so that the whole scene exists as a single composition with balanced major elements. Surviving remnants of the fishing and fowling figures of Sahure’s predecessor, the founder of the Fifth Dynasty Userkaf, suggest they may have been represented in antithetic pose, however definitive examples of what was to become the significant canonical form.

---

1027 The taxon of this fish has been reclassified as *Oreochromis niloticus* however for Egyptological publications it is conventional to retain the former genus/species name of *Tilapia nilotica*. See BREWER & FRIEDMAN (1989): 77-9 for identifying attributes.

of the combined fishing and fowling scene survive from the mid Fifth Dynasty tombs of the officials. Also appearing at the same time was a variant of the combined antithetically-posed scene, where the fishing and fowling elements were separated into individual scenes placed on either side of a portal or doorway to an inner room. The inwards orientation of the two figures is retained, for a similar appearance to the combined scene, however due to the separating element of the doorway few (if any) motifs are actually shared between the two half-scenes. The Fifth Dynasty tomb of Niankhkhnum and Khnumhotep is one of the earliest private tombs with scenes illustrating both of these conventions: there are two separate depictions of fishing and fowling in the tomb, with a canonical combined antithetic composition on the west wall of the chapel, as well as joint antithetic scenes separated by the doorway on the south wall of the outer entrance. The antithetically posed composite scene is found in numerous tombs from Saqqara in the Fifth and Sixth Dynasties, as well as at Dahshur and Qubbet el-Hawa, and while less common, several examples of portal-separated scenes are also attested at Saqqara in the same period.

The alternative compositional form adopted is the separated split scene, where the spearfishing and fowling motifs are separated into their own independent scenes, generally on adjacent or opposite walls. The convention of the split scene was established in the tombs of several high officials at Saqqara, and is also observed at other sites. A variant of the split scene which became common through the Eleventh Dynasty at Beni Hasan is the half scene, where either the spear fishing or fowling motif alone is depicted without its complementary scene being portrayed elsewhere in the tomb.

---

1029 MOUSSA & ALTENMULLER (1977): figs 5-6, pl. 74-75. While the compositional elements of these scenes adhere to the established form, because the tomb is shared between two owners the scene is depicted twice (the first on the rear wall of the portico and the second on the right wall of the chapel antechamber). It is unique in depicting Niankhkhnum and Khnumhotep each as one major figure in the two scenes. The roles of spear fisher and fowler are reversed in the antechamber scene, and as a result so is its orientation. Also of note is the depiction of both fish on the spear as Tilapia.

1030 For a comprehensive analysis of Old Kingdom marsh scenes in the Memphite cemeteries see WOODS (2008), particularly Chapters 3, 4, 6 and 7 in relation to fishing and fowling. See HARPUR (1987), op. cit., 176-204 for a chronological overview of the development of marsh pursuits at all Old Kingdom sites and WOODS (2008) Table A for a list of fishing and fowling scenes in OK tombs. Those conforming to the conventional composite scene are noted. See also WOODS (2006) Table 1. 1031 See WOODS (2008) Table B. Those tombs where the fishing and fowling scenes are separated are identified as such with separate line entries.

1032 See Khety, Baqet II, and Baqet I, NEWBERRY, Beni Hasan II, pl. 11, 29, 35.
Influences from the Sixth Dynasty governors tombs at Meir

At Meir, the split composition is observed in the Sixth Dynasty tombs of Pepiankh Hery-ib (D2) and Pepiankh Heny-kem (A2). This type of composition probably influenced the split separated fishing and fowling scenes in the Middle Kingdom governor’s tomb B4 at the same site (evidence of copying the fish motif from tomb A2 to B4 has already been discussed in Chapter Five), although other considerations like the shortage of wall space in tomb B4 also likely played a part. The split layout of the Old Kingdom scenes evidently had little impact on the choice of format for the other Middle Kingdom tombs, with combined antithetic fishing and fowling scenes being the convention in tombs B1 and B2 and a joint portal-separated scene being the type depicted in the last tomb of the series (C1).

Iconographic alignment of the Meir tombs with established canonical motifs

The Fifth Dynasty mortuary temples above established the following six canonical elements of the fishing and fowling scene, which were consolidated into the conventional representation of the fishing and fowling scene in the the succeeding elite tombs of the Fifth and Sixth Dynasties:

The first canonical element is the major figure of the tomb owner as depicted the portico of Niankhkhnum and Khnumhotep, in large scale, standing upright with legs apart, in a similar pose to the desert hunting motif described in detail above. Conventionally, he is standing on a reed skiff above a water band representing the marsh. He is depicted as either spearfishing, holding a long twin point spear in both outstretched arms, or fowling with a throwstick held in one hand above and behind his head, the other hand in front clutching live birds as decoys. This motif is closely followed at in Meir tomb B1, where Senbi is depicted on the left of the scene spearing two fish, in this case a *Lates niloticus* and a *Tilapia nilotica* in a tall water mound adjoining the western side of the central thicket. The representation of the main figure of Senbi adheres strongly to the established convention, standing in the reed skiff with legs straight and apart, rear (right) foot slightly raised from the top

---

1033 BLACKMAN, *Meir IV*: pl. 7, 17, KANAWATI Cemetery of Meir I, pl. 80, 81.
1034 BLACKMAN & APTED, Meir V: pl. 24, 28
of the skiff. There are similarities in pose to the main figure in the Desert Hunt scene, however in the fishing scene Senbi is more rigidly upright and shows none of the expressive magnification (such as leaning towards his target) that sets the hunting scene apart from its Old Kingdom antecedents. The right-side major figure of Senbi also stands in a reed skiff facing towards the centre of the composition, and except for the choice of throwing stick as an implement is a near-exact mirror in scale, pose and composition to the right hand figure, balancing the scene and drawing its focus to the central element of the papyrus thicket. He wears a shoulder length wig in both sides of the scene, without fillet and streamer. His kilt however, is a close approximation to a royal shendjit kilt. Attributes of the royal kilt depicted here are the pleating of the kilt and the apron, and the shape of the apron, with its base being of similar width to its top. This stands in contrast to a typical marsh hunting kilt where the apron is of more triangular form with its base being wider than the top.\(^{1036}\) The reed skiffs upon which Senbi I stands are raised at both the prow and stern, with the ends curved inwards towards the middle (confirmed in the seriation as chronological marker for early Dynasty 12, \textit{attribute}# 527), a feature that is also noted in the fragmentary marsh scene of Rehuerdjerse from his mastaba at Lisht North (LN384). The transverse cords lashing the reed bundles together are depicted, as is standard for this scene, however, a planked deck on the skiff is absent. In contrast, the shape of the skiff of Ukhhotep II in tomb B4 has adopted a standard form as seen in the later tombs at Meir, El-Bersha and Beni Hasan (as demonstrated in the seriation, \textit{attributes}# 524, 526, 530), where the prow and stern rise gently from the water, with the stern a little higher than the prow and no inward curve of the prow and stern ends.

The second element is the central marsh thicket, which is typically composed of vertical papyrus stalks (or in exceptional cases, other marsh plants) with open or closed umbels in varying patterns towards the top of the thicket. The papyrus thicket in tomb B1 is broad with thickly packed upright stems and papyrus umbels represented densely in an irregular pattern throughout. Except for a few closed umbel shoots at the base, they are open with slightly convex surfaces. The thicket of the spearfishing scene in tomb B4 (Ukhhotep II) is more structured that that of tomb B1, with the stalks represented by densely packed parallel vertical lines, and the

\(^{1036}\) See ZELENKOVA (2010), \textit{BACE} 21: 146ff
majority of umbels in an ordered pattern of six rows at the top of the thicket. All of these are open and convex, with the topmost row having accentuated round tops. The ordered pattern of papyrus umbels is also seen in the fowling depiction in tomb C1 (Ukhhotep III), although in a notable departure from convention, the thicket of the spearfishing half-scene is composed of densely packed Upper Egyptian lilies in an irregular pattern (not unlike the papyrus heads in Senbi’s composition).

The third element is the collective representation of marsh birds and animals within and above the thicket, and in tomb B1, these (along with the hippopotamus herd in the water band) exhibit most of the movement and action in the scene. Birds fly above, into and through the thicket although they are not represented in the same numbers or as tightly packed as in the scene of Niankhkhnum and Knumhotep. The birds in flight are predominantly pintail ducks, with other species depicted including a pied kingfisher diving into the thicket, common kingfishers, and egret and a hoopoe perched on umbels and a sacred ibis is roosting on a nest full of eggs. Two butterflies and a dragonfly are depicted in the thicket. A genet is shown climbing a stem and stealing a chick from a nest, while the nest’s owner flaps her wings above. Similar motifs are seen in the spearfishing scene of tomb B4. The rightmost pintail duck in flight above the thicket is depicted in the process of being struck by the tomb owner’s throwstick. This example of expressive magnification is an innovation in tomb B1 in line with the local early Twelfth Dynasty style at Meir, which tends towards realism in depictions (as shown previously with regard to the hunting scenes). The vignette is observed in the later tomb TT60 of Senet (depicting Intefiqer fishing and fowling) at Thebes.

The fourth element is the water mound, which rises from the water band at the base of the skiff and is generally in direct conjunction with the side of the thicket. It contains the fish which are transfixed on the end of the tomb owner’s spear, of

---

1037 HOULIHAN (1986), 71-3 (No. 37)
1038 Identified by its characteristic diving posture and the short, shaggy crest at the back of the head. See HOULIHAN (1986), 114-16 (No. 60)
1039 HOULIHAN (1986), 113-4 (No.59)
1040 HOULIHAN (1986), 16-18 (No.8)
1041 HOULIHAN (1986), 118-20 (No.62)
1042 HOULIHAN (1886), 28-30 (No.15) denoted by the black upper hind region.
1043 EVANS (2010) Animal Behavior, 41 & passim; BLACKMAN identified this animal as a fox (see Meir I, 28)
which two fish are depicted, either two *Tilapia nilotica* or one *Tilapia* and one Nile Perch (*Lates niloticus*). The water mound is most likely a representation of a bay of open water which is surrounded by the papyrus thicket, according to the principle of typical aspect discussed in Chapter Five. In tomb B1 of Senbi I, it is almost at shoulder height to the tomb owner, however this appears to be variable depending on the dimensions of the compositional space. For example, the wall space of the spearfishing scene of Niankhkhnum and Khnumhotep is higher and narrower than that of tomb B1, necessitating a lower water mound (at waist height) so that the full length of the spear can be accommodated. A similar low mound height is noted in tomb B4 (Ukhhotep II) which is similarly constrained in horizontal wall space. The water mounds of both tomb B4 and its Fifth Dynasty predecessor are full of fish in smaller scale than those transfixed on the spear (at least nine different species can be identified in that of B4), however there are no subsidiary fish at all in the scene in tomb B1.

The fifth element is the underlying band of water at the base of the scene, optionally containing multiple species of fish, as is the case in tombs B4 and C1. Large aquatic animals (most commonly crocodiles and hippopotami), wading birds and aquatic plants in multiple and varied combinations are also attested. In tomb B1, the water band is slightly raised under the central thicket, and contains a herd of six adult hippopotami with one calf. The animals show complex three layer overlapping, with individuals oriented in opposing directions. Only the top of the head with a single ear and eye is visible from the animal of the third layer of the overlapping group. Like the gazelle in the hunting relief, one hippopotamus is facing away from the spear-fishing main figure, but its head is fully turned back to look directly at the hunter’s face, and its mouth gapes open showing tusks to the hunter. There are no other animals or fish in this scene, however aquatic plants are prominently depicted. Although the following two tombs at Meir show crocodiles, wading birds and numerous fish in their respective water bands, neither exhibit the degree of complexity in their representation as seen in the hippopotamus herd of tomb B1.

---

1047 EVANS (2010), *op. cit.*, 135, 9.1.4 Mouth display, aggressive behavior.
The sixth element is the depiction of subsidiary, small scale figures accompanying the tomb owner. These are either of his family members depicted on the skiff itself (as with the half-scale wife of Senbi I in tomb B1), or of servants on the skiff or behind it on subsidiary registers (as seen behind and above the skiff in tomb B4). The representations of these minor figures are very similar to their Fifth Dynsty antecedents in the tomb of Niankhkhnum and Khnumhotep.

d) Other iconographic influences

Comparison tombs of the identified ‘Early Group’ (dated prior to Dynasty Twelve)

There were no decorated tombs constructed at Meir between the Sixth Dynasty and the reign of Amenemhat I, however, the comparative Beni Hasan tombs of the nomarchal Dynasty of Baqet I are preserved, which slightly pre-date the Twelfth Dynasty Meir tombs. The tomb of Ankhtify at Moalla provides the earliest example of the theme in this study. Together these provide an indication of diverging artistic conventions followed at these sites after the end of the Old Kingdom. Neither of these local styles exerted a major influence on artistic transmission to Meir in the Twelfth Dynasty, as discussed below.

The tomb of Ankhtify is dated securely to the First Intermediate Period, specifically the Ninth Dynasty,\footnote{BROVARSKI (2011): 28 and (1989) Appendix B; SPANEL (1984) GM 78: 87-94. See also the discussion of the dating of Ankhtify in Chapter 3, Part I(e) of this study.} based on the contents of the biographical texts. The two scenes of fishing and fowling are placed together to the right of the tomb entrance on the long west wall, with the major figures antithetically posed to face each other, however, the scenes are separated by a short 90 degree step in the wall necessitated by a fault in the rock. Four ducks are depicted on the face of this step adjoining the two scenes. Although the overall placement echoes the composition of a combined scene, the fact that they are separate scenes is reinforced by the differing application of established conventions in both. The fowling scene follows the Old Kingdom convention to the extent that the tomb owner is standing on a skiff above the water band, facing a papyrus thicket. The water band is abundantly portrayed with fish, although the individual representations of these show unique and local styling. The lower limbs of the tomb owner are elongated and his feet are not precisely
grounded on the skiff, with the depiction of the raised heel of the left foot being poorly executed. The spearfishing scene is executed in a less conventional style, where the water band is absent, and with fish being depicted without reference to any ground line above and below the skiff. Seven fish of varying sizes are depicted ungrounded in front of Ankhtify's figure, above and below the shaft of his spear. His feet are further separated from the skiff than in the fowling scene, giving him the appearance of hovering ungrounded above it. The only significant conventional element of the scene is the depiction of the *Lates* and *Tilapia* on the end of the spear, although both of these are represented in a similar local style to the fish in the water band in the fowling scene.

A notable inclusion in this scene is the cord spool with its handle, which Ankhtify holds in his left hand. The cord is attached to the end of the spear (although this is not clear in what remains of Ankhtify's scene). This element is important as it is also depicted in other scenes following Ankhtify and dated to the Eleventh Dynasty. The comparable Eleventh Dynasty examples can be identified in fishing scenes of Intef at Thebes and Khety at Beni Hasan. The feature is not observed in Twelfth Dynasty Middle Kingdom tombs.

The individual elements of Ankhtify's scene show varying degrees of local interpretation of Old Kingdom canonical forms. The representations of fish in particular, while still clearly identifiable according to species, show unusual colouring and patterning to represent scales. The absence of clearly ordered ground lines and proportionality of human figures in the fishing scene is observed in other scenes in the same tomb, as well as in at least one of the Eleventh Dynasty tombs at Beni Hasan (see tomb BH17 of Khety discussed below). Despite this, the composition of the theme in Ankhtify's tomb has greater correspondence with the Old Kingdom canonical form than do those in the later Eleventh Dynasty tombs at Beni Hasan. This is noted by the placement obtained in the unconstrained seriation (see Fig 5.2), which indicates Ankhtify's scene is typologically closer to the Twelfth Dynasty fishing and fowling scenes at Meir than those at Beni Hasan, even though the latter are chronologically closer to the Meir tombs.

The contrasting style developed in the Eleventh Dynasty tombs at Beni Hasan indicate a different iconographic tradition to that of Ankhtify, in particular the
depiction of either the fishing or fowling motif as a half scene, as well as the association of the scene with subsidiary marsh activities and the absence of various iconographic elements as discussed below. As is also observed with their desert hunting scenes, the styles of the fishing and fowling scenes exhibited by these early tombs displays a strong local character.

The half scene in tomb BH29 of Baqet I spearfishing\textsuperscript{1049} from a reed skiff is located at the eastern end of the north wall and establishes the convention for this scene to be associated with the desert hunt in the Eleventh Dynasty tombs at Beni Hasan. As discussed in the preceding chapter, the desert hunt in this group of tombs occupies the top register and (as is the case with this tomb) runs the full length of the north wall. The tomb owner spearfishing is represented in triple height, occupying three registers immediately below the hunt register to the east of centre. Baqet I is depicted according to conventional iconography for the theme, standing upright on the skiff with legs apart, holding a long spear at a slight downward angle in both hands with arms extended, accompanied by his wife and son. He faces a papyrus thicket, to the left of which a \textit{Tilapia} is depicted transfixed on the spear point, along with remnants indicating a second speared fish. It cannot be determined whether a water mound existed, or if contained other fish besides those speared, as this part of the wall painting is now lost. It is certain however that other fish are represented within the water band that runs from the base of the skiff under the adjacent subsidiary seine netting scene to the left. The tomb owner spearfishing therefore represents the central element of the marsh activities depicted on the north wall, acting as a focus for the seine netting and clapnetting scene to the left and papyrus gathering scenes, all on three registers, to the right. As observed with the Beni Hasan desert hunting scenes, the composition spearfishing scene is lacking in any visual cues that convey a sense of action. The most important missing motif in this regard is the lack of any waterfowl perched in or flying above the thicket.\textsuperscript{1050} The tomb owner, his wife and son are posed with a stiff formality, and even the subsidiary figures on either side do little to convey action, with the exception of a man climbing aboard his boat with a load of papyrus, and an attempt at a quarrel between three boatmen gathering papyrus.

\textsuperscript{1049} NEWBERRY (1894), \textit{Beni Hasan}, Part II: Pl. 29

\textsuperscript{1050} The absence of waterfowl is in contrast to established Old Kingdom convention, see the discussion of iconographic tradition above.
The tomb of his successor Baqet II (BH33) closely follows his father's in scene placement and theme, with what appears to be a half scene of the tomb owner spearfishing located east of the centre of the north wall, below the top register containing the desert hunt. Unfortunately the scene is lost, except for the head and upper torso of the large scale main figure, holding the rear quarter of the spear in his outstretched right arm. As a slight difference from his father's stance, the spear is held horizontally and is grasped on the rear part of the shaft rather then on the end. The scene is adjoined on the western side by the subsidiary marsh scene of clapnetting for waterfowl. Again, the scenes below this are lost.

Tomb BH15 of Baqet III dissociates the marsh themes from the top register hunting scene on the north wall. Instead, the half scene of the tomb owner fowling in a papyrus thicket with throwsticks is located in a single height register at the bottom of the wall (the sixth register). Other marsh scenes, of seine netting and quarrelling boatmen, adjoin it on either side. The tomb owner and other figures in the fowling scene are drawn at the smallest scale on the entire wall, and the scene is lost among the larger scale subsidiary marsh activities on either side. This register also introduces subsidiary baselines above the main motifs, carrying perched marsh birds, and bats with outstretched wings are depicted ungrounded above the first group of boatmen. Similar subsidiary baselines were employed in Old Kingdom desert hunting scenes as discussed previously, to insert small game animals into the desert tableau, and the artist appears to have adopted the technique in this case to achieve a similar effect. It is not observed in the Meir fishing and fowling scenes, or in later scenes at Beni Hasan.

The tomb of Khety (BH17) depicts marsh activities on the west wall to the north of the tomb entrance. The primary scene in this group is the motif of the tomb owner spearing a single *Tilapia*. The scene is atypical in that the spearfishing figure is not represented on a skiff, but on its own short floating ground line. The usual papyrus thicket, water mound and underlying band of water are absent. The only reference to a marsh context is the eight registers which the tomb owner faces,

---

1051 NEWBERRY (1894), *Beni Hasan*, Part II: Pl. 35
1052 NEWBERRY (1894), *Beni Hasan*, Part II: Pl. 4
1053 NEWBERRY (1984), *Beni Hasan*, Part II: Pl. 11
depicting stands of papyrus. Four of these registers also depict subsidiary figures in boats collecting papyrus, one register shows men with a clapnet, and the remaining three contain various marsh animals. Other figures and animals are also arranged around the spearfishing tomb owner on their own irregular floating ground lines. Besides the single speared Tilapia, there are no other fish in the composition, and only one small scale waterfowl can be observed on the second register. The apparent free form composition of the scene, with large figures floating without groundlines, is reminiscent of the free form representations of the desert tableau and animal landscape in the hunting scene of tomb B2 of Ukhhotep I at Meir, which slightly post-dates it. Like the scenes of Khety's predecessors, the scene is devoid of any stylistic devices or motifs conveying action and movement.

In all of the above spearfishing scenes, the tomb owner wears a plain wrap-around kilt, and in the earliest two he is also portrayed with a fillet and streamer, this being absent from Khety's scene. A regular pattern for the style of skiff and contents of the water band cannot be determined for this series if tombs as there is individual variability in these areas, and some crucial details have been lost from the first two scenes.

Twelfth Dynasty comparison tombs ('Middle Group' - early Twelfth Dynasty)
The tombs of Senet (TT60) at Thebes and Djefaihapi I (As1) both contain composite fishing and fowling scenes with the tomb owner posed antithetically. Both tombs illustrate motifs in common with the scene of Senbi I, and were clearly influenced by similar Old Kingdom iconographic antecedents, as well as adopting innovations observed in the earlier scene of Senbi I. Both also show additional features common to the contemporary tomb of Ukhhotep II at Meir, and the scene of Djefaihapi I demonstrates an iconographic innovation which is observed in later tombs at Meir and Beni Hasan.

The fishing and fowling scene of Senet's tomb depicts her son, the vizier Intefiqer, in mirrored spearfishing and fowling poses on the north wall of the gallery near to the entrance of the tomb. It is adjoined on either side by small scale agricultural

---

1054 DAVIES (1920), Antefoker: pl. 5
scenes and by the subsidiary marsh activities of fowling by clapnet and seine net fishing immediately to its left. While the two figures of Intefiqer standing on the reed skiffs have been completely and deliberately erased, the central papyrus thicket remains, along with the water mound and water band running below the skiffs. Unlike Senbi’s extensive and elaborate depiction of the central thicket, that of Intefiqer is restricted to a narrow tall band of papyrus reeds and is restricted to essential motifs only. It is topped by three rows of umbels, which are randomly mixed as closed and open. Birds are shown resting on open umbels or flying above the thicket, and one bird is resting on a nest containing eggs situated on top of the thicket. Most notably in concordance with Senbi’s depiction is the flying throw-stick, having already been launched by the tomb owner, connecting with a bird in mid-flight. The stern sections of the skiffs are also curved inwards towards the occupants, although not as acutely as those of Senbi’s skiffs.

Both the prow and stern ends of the skiffs of Djefaihapi I (As1, north wall of the inner passage)\textsuperscript{1055} have short and sharp inward curves very similar to those depicted on Senbi’s and Ukhhotep I’s relief, although the wooden deck planking is explicitly shown, unlike the depictions of Senbi or Intefiqer. The central thicket of Djefaihapi is also more like that of Senbi’s, occupying more of the composition than the minimalist representation of Intefiqer and is densely crowded with an irregular pattern of open umbel papyrus buds, perched birds, a mammalian predator (probably a mongoose).

Like the later tomb of Ukhhotep II (B4) at Meir, the scenes of both Intefiqer and Djefaihapi I depict fish in the water band below the skiffs, along with lotus buds and large marsh animals (crocodiles and/or hippopotami). This feature is carried on in the later Twelfth Dynasty tombs at Meir, Beni Hasan and el-Bersha discussed below, however, it is absent from the scenes of Senbi I and (as far as can be deduced from the fragmentary remains) of Ukhhotep I.

The fowling scene of Djefaihapi introduces an innovation of the form of attire of the tomb owner, which is observed in the later tombs of Ukhhotep III and Khnumhotep II. This is the depiction of a long semitransparent skirt, reaching down below the

\textsuperscript{1055} EL-KHADRAGY (2007), BACE 18, Fig. 5 & 6
knee, worn over the well-established marsh hunting kilt. In addition to this he wears the fillet and streamer head-band and an elaborate collar, both of which are also common in the later Twelfth Dynasty tombs.

Twelfth Dynasty comparison tombs ('Late Group' - mid Twelfth Dynasty)

The nomarchs of the two provinces immediately downstream from UE14 contemporary with Ukhhotep III are Djehutihotep of UE15 (tomb Be2 at el-Bersha) and Khnumhotep II of UE16 (tomb BH3 at Beni Hasan). The fishing and fowling scenes in all three tombs illustrate a number of similar features. Most notably, all three have returned to the compositional convention first established in the Fifth Dynasty of joint portal-separated scenes with antithetic representations of the tomb owner. In each case the composition covers an entire wall with the fishing and fowling themes on either side of a central portal (in the case of el-Bersha tomb Be2 this is the entrance to the inner chamber from the portico, and in the other two tombs the scenes are the major themes of the tomb, covering the back wall, with the central portal being the statue recess). In the case of Khnumhotep II’s scene, this represents a significant departure from the local style established at the site in the Eleventh Dynasty by Baqet I and his successors. Above the lintel of the statue recess, a third marsh scene in slightly smaller scale depicts Khnumhotep II drawing the rope of a clapnet full of water birds.

The composition of Djehutihotep's scene is oriented similarly to that of Ukhhotep III, with the spearfishing half scene on the left hand side of the doorway and the fowling half scene on the right, while that of Khnumhotep II is the reverse of this. Unfortunately the papyrus thicket and water mound is lost from the El-Bersha scene, however that of Khnumhotep II shows motifs in common with the equivalent scene at Meir. As found at Meir the fish on the spear points consist of one Tilapia and one Lates, the papyrus umbels are all open, and numerous birds are either resting on them or flying in the air above the thicket (resulting in a sense of action otherwise uncharacteristic in Beni Hasan art outside of the wrestling scenes). This is supplemented by nests containing eggs and young on both sides of the composition.

1056 ZELENKOVA (2010), BACE 21, 147, fig. 4.5
1057 NEWBERRY (1893) Berhseh, Part I: pl. 8-9
with mongeese and a genet cat climbing the stalks after them (these motifs, minus the genet, are present on the fowling half scene at Meir). In both tombs, the papyrus umbels are in more orderly rows on the fowling half scene, with four rows being evident at Beni Hasan and five at Meir. In all three tombs, the water band under the skiff is full of fish, interspersed with lotus flowers at Meir and Beni Hasan, and with crocodiles and hippopotami at Meir and Beni Hasan.

The main figures in all three compositions wear a shoulder length wig with fillet and streamer, while the Beni Hasan and Meir figures show further concordance in attire. Both wear marsh hunting kilts\textsuperscript{1059} in the spear fishing scenes, based on the royal shendjit kilt, with a long semitransparent skirt over this reaching below the knee. Each man's kilt adopts aspects of the royal style: in Ukhhotep's case the kilt and apron are pleated and in Khnumhotep's case the lateral sides of the apron are concave. In both cases, however, the base of the apron is wider than the top, confirming that the kilts are of the marsh hunting style with royal features rather than being true Shendjit style. Both Ukhhotep III and Khnumhotep II wear long ceremonial beards and all three men wear collars.

The reed skiffs of Djehutihotep and Khnumhotep II are of a similar type as those described above of Ukhhotep II and IV, suggesting a good correspondence of this form in later tombs of the three adjacent nomes.

Below the fishing and fowling scene, in the space, which is occupied at Meir by the ornamental palace-facade frieze, subsidiary marsh scenes are found at the other two sites. These consist of quarrelling boatmen (both sites), seine netting (at Beni Hasan) and transporting of papyrus by boat (at el-Bersha).

III. Chapter Summary

Large scale scenes of the tomb owner spearfishing and fowling are present in all of the decorated Middle Kingdom tombs at Meir. In all of these tombs, the scene closely follows iconographic traditions set in the Old Kingdom, with the standard motifs exhibiting little chronological variation. The scenes of Senbi I, Ukhhotep I

\textsuperscript{1059} ZELENKOVA (2010), BACE 21: 146-149, fig. 3.6 & 4.3
and Ukhhotep III follow the convention of the antithetically posed scene (either combined or portal-separated), whereas that of Ukhhotep II adopts the alternative canonical form of the split scene, reflecting the style evident in the Old Kingdom tombs at Meir. In the case of Ukhhotep II, the split scene composition was necessary due to the relatively short wall lengths in the outer room of tomb B4, rather than being an example of chronologically-based change of style.

Some changes in representational details are evident however, which appear consistent with a chronological dimension. One early change which appears to be a local feature of the early Twelfth Dynasty tombs at Meir is the absence of fish in the water band below the tomb owner’s reed skiffs, as observed in the compositions of Senbi I and Ukhhotep I. Similar absences of fish are not evident in the near contemporary tombs at Thebes or Asyut, or even in the slightly earlier tombs at Beni Hasan. Another attribute that appears to reflect an early Twelfth Dynasty date is the inward turning prow and stern ends of the skiffs, and this is one change that is also observed in the contemporary tombs at Asyut and Thebes.

At Meir, there is also a tendency for the depiction of subsidiary figures to increase in the later scenes. In the tombs of Senbi I and Ukhhotep I, only one family member is shown on the skiff accompanying the tomb owner (his wife in the case of the former and a child in the case of the latter). In the tomb of Ukhhotep II this has increased to include three family members (a wife, daughter and son) on the skiff, and most significantly three officials behind the tomb owner, depicted above the skiff on their own baselines. This pattern is repeated with even more figures accompanying the tomb owner in the scene of Ukhhotep III, with five female family members on the skiff and nine other subsidiary female figures in three registers behind and above him. That these figures are all female is an unusual feature in comparison with contemporary tombs, however it is consistent with the predominantly female gender of small scale figures represented in the other scenes in the same tomb. Similar large numbers of subsidiary figures are not seen in the contemporary scenes from El-Bersha and Beni Hasan, with the composition of Djehutihotep being about equivalent to that of Ukhhotep II in this regard, and that of Khnumhotep II depicting only two officials and two female family members.
The depiction of one item of dress that shows a consistent chronological dimension across many sites is the semitransparent long skirt worn over the tomb owner's kilt. The earliest observation of this feature in the contemporary tombs discussed in this study is in the fowling half scene of Djefaihapi at Asyut, dated to Senusret I. While it cannot be determined from the surviving parts of Ukhhotep II's scene whether he was similarly adorned, the skirt appears in both half scenes in the composition of Ukhhotep III and is also apparent in one half scene each in the contemporary tombs of Djehutihotep and Khnumhotep II.
CHAPTER SEVEN

DATA SYNTHESIS AND CONCLUSIONS

I. Data Synthesis and Discussion

The primary goal of this study is to investigate the Middle Kingdom tombs at Meir from a chronological perspective, and in so doing, to identify evidence for factors influencing the transmission of architectural and artistic styles and techniques, including the role played by the artists of the Meir tombs. The two most significant themes in the decorative programme depicting the tomb owner in scenes of daily life are also examined for changes in the iconography over time, for indicators of the transmission of these themes to adjacent nomes. These themes depict the tomb owner engaged in the desert hunt and in fishing and fowling in the marshes, and were selected for analysis in this study as their development and promulgation through the decoration of provincial Middle Kingdom tombs from Old Kingdom antecedents can be identified.

a) Interrelated aspects of chronological significance

A study of chronological sequencing of inscribed and decorated tombs (or mortuary artifacts such as coffins) must first begin with an examination of texts which are part of the decoration, for the primary reason that they may record specific dateable events or references to known persons (such as the name of the king) upon which a reliable fixed date can be established. These fixed dating points form the basis of a chronological framework, which is further refined in this study by establishing genealogies of the governors at each site based on references to family members in the texts. The chronological framework forms the baseline against which changes in artistic and architectural styles and techniques are examined. Changes that correspond to specific periods of time within the chronological framework can also help in dating other tombs where no genealogies or regnal references are attested. The findings are presented in the relevant chapter summaries, with derived insights discussed below.
Fixed Dating, Regnal References and Observations on their Occurrence

In the case of the present study, this aspect is directly applicable to tombs examined by way of the inclusion of the names of the reigning pharaoh (sometimes with regnal dates) under whom the official served, thus providing a specific *terminus post quem* or date before which a given inscription cannot have been executed.

These regnal references serve as reliable fixed dating criteria for a given tomb as the official can be aligned specifically with one reigning monarch, or in some cases, with several monarchs over the course of his life.\(^{1060}\) When incorporated into a biographical text, a rank or title bestowed by the king on the official or some aspect of service performed by the official for the king is recorded, and it can be reliably inferred from the context of the text that the official is a contemporary of the king being mentioned.\(^{1061}\) In the tombs covered in the present study, kings other than a currently ruling monarch are referenced in the biographical text in the context of that king’s relationship to a predecessor of the tomb owner, or to an earlier period of the tomb owner’s life.

The dates of these tombs according to regnal references are generally accepted and long established, and are included as a necessary point of departure for this study, with the evidence as established in prior studies and tomb reports reviewed in Chapter Three to create the necessary chronological framework. Of the thirty tombs examined in the study for textual content, artistic style, or the iconography of the fishing, fowling and desert hunt scenes, ten contained regnal references within the tomb itself,\(^{1062}\) while a further six of the tomb owners can be identified with a high degree of probability with texts containing regnal references in other contexts thus providing probable fixed dating points for their respective tombs.\(^{1063}\) Apart from Theban officials of the court of Nebhepetre Mentuhotep II (who are prominently

---

\(^{1060}\) As is the case for Djehutihotep of el-Bersha tomb Be2, referencing kings Amenemhat II and Senusret II. Khnumhotep II of Beni Hasan (tomb BH3) references king Amenemhat II with respect to his own appointment, and kings Amenemhat I and Senusret I with respect to his predecessors.

\(^{1061}\) This principle of regnal references to contemporary monarchs is elucidated by STRUDWICK (1985), *The Administration of Egypt in the Old Kingdom*, 6, in respect of Old Kingdom dating studies (with rare exceptions, citing Wenis).

\(^{1062}\) Meir: B4 (Ukhhotep II); Comparison Sites: Beni Hasan - BH2 (Amenemhat), BH3 (Khnumhotep II), BH14 (Khnumhotep I); El-Bersha - Be2 (Djehutihotep); Asyut – As1 (Djefaihapi I), As4 (Khety II); Qubbet el-Hawa – QH31 (Sarenput II), QH36 (Sarenput I); Moalla – Mo1 (Ankhtiify).

\(^{1063}\) The Theban officials Khety (TT311), Dagi (TT103), Meketre (TT280) and Henenu (TT313), and the El-Bersha Nomarch Amenemhat (Be3).
attested on the king’s mortuary temple and other inscriptions as discussed in Chapter Three), the majority of the regnal references examined are for kings of the Twelfth Dynasty with only two exceptions: Ankhtify of Moalla and Khety II of Asyut, whose tombs mention Herakleopolitan kings of the Ninth and Tenth Dynasties. In contrast, the early Eleventh Dynasty nomarchs of Beni Hasan appear to have deliberately avoided any reference to royal allegiance in their tombs, despite their prominent depiction of military activities similar to those of Ankhtify and Khety II. It is probable that the Twelfth Dynasty governors and nomarchs included regnal references in their tombs as a statement of legitimacy of their own authority within the established power structure, as the biographical texts of Khnumhotep I, Amenemhat and Khnumhotep II at Beni Hasan seem to indicate.

The biography of Khnumhotep I represents the earliest invocation of the king’s name at the beginning of the Twelfth Dynasty in the tombs of this study, where the tomb owner explicitly states that he was appointed by Amenemhat I. At Meir this use of the royal cartouche as a statement of legitimacy is only seen in the second last tomb of the series, B4 of Ukhhotep II, where it is displayed prominently on the architrave of the statue recess, at a high point of the main longitudinal axis of the tomb. Ukhhotep II also incorporates an extensive list of predecessors on the left side of the west wall as a further statement of legitimacy of his own authority. The overt statement of royal authority in tomb B4 stands in contrast to the following tomb of the series, C1 of Ukhhotep III, and is discussed further with respect to the genealogical information below. In the decoration of this final tomb at Meir, regnal references are absent, however the tomb owner himself assumes attributes that were formerly the exclusive prerogative of the king.

**Genealogical References and Relative Chronological Positioning**

Equally important in the chronological sequencing of tombs at each site are the genealogies and references to direct family members, which are useful in constructing lines of succession within the provincial ruling families, and filling in the order of tombs between those containing the fixed dating evidence of regnal

---

1064 The identification of Merikare (mentioned in Khety II’s tomb at Asyut) with the Tenth Dynasty Herakleopolitan king of that name is fairly certain, however the king Kaneferre mentioned in Aknkhtify’s tomb could be identified with several sovereigns of that name, from Neferkare II of the Eighth to Neferkare VIII of the Tenth Dynasties. SPANEL (1984), *GM 78*, 89-90, makes the case that the reference is to Neferkare, third king of the Ninth Dynasty (Turin Canon IV.20), based on orthography of the king’s name.
references. While not offering an fixed dating point, the commonly attested listing of fathers, mothers, wives and children’s names nonetheless provides a more precise ordering of the sources than an examination of other relative dating criteria (formulaic textual aspects, architectural features, and artistic styles and themes as examined in this study).

In the case of the Eleventh Dynasty nomarchs of Beni Hasan, the order of succession is well established as identified in Chapter Three, part IV by genealogical references in each of the tombs (with only one gap at the parentage of Remushenti, arising from the lack of surviving inscription in tomb BH27). While it is probable that the final two nomarchs (Baqet III and Khety) held office in the latter, post-unification part of the Eleventh Dynasty (with Khety possibly surviving to the beginning of the reign of Amenemhat I),\textsuperscript{1065} the constructed genealogy does not indicate in the absence of regnal references which (or whether any) of the nomarchs held office prior to reunification. If the assumption is held that the five attested nomarchs of the Eleventh Dynasty each held office for an average of 22-27 years, as did the later governors of 16 U.E.,\textsuperscript{1066} then it is possible that the earliest two, Baqet I and Baqet II, may date to the pre-unification period.\textsuperscript{1067} Architectural differences between their tombs and the final two tombs of the late Eleventh/early Twelfth Dynasty (belonging to Baqet III and Khety) discussed in Chapter Four would support this hypothesis.

\textit{Evidence for Intermarriage of Provincial Elites}

For the three governors of the Twelfth Dynasty whose tombs at Beni Hasan display significant surviving texts, dating to specific reigns has been established by regnal references discussed in the previous section. The genealogical information presented in the tombs however offers possible insight into questions beyond the simple sequencing of the tomb owners. As mentioned above, the inclusion of regnal

\textsuperscript{1065} As discussed in Chapter 4, tombs BH15 of Baqet III and BH17 of Khety are typologically similar to BH14, and the artistic themes also show a high degree of correspondence (particulary the fortress siege scenes), indicating that the three tombs are closely associated from a chronological perspective. This is noted by WILLEMS (1983), \textit{JEOL} 28, 92. The three tombs also comprise the Badawy Type II group, BADAWY (1966), \textit{History of Egyptian Architecture}, 129, 131-3.

\textsuperscript{1066} As estimated by BROVARSKI (2010), in \textit{Studies Kanawati}, 50.

\textsuperscript{1067} This dating is supported by BROVARSKI (2010), \textit{op. cit.}, 52 and SPANEL (1986), \textit{Beni Hasan in the Heracleopolitan Period}, Chap. 3. Both authors include Remushenti and Baqet III in this group.
citations in the biographical texts of all three tombs stands in contrast to the earlier series of tombs, where references to the king are uniformly absent. At the very least this points to a change in the relationship between the local elite and the royal court from the beginning of the Twelfth Dynasty, however, the emphasis of the texts to royal appointments of all three tomb owners to their respective positions suggests that the king’s authority is being directly invoked to reinforce the legitimacy of their office as provincial governor. The change in the governor’s names from Baqet to Khnumhotep (with other family names such as Nakht and Amenemhat) circumstantially suggests a change in the family of the local ruling elite, although the mother of the first governor of this sequence was named Baqet, indicating that a link from Khnumhotep I to the prior ruling family may have been maintained via the maternal line. The biographical text of Khnumhotep II also declares his inheritance from his mother’s side of the family, again with royal assent.\textsuperscript{1068} The father of Khnumhotep II is cited in his tomb BH3 as Neheri, who is generally identified as the nomarch Neheri of Deir el-Bersha (both Neheri I of tomb Be4 and Neheri II of Be7 have been suggested, although the dating of this thesis in Chapter Three would indicate Neheri II is the more likely of the two, although it could also refer to an otherwise unattested Neheri from the governing family of el-Bersha). This citation provides specific evidence of intermarriage between the ruling elites of adjacent nomes, as does the appointment of his son Nakht to governorship of the Jackal nome attested in Khnumhotep II’s biography.\textsuperscript{1069} There is no equivalent textual evidence for intermarriage by the ruling family of Meir, however it is noted that the name of Senbi I’s wife Meres is attested in the ruling family of Beni Hasan, as a daughter of Khnumhotep II.\textsuperscript{1070} It seems likely that intermarriages between provinces extended to other members of the noble families and their officials as indicated by circumstantial evidence of the names of the Meir coffin owners (analysed in Chapter Four). This analysis suggests that the influence at Meir from Beni Hasan was significant towards the mid Twelfth Dynasty.

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{1068} NEWBERRY, Beni Hasan I, 61.
\item\textsuperscript{1069} NEWBERRY, Beni Hasan I, 62-3. KANAWATI (2017), \textit{Etudes et Travaux XXX}, 269, suggests that the appointment is an indicator that Nakht’s mother Khety was a daughter of the governor of the downstream Jackal nome (17 U.E.).
\item\textsuperscript{1070} KANAWATI (2017), \textit{Etudes et Travaux XXX}, 270-1, states that Senbi’s wife was the first attestation of the name at Meir, and although the relative dating of Senbi I and Khnumhotep II make it unlikely that Senbi I’s wife and Khnumhotep II’s daughter are the same individual, a potential link by marriage between the two ruling families can not be discounted.
\end{itemize}
\end{footnotesize}
Genealogical information in the first three tombs at the central focus of this study is unambiguous. Although Meir tombs B1, B2 and B3 do not possess biographical texts as seen in the corresponding Twelfth Dynasty Beni Hasan tombs, the order of succession is clearly attested by the naming of the paternal lineage, with an inscription on the doorway of the inner room of tomb B3 naming Senbi I, Ukhhotep I and Senbi II in order of descent, in concordance with texts in tombs B2 and B1.

In the case of the final two tombs the exact lineage and relationships of the tomb owners to the first three governors is less clear. In tomb B4, the owner Ukhhotep II names his father as another Ukhhotep, son of the elite, overseer of arable lands. Although a member of the wider ruling family, and most probably a descendent of Senbi I, he was however not from the line of paternal succession via Senbi II. His mother Mersi may be identified with the sister of Senbi II, thus indicating that his claim to the governorship lies as much through his maternal lineage as his own. If this is accepted as the case, a parallel may be drawn with the earlier nomarch Khnumhotep I at Beni Hasan discussed above, who appears also to have inherited his office from his maternal line. Like Khnumhotep I, Ukhhotep II makes a point of referencing the reigning king in his tomb texts, and is the first governor in the Middle Kingdom line at Meir to do so (as was Khunumhotep I at Beni Hasan). In the case of tomb B4, this takes the form of the cartouches of Amenemhat II prominently incised on the lintel of the porch fronting the statue recess, at a high point central to the tomb’s longitudinal axis and directly above the entrance to the focus of the mortuary cult. Given the break in direct paternal succession from his predecessor Senbi II, the invocation of the king’s name makes a statement of legitimacy of Ukhhotep II’s authority as governor under royal assent. As discussed in Chapter Four, Ukhhotep II goes further in the tomb’s decorative programme to support his legitimacy, in the form of the list of predecessors on the west wall to the left of the porch.

---

1071 BLACKMAN, Meir III, 3.
1072 BLACKMAN & APTED, Meir VI, 6 and WILLEMS (1988), Chests of Life, 87 (Genealogy 2) both accept the view that his mother Mersi is Senbi II’s sister, as identified on Stela 1 in tomb B3.
1073 KANAWATI (2017), Etudes et Travaux XXX, 276, states that Ukhhotep II’s father and mother were both most likely descendent of Senbi I, and that the position of tomb B4 in line with the first three tombs of the sequence confirms his association with the main branch of the governing family.
Also examined in Chapter Four are the coffins of officials and families of the Meir governors (representing the provincial elite of the social strata immediately below the governors themselves) with a view to identifying dateable textual attributes that are directly comparable to equivalent texts in the governors’ tombs. The results of the seriation demonstrate that the coffin owners are divided into three chronologically distinct groups, with the final group associated with the last three tombs in the sequence, Senbi II (tomb B3), Ukhhotep II (tomb B4) and his successor Ukhhotep III (tomb C1). This third group is the largest numerically of the surviving intact coffins, and is also distinguished from the preceding group by the range of names of the coffin owners, the most common of which are names consistent with the elite family of Beni Hasan. Five coffins bear the name Khnumhotep and one Ameny, reflecting a possible link with Beni Hasan, as opposed to only four coffins of the group bearing the names Senbi or Ukhhotep. In contrast, the preceding group of coffin owners who are most closely associated with the time between Senbi I (tomb B1) and Ukhhotep I (tomb B2) in the analysis, all (except for two) carry the local names of Senbi or Ukhhotep, or variations thereof. Although the evidence is not definitive, it points to a change in the elite strata of Meir society from around the time of Senbi II, which may have involved intermarriage with equivalent elite families of Beni Hasan, along with subsequent migration of these family members and their retainers to Meir. As noted above, definitive evidence exists of a similar process in play between Beni Hasan and Deir el-Berhseh, with Khnumhotep II’s father being recorded as Neheri (from the governing family of El-Bersha) in his tomb BH3. Such an interchange of family members would have facilitated movement of lower classes of skilled artisans, scribes and household workers accompanying the elite family members, and this broader interchange would have been one of the drivers of the routes of artistic transmission discussed below.

Evidence in Art and Architecture

Investigations of the physical aspects of the tombs (embodied in their architectural features) and how their decorative programmes were executed (artistic styles, conventions and techniques) formed major parts of this study, and the detailed discussion on these can be found in Chapters Four and Five respectively. In overview however, the approach taken to both of these aspects of mortuary culture by the builders of the tombs is markedly different. On the one hand, the application
of the decorative programme was subject to strictly applied conventions defined as a mature canon in the early Old Kingdom. As a result, there is a strong similarity in the representation of motifs across tombs at all sites in the study, with variations in the application of common conventions more a result of the capabilities of the artist than an intentional divergence from the canon. On the other hand, there is no unified canon of tomb architecture, with a variety of tomb sizes, layouts and architectural features evident between (and within) sites. Local factors (social and geographic) exerted a significant influence at each site throughout the period examined by the study. The analysis demonstrated however that by the mid Twelfth Dynasty, local architectural styles incorporated several common attributes, instituting a transition to a longitudinal orientation of the tomb emphasizing the statue recess as the cult focus. Varying architectural elaborations were adopted at different sites to facilitate this common goal, and the gradual adoption of similar features between sites indicates that a form of artistic transmission was taking place relating to architectural design, concurrent with the artistic transmission of iconographic motifs as discussed below.

b) Artistic Transmission in Upper Egypt Between Meir and Neighbouring Sites

The third part of this study examines the iconography of the tomb owner in selected scenes of daily life in the Meir tombs and those of the comparison sites, with a view to clarifying the role played by the artists of the Meir tombs in the artistic transmission of the selected scenes in the mortuary culture of the neighbouring provinces of Upper Egypt. For the study, the large scale scenes of the tomb owner engaged in the desert hunt and in fishing and fowling on skiffs in the marshes were selected for analysis and discussed in detail in Chapter Six (parts I and II). For interpretation of the results with respect to identifying processes of artistic transmission, the possible routes of transmission (along with identifying attributes) are presented here in Figure 7.1 (for the Desert Hunt) and Figure 7.2 (for the Tomb Owner Fishing and Fowling).

With the possible exception of Meir tomb B2 (see case study, Chapter 5, III (A)). In this unusual case, the artist appeared to exercise his superior artistic capability with minor deliberate variations to the canon on non-central figures where it would not interfere with the ritual function of the tomb.
The aim of the diagrams in Figures 7.1 and 7.2 is to map the processes and routes of artistic transmission through the provincial governors’ tombs of Upper Egypt, from identified Old and Middle Kingdom influences, as identified by similarities of attributes in the analyses conducted in this study. The following key is applicable to both diagrams, and is assigned to an identified transmission path to characterize the transmission process at that point. The letter D, O or H is assigned to each relationship line between tombs, and is followed by a numbered key which refers to the evidence table for each point in the diagram (the evidence keys are defined in a separate table following each diagram).

**Transmission Process (Keys to Figures 7.1 and 7.2):**

**(D):** Direct or Vertical Transmission, which for the purposes of this study involves the intergenerational transmission of artistic themes within an immediate social group (such as the artists responsible for the decoration of tombs at a specific site). This mode of transmission tends to reinforce existing themes at a specific site, tending towards conservatism and resistance to change.

**(O):** Oblique Transmission, in which artistic styles and themes established by previous generations of unrelated artists at other sites are adopted at new sites. The mode of transfer may be a result of artists training in an established atelier and migrating to a new province (thus receiving the skills or knowledge from the living source) or by study and application of styles of extant work from ateliers that no longer exist (such as the detailed application of royal Memphite Fifth Dynasty themes in the Twelfth Dynasty tombs at Meir).

**(H):** Horizontal Transmission, which is an intra-generational transmission process and an important driver of widespread establishment of new artistic styles and themes at multiple sites within similar chronological timeframes. Influence may be bi- or multi-directional.

---

1075 SCHAEFFER (2013), in Escande, Shen and Li (Eds.), 33.
1076 SCHAEFFER (2013), *op. cit.*, 33-5.
1077 SCHAEFFER (2013), *op. cit.*, 35.
Fig. 7.1 Routes of Transmission of Artistic Themes of the Desert Hunt.
Based on evidence examined in Chapter Six, Part I.
Key to Fig. 7.1

Key Attributes/Influences/Evidence:

(1) The tomb owner is the main figure in large scale, conventionally to the left of the composition, facing a desert tableau consisting of multiple registers of game and other desert animals and vegetation on undulating ground lines. Most importantly for this attribute, the tomb owner is an active participant in the hunt, standing upright with legs apart, right foot raised at the heel, drawing a bow with nocked arrow. The animals are conventionally contained by an enclosure fence, separating them from the tomb owner (the enclosure is not attested in several examples of the scene). Game animals are represented in canonical poses (discussed in Chapter Six) which may be identified in most examples of the scene, including overlapping groups and a shot gazelle with its head turned towards the hunter.

(2) The desert tableau and animal enclosure is organised similarly to Attribute 1 above, but the key differentiator is that the tomb owner is passively observing the hunting activities taking place within the desert tableau (with or without enclosure fencing). Small scale figures of gamekeepers are interposed on the desert groundlines hunting with bows or capturing game with lassos.

(3) Birth and fecundity themes are included in the desert tableau, with depictions of predators and game species copulating and giving birth.

(4) A vignette is included depicting a hunting dog seizing a game animal.

(5) The hunting scene is restricted to a minor single-register scene depicting gamekeeping activities. The tomb owner is not part of the scene.

(6) The major figure of the tomb owner is depicted leaning forward with bent front leg, emphasising the active hunting pose.

\[1078\] This key applies to tombs B2 (Ukhhotep I) and BH3 (Khnumhotep II) without the presence of an enclosure fence.
Fig. 7.2 Routes of Transmission of Artistic Themes of the Tomb Owner Fishing and Fowling.
Based on evidence examined in Chapter Six, Part II.

Key to Fig. 7.2

Key Attributes/Influences/Evidence:
(1) Combined/Antithetic composition. Separate but similar scenes depict the tomb owner in large scale standing on a reed skiff on a band of water. In the fishing scene he holds a long spear or harpoon, with two fish (a lates and a tilapia)
transfixed on the point, while the fowling scene shows him with a throwing stick for hunting waterfowl. This type shows the two scenes integrated into a single composition with the images of the tomb owner facing each other, towards a central papyrus thicket and associated water mound. The tomb owner stands upright with legs apart and his back foot raised at the heel, similar to the stance in the desert hunt described above.

(2) Split scene. The iconographic elements of each scene remain the same as observed in type (1) above, but the scenes are separated in the decorative programme, generally being located on opposite walls.

(3) Half scene. Only one of the themes (usually the spearfishing motif) is depicted in the tomb.

(4) Joint scenes framing a portal, with antithetic composition.

(5) Later form of skiff (with straight prow and stern).

(6) Later form of marsh hunting kilt (with long semitransparent overgarment).

Common elements to the above are also observed, regardless of scene orientation and placement. These include the marsh thicket, represented by dense vertical papyrus stalks with open and closed umbels in varying patterns. As noted with type 1, the thicket serves as the central focus of the composition in the combined scenes, however is placed at the side of split and half scenes (although the tomb owner is always oriented towards it). A standard selection of marsh animals, birds and insects are shown within and above the thicket, including the pintail ducks flying above it which are the target of the tomb owner’s throwing stick. The water band is another core element, representing the aquatic marsh life, including fish, wading birds, water plants and large river animals such as hippopotami and crocodiles. In the spearfishing scenes, a mound of water rises from the water band, incorporating the lates and tilapia fish on the point of the tomb owner’s spear. Also represented to varying degrees are subsidiary figures accompanying the tomb owner, including family standing or seated on the tomb owner’s skiff, servants standing behind or on subsidiary registers, and fishermen on their own smaller scale skiff.

Like the Desert Hunt scene, the scene of the Tomb Owner Fishing and Fowling demonstrates a strong degree of uniformity of its constituent motifs both over time and over a broad geographical distribution. Based on surviving examples of both
scenes, key attributes can be identified which definitively trace their antecedents to the decorative programmes of the royal mortuary complexes of the Fifth Dynasty kings at Abusir, as illustrated in Figures 7.1 (the Desert Hunt) and 7.2 (Fishing and Fowling). While the examples cited from the monuments of Userkaf, Niuserre and Sahure are the earliest surviving attestations, it is possible that they incorporated influences from prior works now lost, however given the number of similarities to the equivalent scenes in the Twelfth Dynasty tombs at Meir it is probable that the Sahure reliefs represented the source of origin of the majority of motifs in the forms and compositions observed in the Meir scenes depicting these two themes.

The diagrams presented in Figures 7.1 and 7.2 demonstrate the probable routes of transmission of these iconographic themes, based on attestation of common elements observed (as outlined above) on a progressive chronological basis. Although deriving from the same origins in the royal decorative programmes mentioned, the actual transmission processes of both iconographic themes from the royal antecedents to the provincial governors’ tombs show the following notable differences. The Fishing and Fowling scene clearly followed an oblique transmission route to the tombs of the court elite of the fifth and succeeding dynasties at Saqqara, and was well established in the Sixth Dynasty provincial tombs at Meir. In contrast the scene of the Desert Hunt shows no evidence of transmission to the Memphite court tombs, which instead appear to have been influenced from an earlier Fourth Dynasty elite tomb style as attested at Meidum. It would further appear (as discussed further below) that the royal antecedent of the Desert Hunt was replicated at Meir without intermediate transmission via elite Old Kingdom tombs at either the Memphite court or at Meir.

Although the common iconographic motifs were generally adopted, the Fishing and Fowling scene was typically represented as either a combined composition (type 1 on the transmission diagram, Fig 7.1) as attested in the late Fifth Dynasty tomb of Niankhkhnum and Khnumhotep at Saqqara with the marsh thicket as a central focus (the earliest surviving example of this type), or as separated (split) compositions within the decorative programme, as is seen in tombs A2 and D2 at Meir, along with numerous earlier and contemporary examples at Saqqara. Given the chronological, social and geographic proximity of the Old Kingdom elite tomb owners to the royal court, the mode of transmission of this theme to the Saqqara
tombs was most likely first-hand, and artists engaged on the royal monuments were also likely to be prominent in the decoration of the elite tombs, as evidenced by the similarities in relief style and technique between the two. The fact that similar themes appeared at Meir not long after provides evidence of the strength of the shared mortuary culture, driven from the Memphite court, even at a time when central political power became less dominant in the Sixth Dynasty. The route of transmission to Meir could also be classified as oblique, similarly to the process in the elite tombs of the royal court, and is likely to have involved the travel of one or more artists with knowledge and exposure to iconographic themes of the royal and elite tombs to Meir.

It would appear, based on fragmentary evidence from the Lisht North mastaba tomb of Rehuerdjersen (LN384), that following the establishment of the Twelfth Dynasty court at Itj-tawy the artists decorating the tombs of Amenemhat I’s officials had access to the Old Kingdom Memphite court tombs, and heavily borrowed from these in the establishment of the standard iconographic canon for the court officials of the new dynasty. The resulting oblique transmission process therefore would have been based on the copying and reproduction of selected themes from the old Memphite elite tombs, including the combined antithetic composition of the tomb owner fishing and fowling (of which the relief fragments from LN384 provide definitive evidence). The styles and themes adopted at the administrative capital of Lisht North likely became a source for artistic transmission to Meir, alongside local transmission of selected themes from the Old Kingdom tombs at Meir, as has been demonstrated by evidence of copying of motifs of the Fishing and Fowling scene from Meir tomb A2 to B4 (discussed in Chapter Five).

In contrast to the oblique transmission of the fishing and fowling scene to the decorative programme for elite tombs, which on the available evidence occurred within one or two generations within the Fifth Dynasty, the officials’ tombs of the Memphite necropolis never adopted the canonical style of the type 1 hunting scene representing the tomb owner actively engaged as a hunter. Instead they followed the older theme for the desert hunt established in elite tombs of the Fourth Dynasty (of which Rahotep at Meidum is the earliest surviving example). This alternative hunting theme (noted as type 2 on the transmission diagram, fig. 7.1), which shares key elements of the desert tableau replete with desert animals with the type 1 scene,
is distinguished by the tomb owner adopting a passive pose, watching the animals and gamekeepers which are often interposed on the desert groundlines with the animals.

Looking at fig. 7.1 it is evident that the canonical pose in large scale of the tomb owner as active hunter following the style set by the Sahure mortuary temple was not adopted in elite tombs until the beginning of the Twelfth Dynasty. Of the surviving examples of this theme it appears that tomb B1 of Senbi I at Meir was the first to adopt this theme (type 1) so closely modelled on Sahure’s original, that the question of transmission is beyond doubt. It is probable that the mode of transmission was the same as for the adoption of the fishing and fowling scene, but without the local influence of hunting scenes from the Old Kingdom Meir tombs. It is clear that the Desert Hunt theme in the tomb of Senbi I was not a local innovation, and could only have been executed by an artist who was very familiar with the original work (of some four hundred and eighty years prior) from the Sahure mortuary temple (or perhaps later copies in the court tombs of Lisht North which are now lost to the archaeological record, which would have provided a similar transmission route to Meir as the fishing and fowling scene of LN384 referred to above). It is important to note that the transmission of this type of hunting scene based on the Old Kingdom royal antecedent was not universal in the provincial Middle Kingdom tombs. At Beni Hasan a local style developed in the Eleventh Dynasty tombs consisting of a single register scene depicting desert animals, and (perhaps with some influence from the Old Kingdom Memphite elite tombs) gamekeepers within the same register bowhunting and capturing live game. This scene was invariably located in the topmost register of the north wall of the chapel. This local hunting theme at Beni Hasan persisted through direct transmission to all the Twelfth Dynasty tombs at that site, with only the scene in the final decorated tomb (BH3 of Khnumhotep II) showing evidence of oblique transmission of the large scale motif of the tomb owner bowhunting (most likely an influence from Meir), resulting in a hunting scene that was a blend of both types. Likewise at Deir el-Bersha, the late tomb Be2 of Djehutihotep indicated an oblique transmission of the Old Kingdom elite type of hunting scene, with the tomb owner depicted in the typical passive role of this type of scene, inspecting activities within the animal enclosure.
Tomb TT60 of Intefiqer’s mother Senet is the only other significant early Twelfth Dynasty tomb to adopt the Sahure style of hunting theme, and being slightly later than Senbi I’s tomb B1, may have been influenced by the adoption of this theme in the Meir tomb. The fact that the posture of the tomb owner more closely follows that of Sahure, and the undulations of the desert groundlines are similarly restrained in comparison to those in Senbi’s tomb, argue against Meir tomb B1 being a significant locus of transmission for the theme to TT60. It is more likely to have been influenced by a hunting scene now lost in the tomb of Intefiqer in the Lisht North necropolis. On the other hand, a significant innovation to the scene by the artist of tomb B1 may be seen echoed in the partial remains of the desert hunt scene in the tomb of Senwosret at el-Kab, in the form of the tomb owner leaning forward while drawing the bow, with the characteristic bend of the front knee (thus demonstrating that the scene in tomb B1 played at least some part as a locus of oblique transmission to other Upper Egyptian provincial tombs). Other than acting as possible influence in the transmission of the motif of the tomb owner bowhunting to Beni Hasan tomb BH3, the primary route of artistic transmission for the hunting scene at Meir appears to be direct vertical transmission to the succeeding tombs at the same site, where from tomb B2 (Ukhhotep I) onward, the figure of the bow-hunting tomb owner reverted to a more canonical upright stance with a straight front leg.

Direct vertical artistic transmission of the fishing and fowling scene is also apparent at Meir, from tombs B1 to B2. The style of skiff in both of these tombs, with turned back prow and stern bundles, follows the same style seen on the skiffs in Lisht North tomb LN384, strongly supporting the view that the royal court tombs of Lisht North acted as a primary locus of transmission for this scene to the provinces (the same backward pointing bundles are also seen in tomb As2 of Djefaihapi I at Asyut). It is notable however that tomb B4 (Ukhhotep II) adopts split scenes for this theme, with the spearfishing scene occupying the major part of the south wall of the chapel, and the fowling scene located on the eastern end of the opposite (north) wall. While the component motifs within the scene correspond strongly to their counterparts in the antithetic combined scene in tomb B1, the scene clearly owes more influence to the split scene style as developed in the Old Kingdom Memphite cemeteries, and transmitted to the Old Kingdom tombs at Meir. As discussed in Chapter Five part IV, evidence demonstrates that specific motifs (particularly the
fish on the end of the tomb owner’s spear) were copied from tomb A2 during the creation of the spearfishing scene in tomb B4. The reason for the employment of split scenes in tomb B4 possibly relates to the short length of the chapel wall, where insufficient space exists on one wall to locate a combined scene of two large-scale figures of the tomb owner along with their skiffs, central marsh thicket and subsidiary figures. The only option available to the artist in this constraint, was to follow the precedent set by the Old Kingdom artists (likely for similar reasons of shortage of space for a large-scale scene), and represent the separate motifs in large scale on separate walls.

Towards the mid-Twelfth Dynasty, a convergence of attributes in the final tombs of the series at Meir, Beni Hasan and El-Bersha (tombs C4, BH3 and Be2 respectively) indicates that a process of horizontal artistic transmission was occurring at these sites. Not only was a variant of the combined antithetic scene adopted in all three tombs, with the two core motifs of the scene placed on either side of a portal (either the entrance to an inner chamber or the statue recess), but changes in the dress of the tomb owner is apparent, as discussed in Chapter Six part II.

Other evidence examined in Chapters Three and Four point to intermarriage between the ruling families and consequent migration of individuals (most likely along with officials and artists) between provinces. This sort of interaction at the highest levels of provincial society in this period is very likely to have been a significant driver of horizontal artistic transmission between the sites at this time. Such intermarriage between Beni Hasan and El-Bersha is documented in the genealogical text of Khnumhotep II, who states his father to be Neheri (generally accepted as being of the el-Bersha ruling family). While no such explicit genealogical texts exist in the Meir tombs, the analysis of the elite coffin owner names at Meir in Chapter Four part I of this study suggests that intermarriage and/or migration of persons of the elite class from Beni Hasan was a significant factor at Meir from the time of Senbi II.
II. Concluding Remarks

a) Old Kingdom influence on artistic styles and motifs

Old Kingdom artistic conventions exerted a fundamental influence on the execution of the artistic programmes in the Meir tombs and the comparison sites. Compositional principles of typical aspect, pattern, balance, spatial distribution and scale are strictly adhered to in the Middle Kingdom Meir tombs. These are essentially unchanged from Old Kingdom precedents at Meir and the Memphite cemeteries of the central administration. Compositional organization is achieved by a system of horizontal registers tied to baselines, however surviving gridlines in Meir tombs B2 and C1 demonstrate a grid system with a greater control of vertical spacing than the Old Kingdom system of horizontal guidelines. The grid system was demonstrated to undergo some change in style between the earlier tomb (B2) and the final tomb in the sequence (C1).

The motifs of the tomb owner hunting in the desert and fishing and fowling in the marshes are also demonstrated to be derivative of precedents from the Fifth Dynasty royal mortuary complexes at Abusir. The desert hunt motifs in Meir tombs B1, B2, B4 and C1 appear to be directly influenced by the original scene in the mortuary temple of Sahure, following the royal tradition of the tomb owner actively engaged in the hunt, rather than the Old Kingdom elite tomb tradition of the tomb owner observing the hunt.

b) Alignment with other Middle Kingdom provincial sites

The sites of Asyut, Deir el-Bersha and Beni Hasan all attest governors’ tombs dating prior to the Twelfth Dynasty, and it is possible that these examples exerted some influence on the architectural style of the Meir tombs, in terms of exterior façade and chamber geometry, although the relief style of el-Bersha Be5 and Asyut As4

---

1079 Refer to discussion, Chapter Five, Part I.
1080 Chapter Five, IV (A).
1081 Chapter Five, IV (B) for case studies I and II of artists grids in tombs B2 (whole tomb) and C1 (statue recess only).
1082 Chapter Six, I (A-D).
1083 Chapter Six, II (A-D).
1084 Chapter Six, I (D).
1085 Chapter Four, I (A).
and the painted style of the early Beni Hasan tombs do not appear to have strongly influenced the early relief style at Meir,\textsuperscript{1086} which is more derivative of the early Twelfth Dynasty style of Amenemhat I. The Beni Hasan tombs retained the technique of painted decoration through the Twelfth Dynasty, and the introduction of this technique to Meir (tomb C1) and el-Bersha (tomb Be2, which attests painted and relief techniques) is possibly a consequence of social interaction (including intermarriage) and transmigration between these sites in the Mid Twelfth Dynasty. This is consistent with evidence of horizontal artistic transmission between the three sites as observed in uniform adoption of features of the fishing and fowling motif.\textsuperscript{1087}

c) Evidence of innovation in artistic styles and motifs
The evidence suggests that Meir tomb B1 was the earliest Twelfth Dynasty provincial tomb to adopt the Old Kingdom royal tradition of the desert hunting motif, however several innovations are documented in the scene with regard to the stance of the tomb owner and the depiction of the desert tableau.\textsuperscript{1088} These innovations do not appear to be replicated to other sites to any great extent, with the possible exception of the tomb of Senwosret at el-Kab.\textsuperscript{1089} Further innovations to the desert tableau are attested in the succeeding tomb B2, but in the final two tombs at Meir (B4 and C1), the desert hunt motif appears to revert to a more canonical depiction (without the innovations described in tomb B1), as seen in the original scene of Sahure, and in the Theban tomb of Intefiqer’s mother Senet.\textsuperscript{1090} The depiction of this motif in the Meir tombs probably influenced changes in the desert hunt motif of tomb BH3 at Beni Hasan to include the tomb owner in large scale as an active participant.\textsuperscript{1091}

d) Comparison of Meir with royal court styles and motifs
The style of relief in the early Meir tombs B1 and B2 both exhibit the low, flat characteristics of early Twelfth Dynasty reliefs associated with the reign of

\textsuperscript{1086} Chapter Five, III (B).
\textsuperscript{1087} Chapter Six, II, (D); Chapter Seven, I (A-B).
\textsuperscript{1088} Chapter Six, I (C).
\textsuperscript{1089} Chapter Six, I (C).
\textsuperscript{1090} Chapter Six, I (D).
\textsuperscript{1091} Chapter Six, I (D).
Amenemhat I, however in terms of internally incised and sculpted facial details, definite influence of the Eleventh Dynasty Theban court style can be observed. This can be seen in the modelling of the lips, nostrils, eyes and upper facial area. The decoration of Meir tombs B1 and B2 therefore represents an adaptation of the early Twelfth Dynasty style of relief, replacing the painted representation of internal detail with modeled detail which is then overpainted, in line with the late Eleventh Dynasty Theban style. This is further developed in the reliefs of tomb B4, which are more rounded and exhibit a greater compositional density, although there is a tendency to return to painted rather than incised internal detail. Tomb C1 at Meir follows the Beni Hasan technique of fully painted decoration indicating that influences of the royal court style became less apparent at Meir towards the mid Twelfth Dynasty.

In terms of the transmission of artistic motifs, it has been established above that the Old Kingdom Memphite court was the original locus of the antecedents of the desert hunting and fishing and fowling scenes studied in the Meir tombs. Due to the poor state of preservation of the Twelfth Dynasty court cemeteries at Lisht, it is difficult to obtain a complete picture of the role the artists of the court tombs played in an active court-centric, outward transmission of themes seen in the provincial tombs. Indications from the partially preserved fishing and fowling scene of Lisht North tomb LN384 suggest however that the Old Kingdom antecedents for this theme were reproduced in the Lisht court tombs early in the Twelfth Dynasty, and innovations (such as the inward curve of the skiff prow-ends) were subsequently attested in Middle Kingdom provincial tombs (including Meir B1). It is likely, therefore, that the artists of the royal court tombs at Lisht played an active part in the outward (oblique) transmission of artistic styles and motifs to the artists of the early Middle Kingdom provincial tombs.

**Recommendations for further study**

In terms of iconography, the major focus of this study has been a comparison of the two major themes involving the tomb owner in activities of daily life, namely

---

1092 Chapter Five, II (A) and following discussion.
1093 Chapter Five, III (B).
1094 Chapter Five, III (B).
1095 Chapter Six, II (C); Chapter Seven, I (B).
hunting in the desert and spearfishing and fowling with a throw-stick in the marshes. As demonstrated in the analyses of Chapter Six, these themes reflected variations in accordance with chronological change, enabling inferences to be made regarding the process of artistic transmission within the provincial cemeteries under study, and justified the choice of these motifs as initial subjects for examination. A similar detailed examination is required to compare the development and possible transmission of selected themes involving workers and other subsidiary figures. Likewise, major representations of the tomb owner in ritual contexts were not investigated in the study, and would be worthy of a study in their own right.

As follow-on studies to fill out the overview of artistic transmission initiated in this study, two broad areas are recommended:

(1) Artistic transmission of selected work contexts in the governors’ tombs of provincial Upper Egypt. Those themes which are strongly represented in the Meir tombs would provide a suitable starting point, particularly livestock management scenes and marsh or riverine activities subsidiary to the tomb owner’s fishing and fowling scene.

(2) Artistic transmission of themes of the tomb owner engaged in ritual contexts. This would include (but not be limited to) offering table scenes, scenes of the tomb owner inspecting and receiving offerings, and the conduct of religious ceremonies. Due to the complexity of these themes, the investigation should include all the subsidiary activities and associated themes which support the central theme.
**BIBLIOGRAPHY**


(Eds.), Ancient Egypt Transformed. The Middle Kingdom (pp. 38-41). New, York: Yale University Press.


Becker, M. (2012). The Reconstruction of Tomb Siut II from the Middle Kingdom. In J. Kahl, M. El-Khadragy, U. Verhoeven, & A. Kilian (Eds.), Seven Seasons at Asyut: First results of the Egyptian-German cooperation in archaeological fieldwork: proceedings of an international conference at the University of Sohag, 10th - 11th of October, 2009 (pp. 69-90).


Bourriau, J. (1991). Patterns of change in burial customs during the Middle Kingdom. In S. Quirke (Ed.), Middle Kingdom studies (pp. 3-20). New, Malden, Surrey: SIA.


Garstang, J. (1907). The Burial Customs of Ancient Egypt: as illustrated by tombs of the Middle Kingdom, being a report of excavations made in the necropolis of Beni Hassan during 1902-3-4. London: Constable.


Bibliography


Bibliography


APPENDIX A

OCCURRENCE MATRICES OF SERIATION DATA


Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs.


Appendix A-4: Occurrence Matrix – Iconographic Attributes of the Tomb Owner’s Fishing and Fowling Scene.
## Appendix A-1: Occurrence Matrix - Architectural Features of the Governors' Tombs (Part 1 - up to reign of Amenemhat I)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>Ankhtify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Khety I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baqet I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iti-ibi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baqet II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Khety II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remushenti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baqet III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Khety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meketre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Khety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Internal Columns:

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>no internal columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>square internal columns</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>fluted or lotus internal columns</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>two internal columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>four internal columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>six or more internal columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### External Features:

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>no portico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>portico with 2 columns</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>multi-column portico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Chamber Geometry:

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>square chamber geometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>rectangular chamber geometry</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>corridor and chapel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Orientation:

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>transverse axis</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>longitudinal axis</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>statue recess rear wall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>processional way rises to shrine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>steps to statue recess</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Room count:

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>1 room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>2 rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix A-1: Occurrence Matrix - Architectural Features of the Governors' Tombs (Part 1 - up to reign of Amenemhat I)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>As5</th>
<th>BH29</th>
<th>As3</th>
<th>BH33</th>
<th>As4</th>
<th>BH27</th>
<th>BH15</th>
<th>TT311</th>
<th>TT280</th>
<th>BH17</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>multiple rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ceiling profile:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>flat ceiling profile</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>vaulted/cambered ceiling</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Architraves:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>no architraves</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>transverse architraves</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>longitudinal architraves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Burial Shafts:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>square burial shafts</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>rectangular burial shafts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A 2
Appendix A-1: Occurrence Matrix - Architectural Features of the Governors' Tombs (Part 2 - from the reign of Amenemhat I)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>BH14</th>
<th>B1</th>
<th>BH21</th>
<th>B2</th>
<th>JI60</th>
<th>A62</th>
<th>A61</th>
<th>BM23</th>
<th>B63</th>
<th>BH2</th>
<th>B6</th>
<th>BH3</th>
<th>B62</th>
<th>C1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong></td>
<td></td>
<td>Khnumhotep</td>
<td>Senbi I</td>
<td>Nakht I</td>
<td>Ukhhotep I</td>
<td>Intefiger</td>
<td>Djefailhap I</td>
<td>Djefailhap I</td>
<td>Netjemakht</td>
<td>Amenemhat</td>
<td>Amenemhat</td>
<td>Senbi II</td>
<td>Ukhhotep</td>
<td>Ukhhotep II</td>
<td>Khnumhotep II</td>
</tr>
<tr>
<td><strong>Internal Columns:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>no internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>square internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>fluted or lotus internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>two internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>four internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>six or more internal columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>External Features:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>no portico</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>portico with 2 columns</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>multi-column portico</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chamber Geometry:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>square chamber geometry</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>31</td>
<td>rectangular chamber geometry</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>corridor and chapel</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Orientation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>transverse axis</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>longitudinal axis</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>42</td>
<td>statue recess rear wall</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>43</td>
<td>procession way rises to shrine</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>steps to statue recess</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Room count:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>1 room</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>2 rooms</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>multiple rooms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ceiling profile:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>flat ceiling profile</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>61</td>
<td>vaulted/cambered ceiling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Architraves:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>no architraves</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>transverse architraves</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>72</td>
<td>longitudinal architraves</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Burial Shafts:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>square burial shafts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>81</td>
<td>rectangular burial shafts</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

A 3
Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs

(Part 1)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Owner</th>
<th>Serial Attributes</th>
<th>M54</th>
<th>M10</th>
<th>M5C</th>
<th>M53</th>
<th>M57</th>
<th>M2</th>
<th>M42</th>
<th>Tomb B1</th>
<th>M9</th>
<th>M37C</th>
<th>M28C</th>
<th>MAnn</th>
<th>M13C</th>
<th>M6C</th>
<th>M3C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Texts - Osiris and Anubis in the Offering Formula:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101</td>
<td></td>
<td>East: Osiris formula + krs tws f nfr or pri t-brw; West: Anubis + pri t-brw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102</td>
<td></td>
<td>East: Osiris + pri t-brw or hr m; West: Anubis + krs tws f nfr</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td></td>
<td>Osiris with seated god determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td></td>
<td>Osiris without determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td></td>
<td>Osiris epithets in the sequence nb qdlw, hnty inn tyw, nb sbqiw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106</td>
<td></td>
<td>Osiris epithets in the sequence - nb qdlw, hnty inn tyw, np s s, nb sbqiw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td></td>
<td>Osirian epithets in the sequence nb qdlw, np s s, nb sbqiw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108</td>
<td></td>
<td>hb qdlw palaeography: written with a determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td></td>
<td>nb qdlw palaeography: written with hand before pillar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td></td>
<td>nb qdlw palaeography: shows hand sign after djed pillar or no hand with double or single died pillar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td></td>
<td>nb qdlw palaeography: crossroads determinative present</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td></td>
<td>nb qdlw palaeography: horizon determinative present</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td></td>
<td>im s wt nb t (present in all his places) attested</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114</td>
<td></td>
<td>nh n t-wy attested</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115</td>
<td></td>
<td>nh nbb (lord of eternity) attested</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>116</td>
<td></td>
<td>hnty sbqiw (foremost of Abydos) attested</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>117</td>
<td></td>
<td>nb innt (lord of the West) attested</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td></td>
<td>Anubis epithets in sequence: shmn twy, tpy dwf</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Texts - The Request Phrase of the Offering Formula:

|          |       | 318 Request for cool water, incense, oil (Anubis formula) |     |     |     |     |     |    |     |         |    |      |      |      |      |     |     |
|          |       | 319 Request in form of frs m ‘thousand of’ |     |     |     |     |     |    |     |         |    |      |      |      |      |     |     |
|          |       | 320 Request for LM and CPU in the form of ‘thousand of’ |     |     |     |     |     |    |     |         |    |      |      |      |      |     |     |
|          |       | 321 Prospective di=f preceded by pri t-brw invocation |     |     |     |     |     |    |     |         |    |      |      |      |      |     |     |
|          |       | 322 pri t-brw palaeography includes plural strokes | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 323 pri t-brw palaeography does not include plural strokes | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 324 pri t-brw palaeography: written without elaborations | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 325 pri t-brw followed by elaboration ‘every good and pure thing’ | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 326 pri t-brw includes elaborations of incense, oil, linen & alabaster | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 327 pri t-brw offering is requested for the deceased | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
|          |       | 328 pri t-brw offering is for the k3 of the deceased | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   | X   |     |     |
Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs

(Part 1)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>M54</th>
<th>M10</th>
<th>M5C</th>
<th>M53</th>
<th>M57</th>
<th>M2</th>
<th>M42</th>
<th>Tomb B1</th>
<th>M9</th>
<th>M37C</th>
<th>M28C</th>
<th>MA</th>
<th>M13C</th>
<th>M5C</th>
<th>M3C</th>
</tr>
</thead>
<tbody>
<tr>
<td>329</td>
<td>$\xi r$ formula is in verbal form $\xi r t n f r t$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>331</td>
<td>$\xi r$ formula is followed by $\text{m is}$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332</td>
<td>$\xi r$ formula is followed by $\text{smi t inm t}$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>333</td>
<td>lid text with: $\text{sms nc} k n k s f t$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>334</td>
<td>lid text with: $\text{g} f t k h r w w n f r t$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>335</td>
<td>lid text with: $\text{g} d f k p t s m s k t$</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>336</td>
<td>west side vertical columns begin with $\text{pri} k r p t m n f r w t$</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>337</td>
<td>vertical columns begin with $\text{imh} y h r$</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338</td>
<td>no epithets are attested for the deceased</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>339</td>
<td>epiteth $\text{ms} f h r w$ after owner's name</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>340</td>
<td>epiteth $\text{ms} f h r w n b l m s h$ after owners name</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>346</td>
<td>Osiris formula asking for a thousand of bread beer oxen fowl</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>347</td>
<td>formula invokes Osiris Thoth and the 2 state chapels</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>348</td>
<td>Anubis formula asking for cool water incense &amp; oil</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>349</td>
<td>Geb formula asking for $\text{pri} t h r w$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orthography: Offering Formula</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>442</td>
<td>variant form of $\text{inm h w}$ with straight or slightly curved spinal cord</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>444</td>
<td>$\text{d br}$ sign has two hands holding sceptre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>445</td>
<td>variant form of $\text{in a t h e a t}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coffin Exterior Layout (number of columns attested):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>No vertical text columns on any side</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>One vertical text column on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Two vertical text columns on long sides</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Three vertical text columns on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Four vertical text columns on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Five vertical text columns on the long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Orthography: Offering Formula

442 variant form of $\text{inm h w}$ with straight or slightly curved spinal cord

444 $\text{d br}$ sign has two hands holding sceptre

445 variant form of $\text{in a t h e a t}$
### Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs (Part 2)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>Tomb B2</th>
<th>M 18e</th>
<th>M 4C</th>
<th>M 37</th>
<th>M 38</th>
<th>M 17</th>
<th>M 45</th>
<th>M 4C</th>
<th>M 47</th>
<th>M 1C</th>
<th>M 40</th>
<th>M 41</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td></td>
<td>Ukhotep</td>
<td>Senbi</td>
<td>Senbi</td>
<td>Senbe-Imy</td>
<td>Khnumhotep</td>
<td>Khnumhotep</td>
<td>Nebet</td>
<td>Senbi</td>
<td>Senbe-Imy</td>
<td>Senbe-Imy</td>
<td>Weresnefer</td>
<td>Senbi</td>
</tr>
<tr>
<td></td>
<td>(Governor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texts - Osiris and Anubis in the Offering Formula:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>East: Osiris formula + qrs. tw=f nfr or pr1.t-lbrw; West: Anubis + pr1.t-lbrw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>102</td>
<td>Osiris with seated god determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>103</td>
<td>Osiris without determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>104</td>
<td>Osiris without determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>105</td>
<td>Osiris epigraphs in the sequence nb-gdw; hnty inn.tyw, nb-sthw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>106</td>
<td>Osiris epigraphs in the sequence - nb-gdw; hnty inn.tyw, npr//, nb-sthw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>107</td>
<td>Osirian epigraphs in the sequence nb-gdw, npr//, nb-sthw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>108</td>
<td>hnty inn.tyw palaeography: written with a determinative</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>nb gdw palaeography: written with hand before pillar</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>nb gdw palaeography: shows hand sign after djed pillar or no hand with double or single died pillar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>111</td>
<td>nb gdw palaeography: crossroads determinative present</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>112</td>
<td>nb gdw palaeography: horizon determinative present</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>im s.wt.f nb.t (present in all places) attested</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>nb râ-t sîwy attested</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>nb râ-t sîwy (lord of eternity) attested</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>hnty sbhw (foremost of Abydos) attested</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>117</td>
<td>nb ñtzw (lord of the West) attested</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>Anubis epigraphs in sequence: æhm twwy, ãh gw-f</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texts - The Request Phrase of the Offering Formula:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Request for cold water, incense, oil (Anubis formula)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>Request for thousand of [ _ ]</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>Wish forms do not include di=f in direct introduction of request</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>123</td>
<td>Prospective di=f precedes pr1.t-lbrw invocation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>124</td>
<td>pr1.t-lbrw palaeography includes plural strokes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>125</td>
<td>pr1.t-lbrw palaeography does not include plural strokes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>126</td>
<td>pr1.t-lbrw palaeography: written without elaborations</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>pr1.t-lbrw includes elaborations of incense, oil, linen &amp; alabaster</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>128</td>
<td>pr1.t-lbrw offering is for the deceased</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>129</td>
<td>pr1.t-lbrw offering is for the kâ of the deceased</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>130</td>
<td>pr1.t-lbrw formula is in verbal form qrs. tw=f nfr</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>131</td>
<td>pr1.t-lbrw formula is in nominal form qrs. tw=f nfr</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>132</td>
<td>pr1.t-lbrw formula is followed by m is=f</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

A 6
Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs (Part 2)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>Tomb B2</th>
<th>M18e</th>
<th>M4C</th>
<th>M37</th>
<th>M38</th>
<th>M17</th>
<th>M43</th>
<th>M45</th>
<th>M8C</th>
<th>M47</th>
<th>M1C</th>
<th>M2C</th>
<th>M40</th>
<th>M41</th>
</tr>
</thead>
<tbody>
<tr>
<td>332</td>
<td>krs formula is followed by m smi.t imnt.t</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>333</td>
<td>lid text wish: smi.tw=f in kis=t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>334</td>
<td>lid text wish: sdi-k hr wr wt otr.t...</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>335</td>
<td>lid text wish: dsi-k p.t smi-k t...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>336</td>
<td>west side vertical columns begin with pti-k r p.t mm nprw...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>337</td>
<td>vertical columns begin with imni.x hr [deity]...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338</td>
<td>no epithets are attested for the deceased</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>339</td>
<td>epithet mtr-lnv after owner’s name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>340</td>
<td>epithets mtr-lnv nhb-ims after owner’s name</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>346</td>
<td>Osiris formula asking for a thousand of bread beer oxen fowl</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>347</td>
<td>formula invokes Osiris, Thoth and the 2 state chapels</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>348</td>
<td>Anubis formula asking for cool water incense &amp; oil</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>349</td>
<td>Geb formula asking for pr1.l-lnv</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>442</td>
<td>Orthography: Offering Formula</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>442</td>
<td>variant form of imn=w with straight or slightly curved spinal cord</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>444</td>
<td>dfr sign has two hands holding sceptre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>445</td>
<td>variant form of imn.t feather</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coffin Exterior layout (number of columns attested):**

- No vertical text columns on any side
- One vertical text column on long sides
- Two vertical text columns on long sides
- Three vertical text columns on long sides
- Four vertical text columns on long sides
- Five vertical text columns on the long sides

- **Tomb B3**
### Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Co.

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>M42C</th>
<th>M1Tor</th>
<th>M5</th>
<th>M18</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M48</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weresnefer</td>
<td>Tjetetu</td>
<td>Wahka</td>
<td>Nebet-Hut</td>
<td>Ukhhotep</td>
<td>Ukhhotep</td>
<td>Ukhhotep II</td>
<td>Senbi</td>
<td>Ameny</td>
<td>Ukhhotep III</td>
<td>Hayyankhtify</td>
<td></td>
</tr>
</tbody>
</table>

**Texts - Osiris and Anubis in the Offering Formula:**

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>M42C</th>
<th>M1Tor</th>
<th>M5</th>
<th>M18</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M48</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>East: Osiris formula + krs.tn-f nfr or pri.t-brw; West: Anubis + pri.t-brw</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>East: Osiris + pri.t-brw or br m; West: Anubis + krs.tn-f nfr</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Osiris with seated god determinative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Osiris without determinative</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>Osiris epithets in the sequence nb-dhw, hnty inn.tyw, nb-dhw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>Osiris epithets in the sequence: nb-dhw, hnty inn.tyw, nb-dhw, nb-dhw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>Osirian epithets in the sequence nb-dhw, ntr-s, nb-dhw</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>hnty inn.tyw palaeography: written with a determinative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>nb dhw palaeography: written with hand before pillar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>nb dhw palaeography: shows hand sign after djed pillar or no hand with double or single died pillar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>nb dhw palaeography: crossroads determinative present</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>nb dhw palaeography: horizon determinative present</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Texts - The Request Phrase of the Offering Formula:**

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>M42C</th>
<th>M1Tor</th>
<th>M5</th>
<th>M18</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M48</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>318</td>
<td>Request for cool water, incense, oil (Anubis formula)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>319</td>
<td>Request in form of ‘hs m ‘thousand of...’</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>320</td>
<td>wish forms do not include disf ‘ie direct introduction of request</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>321</td>
<td>prospective disf precedes pri.t-brw invocation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>322</td>
<td>pri.t-brw palaeography includes plural strokes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>323</td>
<td>pri.t-brw palaeography does not include plural strokes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>324</td>
<td>pri.t-brw palaeography: written without elaborations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>325</td>
<td>pri.t-brw followed by elaboration ‘every good and pure thing’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>326</td>
<td>pri.t-brw includes elaborations of incense, linen &amp; alabaster</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>327</td>
<td>pri.t-brw offering is requested for the deceased</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>328</td>
<td>pri.t-brw offering is for the kis of the deceased</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>329</td>
<td>krs formula is in verbal form krs.tn-f nfr...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>330</td>
<td>krs formula is in nominal form krs.t nfr.t</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix A-2: Occurrence Matrix - Textual Attributes of the Meir Governors Tombs and Coffins from Shaft Tombs (Part 3)

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>M42C</th>
<th>M11or</th>
<th>M5</th>
<th>M1B</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M4B</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>331</td>
<td>3rs formula is followed by m is=f</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332</td>
<td>3rs formula is followed by m smi.t imnt.t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>333</td>
<td>lid text wish: lms. ns=f in k.w.f</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>334</td>
<td>lid text wish: qrs-k hr w s w t hr t</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>335</td>
<td>lid text wish: g h-p.t smis-k t t</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>336</td>
<td>west side vertical columns begin with pri-k r p.t mm ntrw...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>337</td>
<td>vertical columns begin with imnh.y hr [deity]...</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338</td>
<td>no epithets are attested for the deceased</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>339</td>
<td>epithet mn=f-brw after owner's name</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>340</td>
<td>epithets mn=f-brw ab-imnh after owners name</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>346</td>
<td>Osiris formula asking for a thousand of bread beer oxen fowl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>347</td>
<td>formula invokes Osiris Thoth and the 2 state chapels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>348</td>
<td>Anubis formula asking for cool water incense &amp; oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>349</td>
<td>Geb formula asking for pri-t-brw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Orthography: Offering Formula**

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>M42C</th>
<th>M11or</th>
<th>M5</th>
<th>M1B</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M4B</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>442</td>
<td>variant form of lnshw with straight or slightly curved spinal cord</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>444</td>
<td>dfr sign has two hands holding sceptre</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>445</td>
<td>variant form of innt feather</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coffin Exterior Layout (number of columns attested):**

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attributes</th>
<th>M42C</th>
<th>M11or</th>
<th>M5</th>
<th>M1B</th>
<th>Tomb A3</th>
<th>M1NY</th>
<th>Tomb B4</th>
<th>M4B</th>
<th>M3</th>
<th>Tomb C1</th>
<th>M2NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>No vertical text columns on any side</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>One vertical text column on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Two vertical text columns on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Three vertical text columns on long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Four vertical text columns on long sides</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Five vertical text columns on the long sides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A 9
Appendix A-3: Occurrence Matrix - Iconography of the Tomb Owner in the Desert Hunt

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Ma1</th>
<th>BH29</th>
<th>BH33</th>
<th>BH15</th>
<th>BH17</th>
<th>BH14</th>
<th>B1</th>
<th>B2</th>
<th>T760</th>
<th>B4</th>
<th>BH2</th>
<th>B2e2</th>
<th>BH3</th>
<th>C1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tomb Owner attributes:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>601</td>
<td>Tomb owner as major figure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>602</td>
<td>Tomb owner actively hunting with bow</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>603</td>
<td>Tomb owner inspecting hunt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>604</td>
<td>Son or attendant accompanies main figure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>605</td>
<td>Tomb owner leans forward</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>606</td>
<td>Tomb owner front knee bent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>607</td>
<td>Kilt: shendyt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>608</td>
<td>Kilt: plain</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>609</td>
<td>Hunting sporran replaces kilt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>610</td>
<td>Semi-transparent long outer kilt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>611</td>
<td>Tomb owner wears sandals</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Subsidiary Figures:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>620</td>
<td>As subsidiary scene (single register) only</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>621</td>
<td>Subsidiary figures bowhunting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>622</td>
<td>Subsidiary figures capturing/leading game</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>623</td>
<td>Attendants outside enclosure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>624</td>
<td>Attendants/gamekeepers inside enclosure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>625</td>
<td>Attendants/companions wear sporran</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Desert tableau:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>630</td>
<td>Enclosure net fence represented</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>631</td>
<td>Desert tableau not enclosed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>632</td>
<td>Baseline registers straight</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>633</td>
<td>Baseline registers slightly undulating</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>634</td>
<td>Baseline registers significantly irregular</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>635</td>
<td>Animals ungrounded (no baseline)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>636</td>
<td>Subsidiary/inserted desert registers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>637</td>
<td>Vegetation represented</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>638</td>
<td>Stippling representing stones</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Game animals and Predators:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>650</td>
<td>Large game species hunted by bow</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>651</td>
<td>Large game species hunted by dog</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>652</td>
<td>Large game species copulating/birthing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>653</td>
<td>Predators depicted prowling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Appendix A-3: Occurrence Matrix - Iconography of the Tomb Owner in the Desert Hunt

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>BH29</th>
<th>BH33</th>
<th>BH15</th>
<th>BH17</th>
<th>BH14</th>
<th>B1</th>
<th>B2</th>
<th>TT60</th>
<th>B4</th>
<th>BH2</th>
<th>Be2</th>
<th>BN3</th>
<th>C1</th>
</tr>
</thead>
<tbody>
<tr>
<td>654</td>
<td>predators hunting game</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>655</td>
<td>predators copulating</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>656</td>
<td>small desert animals on main groundlines</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>657</td>
<td>small desert animals on insert registers</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>658</td>
<td>all animals grounded on four legs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>659</td>
<td>game species lifting legs above baseline</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>660</td>
<td>game species turns head towards hunter</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>661</td>
<td>game species elongated stance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>662</td>
<td>game species in overlapping pairs</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>663</td>
<td>hunting dog seizing game animal by neck</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>664</td>
<td>mythical creatures present</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A 11
## Appendix A-4: Occurrence Matrix - Iconography of the Tomb Owner Fishing and Fowling

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>BH29</th>
<th>BH33</th>
<th>BH35</th>
<th>BH17</th>
<th>B1</th>
<th>B2</th>
<th>TT60</th>
<th>QH31</th>
<th>As1</th>
<th>B4</th>
<th>Be2</th>
<th>BH3</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>501</td>
<td>Combined single scene. Antithetic composition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>502</td>
<td>Joint scenes, Portal-separated. Antithetic composition</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>503</td>
<td>Fishing &amp; Fowling Separated / independent placement and orientation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>504</td>
<td>Single scene Fishing only</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>505</td>
<td>Single scene Fowling only</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>506</td>
<td>Large scale major figure in striding posture with rear foot raised to ball on papyrus skiff</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>507</td>
<td>Major figure not depicted on skiff</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>508</td>
<td>Wears short plain closed kilt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>509</td>
<td>Wears short plain kilt, diagonal fold, tucked waist cord</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>510</td>
<td>Shendjit kilt with Marsh hunting apron</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>511</td>
<td>Shendjit kilt with Royal style apron</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>512</td>
<td>Medium length semitransparent outer kilt (or skirt) over hunting kilt</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>513</td>
<td>Short wig</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>514</td>
<td>Shoulder-length wig</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>515</td>
<td>Fillet &amp; Streamer headdress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>516</td>
<td>Collar</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>517</td>
<td>False beard</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>518</td>
<td>Holds harpoon tether with handle</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>519</td>
<td>Family members seated under or standing before major figure (two or less)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>520</td>
<td>Family members seated or standing on skiff (three or more)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>521</td>
<td>Attendants on skiff behind major figure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>522</td>
<td>Attendants on subsidiary register behind major figure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>523</td>
<td>Long high prow curved upwards</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>524</td>
<td>Long straight prow</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>525</td>
<td>Long high stern curved upwards</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>526</td>
<td>Long straight high stern</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>527</td>
<td>Inward recurved short prow and stern ends</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>528</td>
<td>Transverse lashing cords regularly spaced</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>529</td>
<td>Transverse lashing cords at irregular intervals</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>530</td>
<td>Deck boards</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

---

**Notes:**
- Major Figure: Large scale major figure in striding posture with rear foot raised to ball on papyrus skiff.
- Subsidiary Figures: Family members seated under or standing before major figure (two or less).
- Boat: Long high prow curved upwards.
- Water band: Deck boards regularly spaced.

---

Appendix A-4: Occurrence Matrix - Iconography of the Tomb Owner Fishing and Fowling
### Appendix A-4: Occurrence Matrix - Iconography of the Tomb Owner Fishing and Fowling

<table>
<thead>
<tr>
<th>Serial #</th>
<th>Attribute</th>
<th>Mo1</th>
<th>BH29</th>
<th>BH33</th>
<th>BH15</th>
<th>BH17</th>
<th>B1</th>
<th>B2</th>
<th>TT60</th>
<th>QH31</th>
<th>As1</th>
<th>B4</th>
<th>Be2</th>
<th>BH9</th>
<th>Cl</th>
</tr>
</thead>
<tbody>
<tr>
<td>531</td>
<td>Fish absent</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>532</td>
<td>Fish below skiff, sparsely depicted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>533</td>
<td>Fish below skiff, numerous</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>534</td>
<td>Aquatic plants rooted in baseline</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>535</td>
<td>Free floating plants / lotus buds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>536</td>
<td>Water weed trailing stern of skiff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>537</td>
<td>Hippopotami</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>538</td>
<td>Crocodile(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>539</td>
<td>Turtles, frogs, small animals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>540</td>
<td>Wading birds in water band</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>541</td>
<td>Insects above or perched on plants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Water mound:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>542</td>
<td>Narrow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>543</td>
<td>Broad</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>544</td>
<td>Tall (chest height or above)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>545</td>
<td>Two tilapia on spear point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>546</td>
<td>One tilapia and one Nile perch on spear point</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>547</td>
<td>One fish only on spear point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>548</td>
<td>Additional fish in mound</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Papyrus thicket:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>549</td>
<td>Narrow</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>550</td>
<td>Umbels in structured rows</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>551</td>
<td>Umbels irregularly spaced</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>552</td>
<td>Flat top open umbels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>553</td>
<td>Round top open umbels</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>554</td>
<td>Birds flying above thicket</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>555</td>
<td>Bird being struck by throw-stick</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>556</td>
<td>Birds perched on open umbels</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>557</td>
<td>Birds perched on nests within thicket</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>558</td>
<td>Eggs and/or chicks in nests</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>559</td>
<td>Mongoose or genet climbing papyrus stalks and raiding nests</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>560</td>
<td>Insects within or above thicket: dragonflies and/or butterflies</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>561</td>
<td>Numerous birds prominent in the compositional space, conveying action</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>