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The American University in Cairo
School of Humanities and Social Sciences

Pure and Fresh: A Typology of Formal Garden Scenes from Private Eighteenth Dynasty Theban Tombs Prior to the Amarna Period

A Thesis Submitted to
The Department of Sociology, Egyptology, and Anthropology

In Partial Fulfilment of the Requirements for
The Degree of Master of Arts in Egyptology and Coptology

By Jayme Rudolf Reichart

Under the Supervision of Dr. Lisa K. Sabbahy and Dr. Salima Ikram
Second Reader: Dr. Mariam Ayad

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“Everything that slows us down and forces patience, everything that sets us back into the slow circles of nature, is a help. Gardening is an instrument of grace.”

- May Sarton, American Poet (1912-1995)
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ABSTRACT

Gardens in ancient Egypt are known from the Early Dynastic Period to the Graeco-Roman Period from archaeological, textual, and pictorial evidence. From this evidence, one can differentiate between simple and formal gardens. This thesis exclusively produces a typology of the š- and Domain of Amun formal garden scenes (the ḫnty-š-, kšmw-, šš-, ‘t-nt-ht-, and ḡrrt-š-formal gardens) represented in the early to mid-late Eighteenth Dynasty Theban private tomb art prior to the Amarna Period (TT E2, TT 39, TT 63, TT 80, TT 81, TT 85, TT 87, TT 90, TT 93, TT 96, TT 100, TT 109, TT 161, and TT 334) by their Egyptian names. These formal gardens are examined in this study through (i) visual analyses and (ii) discussions in terms of their additional extant evidence, tomb locations, flora and fauna they sustained (including their actual growth cycles, as well as use, symbolism, and significance for the ancient Egyptians in life and death found in Appendix II: Herbarium and Faunarium), and wider sociocultural significance and relevance to the tomb-owners’ titles in early to mid-late Eighteenth Dynasty Thebes prior to the reign of Amenhotep IV/Akhenaten.

This study concludes that the formal gardens represented as tomb scenes, and the actual ones known from extant textual, pictorial, and/or archaeological evidence of the period, were symmetrical and even sometimes asymmetrical landscapes, that were located in proximity to either private homes and tombs, palatial residences, cult and/or memorial temples/shrines, and domains. The š-formal gardens were first constructed by the pharaohs, who sometimes gifted them to private and royal individuals, and which influenced other elite individuals, who had the power and resources, to construct ones of their own. The ḫnty-š-, kšmw-, šš-, ‘t-nt-ht-, and ḡrrt-š-formal gardens were principally constructed as monuments (mnw) by the kings for their palaces or for the gods. In the royal and private spheres, the š- and Domain of Amun formal gardens were aesthetic landscapes with numerous features used for sports, leisure, music, song, and dance performances, boat rites, meals, wakes, private banquets, and/or religious festivals and rituals, as well as provided surplus flower, herb, wine, fruit, fish, fowl, incense, and/or honey production for the institution(s) to which they were connected. Important to note is that the native and foreign flora of these formal gardens would have been purchased and/or introduced locally as seeds, fruit, and/or potted young specimens via gardeners or one’s other gardens or via foreign trade. Each of the 42 floral and 11 faunal species identified in these formal gardens have a specific growth and/or development cycle, which only allows them to be in bloom and/or available for harvest during a certain time of the year for use in food, medicine, festivities, meals, banquets, offerings, and floral arrangements, etc. Additionally, these formal gardens and their production were established, constructed, cultivated, maintained, overseen, and administered by intricate networks of individuals who worked in and/or liaised with them directly or indirectly. This relationship was evident in terms of the relevant titles of the tomb-owners and their colleagues, as well as from the location of the formal garden scenes in the porticos, transverse halls, passages, and chapels of the tombs in proximity to other self-glorifying ‘focal representations’ (Blickpunktsbilder) that would have been regularly viewed by family and community members and ideally visited by the bꜢ and kꜢ of the tomb-owner after death.
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Atil-Tree (Mærua crassifolia Forssk.?)
Blue Lotus and White Lotus (Nymphaeæ caerulea L. Savigny) and (Nymphaeæ lotus L.)
Carob Tree (Ceratonia siliqua L.)
Christ’s Thorn Tree (Ziziphus spina Christi L. Desf.)
Cilantro/Coriander (Coriandrum sativum L.)
Common Fig (Ficus carica L.)
Common Reed (Phragmites australis (Cav.) Trin. ex Steud.)
Cos-Lettuce (Lactuca sativa L.)
Curled Pondweed (Potamogeton crispus L.)
Date Palm (Phoenix dactylifera L.)
Doum-Palm (Hyphaene thebaica L. Mart.)
Desert Date (Balanites ægyptiaca L. Delile)
Egyptian Riverhemp Tree (Sesbania sesban L. Merril?)
Egyptian Walking Onion (Allium × proliferum (Moench) Schrad. ex Willd.) and/or Bulb Onion (Allium cepa L.)
Egyptian Willow Tree (Salix mucronata Thunb.)
Grapevine (Vitis vinifera L.)
Ih-Plant (?)
Incense Trees (Commiphora erythraea var. glabrescens Engler) and (Boswellia frereana Birdw.)
Ksbt-Tree (?)
Low Cornflower (Centaurea depressa Bieb.)
Mallow Bindweed and Lesser Bindweed (Convolvulus althæoides L.) and (Convolvulus arvensis L.)
Mandrake (Mandragora autumnalis Bertol.)
Mediterranean Cypress (Cupressus sempervires L.)
Mnw-Plant (?)
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List of Abbreviations

A1 = (Djeserkara) Amenhotep I; Appendix I
A2 = (A’akheperura) Amenhotep II; Appendix II
A3 = (Nebma’atra) Amenhotep III; Appendix III
ABSA = The Annual of the British School at Athens
ACE = The Australian Centre for Egyptology, Macquarie University
ADAIK = Abhandlungen des Deutschen Archäologischen Instituts, Abteilung Kairo
AJPH = American Journal of Public Health
AJPS = African Journal of Plant Science
Altägyptische Totenliturgien = Altägyptische Totenliturgien, Band 2: Totenliturgien und Totensprüche in Grabinschriften des Neuen Reiches
ARAST = Atti della reale accademia delle scienze di Torino
Arbres et arbustes = Arbres et arbustes de l’Égypte ancienne : La liste de la tombe thébaine d’Ineni (no. 81)
ARCE = The American Research Center in Egypt
ARCE Bulletin = The American Research Center in Egypt Bulletin
AM = Ashmolean Museum of Art and Archaeology
Ancient Egypt = Ancient Egypt: Anatomy of a Civilization
Ancient Egyptian Literature I = Ancient Egyptian Literature: Old and Middle Kingdom, vol. I
ASAE = Annales du service des antiquités d’Egypte
AT = Amarna Tomb
AUCES = Assiut University Center for Environmental Studies
AUC Press = The American University in Cairo Press
A-V = Akademie-Verlag/Arcus-Verlag
BACE = Bulletin of the Australian Centre for Egyptology
BAR Series = British Archaeological Reports International Series
BBM = Botanischen Museum Berlin-Dahlem
Between Heaven and Earth = Between Heaven and Earth: Birds in Ancient Egypt
BIE = Bulletin de l’Institut d’Égypte
BIEg = Bulletin de l’Institut égyptien
BIFAO = Bulletin d’Institut français d’archéologie orientale du Caire
BMMA = The Metropolitan Museum of Art Bulletin
BM Press = British Museum Press
BSA = British School at Athens
BoD = Book of the Dead (Book of Coming Forth by Day)
BWZKM = Beihefte zur Wiener Zeitschrift für die Kunde des Morgenlandes
CAJ = Cambridge Archaeological Journal
CASAE = Cahiers supplémentaires des annales des services des antiquités de l’Égypte
cf. = confer = compare to
CGC = Catalogue général des antiquités égyptiennes du musée du Caire
Chronologie des pharaonischen Ägypten = Chronologie des pharaonischen Ägypten: Die Zeitbestimmung der ägyptischen Geschichte von der Vorzeit bis 332 v. Chr.
CM = Cairo Museum
Codex = Codex of ancient Egyptian plant remains
CNRS Éditions = Éditions du Centre national de la recherche scientifique à Paris
CSAE = Conseil suprême des antiquités de l’Egypte
CT = Coffin Texts
CUP = Cambridge University Press
DBH = Druck von Breitkopf and Härtel
DE = Discussions in Egyptology
Deir el Médineh II = Rapport sur les fouilles de Deir el Médineh (1934-1935) : Deuxième partie :
La nécropole de l’Est
Dendérah IV = Dendérah : Description générale du grand temple de cette ville, vol. IV
Deir el-Bahari III = Der Tempel des Königs Mentuhotep von Deir el-Bahari, Band III: Die
königlichen Beigaben
Die Gartenpflanzen = Die Gartenpflanzen im alten Ägypten: Ägyptologische Studien
Domestic Plants and Animals = Domestic Plants and Animals: The Egyptian Origins
EA = Egyptian Artefacts, British Museum
EA = Egyptian Archaeology: Bulletin of The Egypt Exploration Society
EB = Encyclopædia Britannica
Egyptian Grammar = Egyptian Grammar: Being an introduction to the study of hieroglyphs
EES = Egypt Exploration Society
Encyclopédie religieuse de l’univers végétal II = Encyclopédie religieuse de l’univers végétal II :
Croyances phytoreligieuse de l’Egypte ancienne
Enquiry into plants = Theophrastus: Enquiry into plants and minor works on odours and weather
signs
ePSD = Electronic Pennsylvania Sumerian Dictionary
et al. = et alii/aliæ/alias = and all
etc. = et cetera = and other similar things
EUT = Edizioni Università di Trieste
FAOUN = Food and Agriculture Organization of the United Nations
FERE/FerE = Fondation égyptologique reine Elisabeth
Flora of Egypt Ia/Ila/IIa/IVa = Flora of Egypt, vol. I-IV (Boulos)
Five Years’ Explorations at Thebes = Five Years’ Explorations at Thebes: A Record of Work done
1907-1911
Following Osiris = Following Osiris: Perspectives on the Osirian Afterlife from Four Millennia
FM = Fouad I Agricultural Museum
GI = Griffith Institute, University of Oxford
GM = Göttingen Miszellen
GT = Giza Tomb
GOV = Georg Olms Verlagsbuchhandlung
GR = Geographical Review
H = (Ma’atkara) Hatshepsut
Handbuch = Handbuch der altägyptischen Heilpflanzen
Hidden fields of Tutankhamun = Hidden fields of Tutankhamun: From identification to
interpretation of newly discovered plant material from the pharaoh’s grave.
Histoire économique et sociale = Histoire économique et sociale de l’ancienne Egypte : De
Nârmer à Alexandre le Grand I : Les fondements de l’économie, Tome 1 : Les bases
structurelles de l’économie
Historisch-Biographische = Historisch-Biographische Texte der 2. Zwischenzeit und neue Texte
der 18. Dynastie
IFAO/Ifao = Institut français d’archéologie orientale du Caire
IUCN = The International Union for Conservation of Nature Programme
JAMT = Journal of Archaeological Method and Theory
JARCE = Journal of the American Research Center in Egypt
Ramesside Inscriptions VI = Ramesside Inscriptions: Historical and Bibliographical, vol. VI
RdE = Revue d’Égyptologie
SAE = Service des antiquités égyptiennes du musée du Caire
Stèles du Nouvel Empire I = Catalogue général des antiquités égyptiennes du musée du Caire n°
34001-34064 : Stèles du Nouvel Empire I
Stil der Grabmalereien in der Zeit Amenophis II’ = Stil der Grabmalereien in der Zeit Amenophis
II’ : Untersucht an den thebanische Gräbern Nr. 104 und Nr. 80
s.v. = sub verbo = under the word
RSUE = Revista de la Sociedad uruguaya de egiptología
T1 = (A’akheperkara) Thutmose I
T2 = (A’akheperenra) Thutmose II
T3 = (Menkheperra) Thutmose III
T4 = (Menkheperura) Thutmose IV
TLA = Thesaurus Linguae Ægyptiae
T = Tomb
The Complete Papyrus of Ani = The Egyptian Book of the Dead: The Book of Going Forth by Day:
The Complete Papyrus of Ani, 3rd edition
The Painted Tomb-Chapel of Nebamun = The Painted Tomb-Chapel of Nebamun: Masterpieces
of Ancient Egyptian Art in the British Museum
The Pharaoh’s Kitchen = The Pharaoh’s Kitchen: Recipes from Ancient Egypt’s Enduring Food
Traditions
The unbroken reed = The unbroken reed: Studies in the culture and heritage of ancient Egypt in
honor of A. F. Shore
The Tomb in Ancient Egypt = The Tomb in Ancient Egypt: Royal and Private Sepulchres from the
Early Dynastic Period to the Romans
Tombs of Two Officials = Tombs of Two Officials of Thutmose The Fourth (nos. 75 and 90)
Topographical Bibliography I = Topographical Bibliography of Ancient Egyptian Hieroglyphic
Trees and Flowers of Egypt = Trees and Flowers of Egypt: A Guide to Popular Ornamental
Egyptian Plants
TT = Theban Tomb
UCLAE = University of California, Los Angeles, Encyclopedia of Egyptology
UCL = University College London
UNESCO = United Nations Educational, Scientific, and Cultural Organization
UFSVRG = Universitätsverlag Freiburg Schweiz Vandenhoeck and Ruprecht Göttingen
Urkunden 18 = Urkunden der 18. Dynastie 18: Biographischen Inschriften von Zeitgenoßen
Thutmosis’ III und Amenophis’ II,
UWH = Universitätsverlag Winter Heidelberg
VdDB = Verlag der Dürrschen Buchhandlung
VJJA = Verlag J. J. Augustin
WB I-IV = Wörterbuch der ägyptischen Sprache, vols. I-IV
ZÄS = Zeitschrift für ägyptische Sprache und Altertumskunde
Chapter One

Introduction

Evidence of gardens in ancient Egypt exists in various forms, including archaeological, textual, and pictorial, dating from the Early Dynastic through the Graeco-Roman Period. From these sources, one can differentiate between a ‘garden’ and a ‘formal garden.’ The former is a simple piece of land established to cultivate trees and plants while the latter is a distinct, landscaped area, built on a symmetrical and geometrical plane, and incorporating trees, plants, water features, and/or architecture. Evidence show that in ancient Egypt, a variety of gardens and formal gardens appear from the Early Dynastic Period onwards in the vicinity of homes, tombs, temples, and palaces, being used for pleasure, aesthetics, and practicality.¹ This thesis exclusively examines the ḫ- and Domain of Amun formal gardens represented in the private Theban funerary art of the Eighteenth Dynasty prior to the Amarna Period. In doing so, the aim of this thesis is to expand our understanding of their layouts, water and architectural features, flora and fauna, and overall function and significance of the actual formal gardens in early to mid-late Eighteenth Dynasty Theban society by means of extant textual, archaeological, and/or pictorial evidence. Amenhotep IV/Akhenaten and his late Eighteenth Dynasty successors are excluded due to the profound changes that occurred under his leadership: (i) the rise of Atenism; (ii) the damnatio memoriae of Amun and the closure of his cult at Thebes; and (iii) the shift of the capital to Akhetaten (Amarna).

Research Questions

The following research questions form the focus of this study:

1. What do the images and the Egyptian names of the formal garden scenes found in Theban private tombs reveal about actual formal gardens existing during this period?

2. To what extent does the location of the formal garden scene in the tomb and its relationship to the surrounding decorative schema and texts indicate its function and significance?

3. What information can be deduced from the tomb-owners’ and their families’ titles in relation to the type(s) of formal garden scene(s) found within their tombs?

4. In what ways do the formal garden scenes function for the deceased?

5. Which species of flora and fauna are present in these formal garden scenes and their additional, extant archaeological and textual evidence? What did these formal gardens have in bloom or harvestable each season? What were their symbolism and significance in life and in death? To what extent do they reflect Eighteenth Dynasty Theban society?

Formal Gardens in Eighteenth Dynasty Thebes prior to the Amarna Period

The ancient Egyptians had many words for gardens, allowing them to be categorized.² The following examples of formal gardens will serve as the main focus of the thesis: the 𓊧 (𓊧 ; 𓊧; 𓊧; 𓊧; 𓊧; 𓊧; 𓊧; 𓊧), the 𓉝 (𓉝 ; 𓉝; 𓉝; 𓉝; 𓉝; 𓉝; 𓉝; 𓉝), the 𓉀-𓉂 (𓉀 ; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂), the 𓉀-𓉂 (𓉀 ; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂), and the 𓉀-𓉂 (𓉀 ; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂; 𓉀; 𓉂). The 𓊧 is known from the Old Kingdom onward, variously translated from the Egyptian, as “garden (with a pool)”³ and “garden/pool/pond/lake.”⁴ The 𓉝 occurs from the Old Kingdom onward and has been interpreted as “pond”⁵; “bird pond”⁶; “fish pond”⁷; and “an outdoor

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⁶ Erman and Grapow, WB III, nos. 483.12-485.2.
⁷ Erman and Grapow, WB III, nos. 483.12-485.2.
enclosure”8; and “marshland/thicket.”9 The ḫnty-š is known since the Old Kingdom and has been interpreted as “arable land”10; “a plantation”11; “an orchard”12; “terraces”13; “a Lebanese orchard”14; “a tree orchard”15; “a garden with trees”16; and “a pond.”17 The ksmw is attested from the Old Kingdom onward and has been interpreted as “a vineyard”18; “wine-garden”19; “temple garden”20; “an orchard.”21 The ṭ-nt-ḥt is mentioned in various texts from the Old Kingdom onward and has been translated as “a garden”22; “an orchard”23; and “an arbor.”24 The ḫrrt-š25 first occurs in the New Kingdom and has been interpreted as “garden (at a temple)”26 or an “utilitarian garden.”27 These translations demonstrate how multifaceted a formal garden could be in ancient Egyptian society. Their layouts, water features, architecture, the flora and fauna they sustained, 

10 Erman and Grapow, WB III, nos. 311.6-7; Kurt Sethe, Urkunden des Altes Reichs I, (Leipzig: Akademie-Verlag, 1932-1933), no. 140.10; Lesko and Lesko, A Dictionary of Late Egyptian II, 186; Seidlmayer and Hafemann, s.v. “ḥnty-š,” in TLA, http://aaew.bbaw.de/tda/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=119280&db=0.
11 Erman and Grapow, WB III, no. 310.11.
12 Erman and Grapow, WB III, nos. 310.11, 311.8; Hugonot, Le jardin dans l’Egypte ancienne, p. 17.
14 Erman and Grapow, WB III, no. 310.12.
15 Faulkner, A Concise Dictionary of Middle Egyptian, pp. 194-195.
16 Sethe, Urkunden IV, no. 353.4.
17 Via the epithet ḫntyw-š.f or “who is in front of his pond(s).” See Christian Leitz, Lexikon der ägyptischen Götter und Götterbezeichnungen V, (Dudley: Peeters, 2002), p. 864.
18 Erman and Grapow, WB V, nos. 106.4-9, 107.6-7; Seidlmayer and Hafemann, s.v. “ksmw,” in TLA, http://aaew.bbaw.de/tda/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=163530&db=0; Lesko and Lesko, A Dictionary of Late Egyptian IV, p. 34.
22 Erman and Grapow, WB I, no. 160.13; WB III, nos. 341.4-5; Seidlmayer and Hafemann, s.v. “ṭ-nt-ḥt,” in TLA, http://aaew.bbaw.de/tda/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=34660&db=0.
25 It should not be confused with another type of (formal?) garden that is placed in the vicinity of a tomb: š-ḥrrt (𓊴𓊴𓊴), written with Gardiner N1 (𓊴). See Hugonot, Le jardin dans l’Egypte ancienne, p. 18.
26 Erman and Grapow, WB III, nos. 341.4-5; Seidlmayer and Hafemann, s.v. “ḥrrt-š,” in TLA, http://aaew.bbaw.de/tda/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=108840&db=0.
27 Erman and Grapow, WB III, no. 310.11.
28 Hugonot, Le jardin dans l’Egypte ancienne, p. 15.
and other functions, however, remain less understood. This is where archaeological and pictorial evidence becomes vital to this study.

The main archaeological evidence for ancient Egyptian formal gardens from the Old Kingdom until before the Amarna Period has been found in the following locations: the valley temple garden enclosure beside the Bent Pyramid at Dahshur, dating to the reign of Sneferu of the Fourth Dynasty28; the Middle Kingdom Memorial Temple of Montuhotep II at Deir el-Bahari29; the Middle Kingdom mayor’s mansion in Senwosret III’s memorial cult town of Wahsut in South Abydos30; the Middle Kingdom to Late Hyksos and New Kingdom palaces constructed at Avaris/Perunefer/Per-Ramesses (Tell el-Daba’a/Qantir) in the Eastern Delta31; the First Court of the Memorial Temple of Hatshepsut32; and the Memorial Temple of Amenhotep, Son of Hapu on the West Bank of Thebes.33 Although these excavated remains and material culture have added to our knowledge of the layout and functions of formal gardens, many archaeological sites that might

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28 “Remains of 80 m long and 55 m wide...with a 5 m thick brick walls surrounding the remains of a garden. More than 350 plants were arranged in long, parallel rows...palm and sycamore trees were planted here...several cypress trees that must have been imported from the Levant. In the spaces between these plants lay flower beds. Inside the garden stood a solitary building, either a royal rest house or a temple.” See the DAI Kairo - German Archaeological Institute Cairo Facebook Page Post from April 11, 2020, “Extensive garden of King Sneferu (4th Dynasty),” (accessed May 4, 2020), https://facebook.com/DAINST.Kairo/posts/2861983523922430; and also see Felix Arnold, “Cult Buildings of the Bent Pyramid at Dahshur,” Archaeology in Egypt: Magazine of the German Archaeological Institute in Cairo 5 (Nov. 2019): p. 49; as well as Nicole Alexanian and Felix Arnold, The Necropolis of Dahshur, (Cairo: DAI, 2015), pp. 2, 8-10.


30 “An intriguing addition to the front part of the building was the removal of the original architecture and its replacement with a walled garden courtyard. The actual floor level of this garden is not preserved but we have a 3 x 4 grid of 12 brick tree planters. Remnants of bark and leaves suggest this was a garden of ficus trees (Ficus sycomorus), which were frequently favored by Egyptians in formal garden settings.” See Josef Wegner, “Museum Excavations at Abydos: Modeling the Mayor’s House at South Abydos: The Palatial Residence at Wah-Sat,” Expedition 56:1 (Spring 2014), pp. 24, 28, 30.


32 Hebert E. Winlock, Excavations at Deir el-Bahari 1911-1931, (New York: Macmillan, 1942), fig. 12, p. 213.

have evidence of them before the New Kingdom have still not been found, excavated, or studied. Therefore, the study of ancient Egyptian formal gardens still strongly relies on pictorial evidence from elite tombs. Pictorial evidence from palaces, temples, and royal tombs exists; however, they do not provide much evidence for formal gardens. Information can be derived from the floor paintings of formal gardens from Amenhotep III’s Malkata Palace Complex, although, pictorial evidence for ancient Egyptian simple and formal gardens still largely derive from private New Kingdom tombs in Thebes and in Saqqara. Old Kingdom and Middle Kingdom scenes from private tombs in Asyut, Beni Hasan, Deir el-Bersha, Saqqara, and Thebes do not depict formal gardens, only simple gardens like the hsp-plot, grapevines on arbors or pergolas, or small groupings of one or more trees. In Thebes, Middle Kingdom and Second Intermediate Period formal garden scenes might have been present. It is difficult, however, to ascertain their existence because many private Theban tombs, particularly in the necropolis district of Sheikh Abd el-Qurna, were reused by the early to late New Kingdom elite.

A problem with using tomb scenes to interpret actual formal gardens is whether these tomb scenes were used in the actual gardens or were simply as part of the design elements of the tomb. The use of garden scenes in tombs may have been for practical reasons, such as to denote the owner’s wealth and status, or for symbolic reasons, such as to reflect the owner’s desire for a paradise in the afterlife. The use of garden scenes in tombs also suggests that the concept of the garden was an important part of ancient Egyptian culture and that gardens were not only decorative, but also functional and symbolic.
scenes are idealized or realistic. To use the term ‘idealized’ suggests that one believes that these tomb scenes are conceptual; conversely, the term ‘realistic’ suggests truth and accuracy. In essence, scholars believe tomb scenes can be interpreted on several levels: the ‘real’ or what was once real, and the ‘ideal,’ as well as a symbolic meaning that goes beyond their depiction. For example, agriculture, horticulture, viticulture, apiculture, and/or other daily life scenes might depict reality while also metaphorically evoking ideas of rebirth, resurrection, and sustenance after death. This can be deduced from the placement of some scenes in the wider dialogue or narrative, occurring in the surrounding scenes and texts on the same wall or pillar.

**Formal Garden Scenes in Private Early to Mid-Late Eighteenth Dynasty Tombs**

Formal garden scenes are characterized by central water feature(s) with plants, waterfowl, and fish, and bordered by trees, plants, and architectural features. Based on these characteristics, 16 formal garden scenes are found in private Eighteenth Dynasty Theban tombs prior to the Amarna Period. These scenes will form the focus of this thesis’s study: TT E2, TT 39, TT 63, TT 80, TT 81, TT 85, TT 87, TT 90, TT 93 (#1-3), TT 96, TT 100, TT 109, TT 161, and TT 334. A review of the previous scholarship will demonstrate that a chronological and comprehensive study of these scenes has yet to be conducted and that a typology can address the gaps in information their layouts, water features, architecture, flora and fauna, and functions prior to the Amarna Period.

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47 Typically, one uses the term ‘naturalistic’ instead of ‘realistic’ in art history because to employ ‘realistic’ refers to Realism, an artistic movement that developed in response to Romanticism during the Nineteenth and Twentieth Centuries in Europe. This study, however, will use the latter because of its common use still in archaeology.
49 Dodson and Ikram, The Tomb in Ancient Egypt, pp. 77, 80.
50 Dodson and Ikram, The Tomb in Ancient Egypt, pp. 77, 80.
51 Dodson and Ikram, The Tomb in Ancient Egypt, p. 83.
52 “All exemplars of a single [formal garden] category do not necessarily have [to have all the same] attributes...in common...[it is more about][the] principle of [a] family resemblance.” See Bernard St-Denis, “Just what is a garden?,” Studies in the History of Gardens and Landscape Design 27.1 (2007): p. 63.
Previous Scholarship

Schröter-Gothein’s (1928; trans. into English 1966) two-volume publication remains until today one of the most respected, early accounts of garden art from the ancient world to the modern era.\(^{53}\) She describes and reviews the evidence for ancient Egyptian gardens in general from the Old to the New Kingdoms based on the pictorial and textual evidence that was available in the 1920s. Her study, however, does not include the textual evidence of the garden names in Egyptian. Schröter-Gothein describes various formal garden scenes from private Theban tombs dating from the early to late Eighteenth Dynasty and briefly mentions the elements that constitute them: architectural features and plants.\(^{54}\) Due to the early date of the publication, evidence of formal gardens was somewhat meager and a comprehensive study was not possible.

Hugonot’s work on gardens (1989) importantly surveys Egyptian vocabulary for types of gardens dated from Old Kingdom to Graeco-Roman Period sources.\(^{55}\) He provides considerable archaeological, textual, and pictorial evidence for his examination of gardens in temple, palatial, domestic, and funerary contexts from the Early Dynastic to the Ptolemaic Era.\(^{56}\) He describes formal garden scenes from private Theban tombs ranging in date from the Eighteenth to Nineteenth Dynasties, but does not use ancient Egyptian names to categorize them.\(^{57}\) Although his study is informative, it remains incomplete because the tomb scenes were neither examined chronologically nor were the flora and fauna, layouts, and architectural features fully identified.

Wilkinson’s (1998) monograph is analogous to Hugonot’s, offering an updated overview of Egyptian gardens from the Early Dynastic onwards based various forms of evidence.\(^{58}\)

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Wilkinson defines a formal garden as one “that is displaying symmetry, geometry, and pattern in their design.”\(^{59}\) She examines the types of trees and flowers that grew in pharaonic Egypt using archaeological, pictorial, and textual evidence. She certainly acknowledges that the Egyptians had terms and locations for their types of gardens and formal gardens,\(^{60}\) but does not use this as a nexus for her classification of them. She identifies the genus and Egyptian names of the plants and trees in the formal garden scenes, but she does not do this for the waterfowl, fish, or insects.\(^{61}\) Wilkinson does not look at the formal garden scenes chronologically and broadly defines them as funerary because of their location in tombs.\(^{62}\)

Daines (2008) argues that from the Old Kingdom to the Middle Kingdom, gardens were primarily focused around the gods and that in general “important questions about the evolution of the [Egyptian] gardens ha[ve] yet to be asked.”\(^{63}\) She argues that it was not until the New Kingdom that the idea of the garden as a tradition and as vehicle to display elite power came to pass,\(^{64}\) focusing primarily around the Amarna formal gardens. One of the aims of the present thesis is to demonstrate that that ‘tradition’ began far earlier than the reign of Amenhotep IV/Akhenaten.

Karelin and Kulikova (2010) resolve that the flora and architecture of ancient Egyptian gardens were imbued with symbolism, metaphor and allegory.\(^{65}\) Karelin and Kulikova acknowledge that many words for gardens existed in Egyptian but they do not use this as a crux to group them.\(^{66}\) They acknowledge that the Egyptians constructed both simple and complex formal


\(^{62}\) Daines, *Egyptian Gardens,* p. 16.

\(^{63}\) Daines, *Egyptian Gardens,* p. 16.

\(^{64}\) Daines, *Egyptian Gardens,* p. 16.

\(^{65}\) Dimitry Karelin and Irina Kulikova, “Сады в Древнем Египте (Gardens in ancient Egypt),” in Сад: Символы Метафоры Аллегорий ed. by E. D. Fedotova, (Moscow: Russian Academy of Arts, 2010), p. 31.

gardens. They handpick archaeological, pictorial, and textual examples of palace, house, temple, and tomb gardens from the Old to New Kingdom, exploring their architecture, flora, and use.

El-Saddik (2011) examines eight formal garden scenes. These formal garden scenes are studied synchronically and range in date from the Eighteenth to Twentieth Dynasty. El-Saddik describes their architectural features, plants, and animals but their unique layouts, architectural features, and flora and fauna are not fully observed. The inscriptions of some of the formal garden scenes are included; however, neither the names of the gardens in Egyptian are considered nor are the relevant surrounding scenes.

Tietze (2011) resolves that formal garden scenes in private tombs are idealized representations and, as such, does not attempt to categorize them, not even by their Egyptian names. He examines the same formal garden scenes that Hugonot (1989) did synchronically and speculates that there is no need for a typology because, in his view, Egypt was considered a garden in its entirety. Tietze describes the 15 formal garden scenes in the same fashion as El-Saddik. He examines their layouts and architecture but does not identify all of their flora and fauna.

Wolff and Felber (2016) collaborated on the most recent publication, focusing on the role of gardens in ancient Egyptian society. The selected examples generally come from late Eighteenth Dynasty Thebes and the Amarna Period and are referred to as ‘temple gardens’

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70 El-Saddik, „Gärtendarstellungen in Gräbern,” pp. 90-100.
72 “First of all, there is no need to define the term garden and its background. What do we understand – or better understood of the ancient Egyptians in regard to gardens? Is not the entire Nile Basin a single garden? And can the economy of the country be separated from the aesthetic, religious, and cultic aspects of a garden? Is not the Fayyum Oasis still today called the garden of the capital Cairo?” See Tietze, „Gärten in der Stadt,” p. 204.
‘pleasure gardens,’ ‘offering gardens,’ and ‘afterlife gardens.’ They do not consider the Egyptian names for simple and/or formal gardens as essential aspects for their classifications possibly because it was written as a museum catalogue of a special exhibition for the general public.

**Methodology**

Overall, Schröter-Gothein (1928/1966), Hugonot (1989), Wilkinson (1998), Daines (2008), Karelin and Kulikova (2010), Tietze, *et al.* (2011), and Wolff and Felber (2016) produced enriching studies. The formal garden scenes in private Theban tombs still require an additional investigation in order to advance our understanding of the layouts, water features, architecture, flora and fauna, and sociocultural significance of the actual formal gardens in Eighteenth Dynasty Thebes prior to the Amarna Period. It is the author’s hope that this study will ultimately assist those in identifying both simple or formal gardens from either textual, pictorial, or archaeological forms of an earlier or later date or ones that might be discovered in the future, as well as to further demonstrate how reexaminations of older material in concert with more recent evidence can garner nuanced results. This section outlines the methodology used to study the 16 formal garden scenes.

In order to conduct a comprehensive case study of these formal garden scenes, a typology is essential. Typologies are used in archaeology and art history to organize artifacts, material culture, and even architecture into groups. When an artwork is studied, whether it is in two- or three-dimensions, all of its aspects must be considered. The formal garden scenes are often labeled as a specific type of formal garden in Egyptian and are located within a particular decorative schema of the tomb. So, one must take into consideration their Egyptian name, their physical location and orientation within the tomb, and their relationship to one another. In doing so, this reveals for us the formal garden scene’s ‘setting,’ which is defined here as how they function

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within the decorative schema. A survey of the formal gardens’ layouts, architectural features, and flora and fauna will likewise be included to collect any important information. The catalogue of the 16 formal garden scenes are organized into entries with the following information:

1. Theban tomb number
2. Tomb-owner(s)
3. Type of formal garden scene
4. Date and location in the Theban Necropolis
5. Physical location and orientation within the tomb
6. Facsimile of the wall narrative and the ‘setting’ of the formal garden scene within it
7. Facsimile of the formal garden scene itself
8. Formal analysis or ‘visual description’ of the formal garden scene and the identification of its layout, water and architectural features, and flora and fauna
9. Main literature
10. Materials and techniques
11. Relevant tomb-owner and family titles

The relevant information for the entries of the formal garden scenes was collected from (a) first-hand observation of the scene and the surrounding scenes on the wall; (b) relevant inscriptions beside or in proximity to the scene; (c) relevant titles of the tomb-owner; (d) plates and photographs of the scene and its surrounding scenes archived in Das Digital Schott-Archiv (DSA), The Oriental Institute’s Records of The Epigraphic Survey Online (OIESO), or taken by past or current scholars who visited/worked in the tombs; (e) the scene’s description published in Porter and Moss (1970) and Kampp (1991); (f) studies on private Eighteenth Dynasty Theban tomb wall orientations in Manniche (1988); (g) individual tomb publications; and (h) other scholars who studied ancient
Egyptian formal gardens. As a result, certain types of formal garden scenes can be identified:

1. The š-formal garden scene (11 examples)

Scholars have classified this scene as “garden”75; “garden with trees and pool”76; “pleasure garden”77; “private home gardens”78; “gardens of private tombs”79; and “a city garden.”80 The creation of a standardized term for this formal garden scene is justifiable. In fact, the ancient Egyptians had a standardized term for it: š (ם[מ]ט) and its plural š(w (ם[מ]ט). There are 11 š-formal garden scenes that occur in the Theban Necropolis during this period in: TT 81, TT 109, TT 85, TT 100, TT 80, TT 93 #1, TT 93 #2, TT 93 #3, TT 63, TT E2, and TT 334.

2. The Domain of Amun formal garden scenes (five examples)

These formal garden scenes are defined by their mutual relationship to the Domain of Amun in the capital city of Thebes. The Domain of Amun or pr Imn (ם[מ]נ) refers to all the lands, mundane and sacred, controlled by the Amun cult on the East and West Banks of Thebes.81 Unlike the š-formal garden scenes, these formal garden scenes have individual names and to categorize them as simply a ‘temple formal garden scene’ would not adequately express their distinctiveness. As a result, the scenes are referred to by their distinct names: the ħnty-š-formal garden (ם[מ]נ נ[נ]ת), the ksmw-formal garden (ם[מ]נ מ[מ]), the š-formal garden (ם[מ]נ מ[מ] מ[מ];ם[מ]נ מ[מ] מ[מ] מ[מ]), the ṭ-nḥht-formal garden (ם[מ]נ מ[מ] מ[מ] מ[מ] מ[מ];ם[מ]נ מ[מ] מ[מ] מ[מ]) and the ħrrt-š-formal garden (ם[מ]נ מ[מ] מ[מ];ם[מ]נ מ[מ] מ[מ]). Five Domain of Amun formal garden

75 Schröter-Gothein, A History of Garden Art, pp. 8-10
76 Porter and Moss, Topographical Bibliography I, p. 466.
78 Hugonot, Le jardin dans l’Egypte ancienne, p. 129.
80 Tietze, „Gärten in der Stadt,” p. 204.
scenes occur during this period in: TT 39, TT 87, TT 90, TT 96, and TT 161.

How Were the Flora and Fauna Identified in the Formal Garden Scenes?

Identifying the flora and fauna in pictorial representations can be difficult because the ancient Egyptians showed them in profile, frontal and/or in aerial perspective, as well as in ways that can look hieroglyphic, standardized, or realistic. In addition, the paint of the flora and fauna has not always survived, making it sometimes difficult to identify a species. The Egyptians were committed to “strik[ing] a balance between the ideal and the actual when carving representations of plants, animals, and objects,” so they would forever be of use to the tomb-owner after death. The flora and fauna in the formal garden scenes were identified in this thesis by examining:

i. The rendering of their pictorial representation in the formal garden scene proper

ii. Their written mention in the formal garden scene’s texts

iii. The rendering of their pictorial representation or written mention in the scenes and texts beside the formal garden scene. The most common surrounding scenes are of rows of offering-bearers or of family members shown and/or mentioned as carrying baskets/bundles/bouquets of the flora and/or fauna from the formal gardens

Information about the flora and fauna’s representation in tomb art, names, archaeological remains, use, and significance to the Egyptians were gleaned from secondary source material, such as, for flora: Schweinfurth (1882); Moldenke (1886), Täckholm, et al. (1969/1974); Keimer and Germer (1961); Germer (1985/1988/2008); Hugonot (1989); Schoske, et al. (1992); Boutros (1999-2005); Manniche (2006); Hepper (2009); de Vartavan, et al. (2010); Kapel, et al. (2011); Tietze, et al. (2011); Greco, et al. (2012), Wiese, et al. (2014), and Gamal (2018); and for fauna: Bree and

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84 Wilkinson, The garden in ancient Egypt, p. 16; Dodson and Ikram, The Tomb in Ancient Egypt, p. 77.

**Thesis Organization**

There are 16 formal garden scenes examined in the following chapters. Chapters Two begins with formal analyses or ‘visual descriptions’ of the δ-formal garden scenes while Chapter Three starts with ones of the Domain of Amun formal garden scenes. These descriptions include abbreviated information from the entries found in the full typology of the formal garden scenes located in Appendix I. This is followed by an examination of each formal garden’s layouts, water and architectural features, and wider sociocultural significance in early to mid-late Eighteenth Dynasty Theban society, using extant textual, pictorial, and archaeological evidence. Chapter Four is a synthesized discussion of the patterns of the flora and fauna from Chapters Two and Three. Chapter Five summarizes the conclusions of this study and is followed by the Appendices I, II, and III, and the Bibliography. The scientific names of the flora and fauna are only provided at first mention while their full taxonomic descriptions, uses, and symbolism to the Egyptians are available in Appendix II: Herbarium and Faunarium. Appendix III offers the List of Figures.

**Translation Note**

Many of the texts have been reevaluated by the author in this thesis in order to validate and substantiate the usage of the formal garden terms therein. The translations were rendered through reexamining the hieroglyphic, transliterated, and/or previous modern language texts (English, French, or German) by other archaeologists, philologists, art historians, and/or Egyptologists. If the translation is by the author, only the hieroglyphic text will have a footnote beside it, giving credit to those who published it. If the transliteration or English translation have footnotes, this indicates that these are not the author’s transliterations and/or translations but another’s.
Chapter Two

The Š-Formal Garden

There are 11 Š-formal garden scenes found in the Theban Necropolis from the Eighteenth Dynasty prior to the Amarna Period: TT 81, TT 109, TT 85, TT 100, TT 80, TT 93, TT 63, TT E2, and TT 334. This chapter is comprised of ‘visual descriptions’ of the 11 Š-formal garden scenes followed by a discussion, examining the layouts, architecture, water features, and flora and fauna, and wider significance of Š-formal gardens in Thebes at this time. This is complemented by extant archaeological, textual, and/or pictorial evidence. The flora and fauna identified in all the formal gardens scenes as well as from the extant evidence in the current and following chapter are discussed alone in Chapter Four in order to be more succinct and useful for the reader.

**TT 81 (Ineni)**

*Date:* Amenhotep I to Thutmose III

*Location:* Sheikh Abd el-Qurna Cemetery

West – left rear wall of pillar 4 in the portico

*Wall Narrative:* Inspecting setting

*Formal Garden Scene:* See Appendix I Part I

*Description and Relevant Text:*

Two avenues of doum-palm (*Hyphaene thebaica* L. Mart.) begin this wall narrative. Ineni and his wife sit in a pavilion while a gardener carries water jugs. The text above this scene reads:

\[\text{Ineni and wife inspect formal garden in pavilion (L→R)}\]

**List of trees (L←R)**

Trees: Tree avenues

Inspecting his [š-formal garden] in the west,\(^{86}\) refreshing himself under

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\(^{85}\) The full entries of the š-formal garden scenes are located in Appendix I: Part I with images, titles, and bibliographies.

\(^{86}\) It is better to translate this as “in the west” than “of the west” because “of the west” implies a different formal garden all together. However, this is not the case, as it is Ineni’s earthly formal garden perpetuated into the hereafter.
his sycamore fig trees, seeing [those great] and beautiful trees that he planted on earth under the praises of that noble god [A]mun, [Lord of Thrones of the Two Lands].

The plant varieties of Ineni’s formal garden are then listed:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>nh(s)i</td>
<td>73 sycamore figs (Ficus sycomorus L.)</td>
<td>73</td>
</tr>
<tr>
<td>šwrb</td>
<td>31 persea trees (Mimusops laurifolia (Forssk.) Friis)</td>
<td>31</td>
</tr>
<tr>
<td>bn(i)t</td>
<td>170 date palms (Phenix dactylifera L.)</td>
<td>170</td>
</tr>
<tr>
<td>mzm</td>
<td>120 doum-palms</td>
<td>120</td>
</tr>
<tr>
<td>nh(s)i n</td>
<td>Five common figs (Ficus carica L.)</td>
<td>5</td>
</tr>
<tr>
<td>ḫt n šn(-ts)</td>
<td>Three mnwh-plants</td>
<td>3</td>
</tr>
<tr>
<td>b(s)k</td>
<td>Two morgina trees (Moringa peregrina (Forssk.) Fiori)</td>
<td>2</td>
</tr>
<tr>
<td>isr</td>
<td>12 grapevines (Vitis vinifera L.)</td>
<td>12</td>
</tr>
<tr>
<td>inh(r)m</td>
<td>Five pomegranate trees (Punica granatum L.)</td>
<td>5</td>
</tr>
<tr>
<td>ksb[t</td>
<td>Eight ksb-trees</td>
<td>8</td>
</tr>
<tr>
<td>ṃdm</td>
<td>16 carob trees (Ceratonia siliqua L.)</td>
<td>[16]</td>
</tr>
<tr>
<td>nb[s</td>
<td>Five Christ’s thorn trees (Ziziphus spinus Christi L. Desf.)</td>
<td>5</td>
</tr>
<tr>
<td>ḫtn[w</td>
<td>Five ḫwn-plants</td>
<td>5</td>
</tr>
<tr>
<td>mzm s ḫ(ns)</td>
<td>One argun-palm (Medemia argun Württemb. ex Mart.)</td>
<td>[1]</td>
</tr>
<tr>
<td>ḫt-ds</td>
<td>Two Egyptian riverhemp trees (Sesbania sesban L. Merrill?)</td>
<td>2</td>
</tr>
<tr>
<td>i[šd]...</td>
<td>...Desert date trees (Balanites ægyptiaca L. Delile)</td>
<td>...</td>
</tr>
</tbody>
</table>

---

87 Eberhard Dziobek, *Das Grab des Ineni: Theben Nr. 81*, (Mainz am Rhein: PvZ, 1992), p. 61, Texte 13a; also see Sethe, *Urkunden IV*, p. 73.
88 šni-t is the name of the fruit and/or seed that the mnwh-plant produces. It is likely a medicinal plant and the name of its fruit means “hair of the earth,” according to Germer, *Handbuch*, pp. 78, 113.
89 Germer, *Handbuch*, p. 56.
90 Germer, *Handbuch*, p. 158.
91 Aufrère concludes that it remains impossible to identify with certainty the ḫt-ds. She does suggest Egyptian riverhemp tree as a possibility. See Sydney Aufrère, « Remarques au sujet des végétaux interdits dans le temple d’Isis à Philae. » *BIFAO* 86 (1986): p. 24.
92 For the reconstruction of the lacuna as iṣd, see Henrich Brugsch, *Recueil de monuments égyptiens I*, (Leipzig: Librarie J. C. Hinrichs, 1862), pl. 36, p. 50; and the discussions in Natalie Baum, *Arbres et arbustes*, (Leuven: Peeters, 1988), p. 183; and in Germer, *Handbuch*, p. 37.
93 No conclusive evidence exists currently to identify this species according to Germer, *Handbuch*, pp. 33-34.
An avenue of date palms, an outer avenue of sycamore figs, *Tamarix* spp., two Egyptian riverhemp trees, and two Egyptian willow trees border the pool. The middle avenue might have depicted the other flora mentioned in Ineni’s list. The pool has traces of *Lotus* spp. and a gardener collects water from it. Ineni’s house, double-granary, and a large sycamore fig (?) are beside the formal garden, which are enclosed by a wall with wavy merlons and two gates.

**TT 109 (Min)**

*Date:* Thutmose III  
*Location:* Sheikh Abd el-Qurna Cemetery  
South – left rear wall of transverse hall  

**Wall Narrative**: Inspecting setting

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[Diagram of the wall narrative, including the different registers and scenes depicted.]

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**Formal Garden Scene:** See Appendix I Part I  
**Description and Relevant Texts:**  
This wall narrative begins with three registers of relatives seated behind Min who censes and offers

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97 The ancient Egyptians did not differentiate between tamarisk varieties, according to Baum, *Arbres et arbustes*, p. 200; and Germer, *Handbuch*, pp. 34-35.  
99 There is extreme paint deterioration on all of the trees depicted in this scene.  
100 This wall narrative is based on Schott Photographs 5764-5769, 5577-5588, and 8585; also see Porter and Moss, *Topographical Bibliography* I, p. 226, see esp. walls (3-5).
to Thutmose III. The narrative continues with three registers of temple musicians and offerings censed by Min. The formal garden scene follows with a pool full of blue lotus, (*Nymphaea caerulea* L. Savigny), white lotus (*Nymphaea lotus* L.), pintail duck (*Anas acuta* L.), *Tilapia* spp., likely *T. zillii* Gervais 1848, and catfish (*Synodontis* spp.). Two avenues of sycamore figs and persea surround the pool while an outer avenue of date palms and *doum*-palms enclose the formal garden. Two registers of workmen building a *nšmt*-bark\(^{101}\) are shown above the formal garden scene. To the right of this scene is Min’s son, Sobekmose, reciting a prayer to his parents:

\[ s3.f\ mr(w).f\ ḫm\ nṯr\ n\ Nit\ Sbkms\ n\ kȝ.k\ rnp(w)t\ šw.k \]

His son, his beloved, priest of Neith, Sobekmose, to your *kȝ* the fresh flowers, fruits and vegetables\(^{103}\) from your *š*-formal gardens.

Sobekmose offers the formal garden’s produce to Min and his mother, seated and inspecting their formal garden and the building on a *nšmt*-bark for the pool. The text in front of the couple reads:

\[ htp\ m\ š\ innty\ m33\ rnp(w)t\ nb(w)t \]

Enjoying (his) *š*-formal garden in the west (and) inspecting all the fresh flowers, fruits and vegetables.

The narrative continues with three registers of the formal garden’s produce,\(^{105}\) inspected and counted by Min seated in the upper righthand corner. The narrative ends with Min who sits and

---

101 The bark is labeled *nšmt*. See Virey, « Tombeau de Khem, » p. 366, fig. 2.
103 The term *rnpwt* has been translated as “fruit and vegetables” in Faulkner and Saba, *Egyptian Grammar*, p. 480; and “green plants/fresh flowers” due to its closeness to the verb *rnpi* “to be young,” see El-Maenshawy, “Aspects of the office of temple gardener in ancient Egypt,” p. 53. Thus, I have decided to translate the term throughout this thesis as the phrase “fresh flowers, fruits, and vegetables” in order to synthesize these interpretations. It is reasonable given the *rnpwt* labeled in the paintings includes flowers, fruits, vegetables, and even sometimes fauna.
105 This formal garden’s produce cannot be identified because the scenes are badly damaged.
teaches archery to the young Prince Amenhotep II in the courtyard of a royal palace (pr-ṣ2).

**TT 85 (Amenemhab called Mahu)**

*Date:* Thutmose III to Amenhotep II  
*Location:* Sheikh Abd el-Qurna Cemetery  
   East – right side wall of chapel  
*Wall Narrative*\(^{107}\): Inspecting setting

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<table>
<thead>
<tr>
<th>hkr-frieze</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min and wife receive the formal garden’s produce (L→R)</td>
</tr>
<tr>
<td>Servants w/ formal garden’s produce (L→R)</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Min and wife inspect the formal garden (L→R)</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Servants w/ formal garden’s produce (L→R)</td>
</tr>
<tr>
<td>Tree avenue</td>
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<td>Tree avenue</td>
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<tr>
<td>Tree avenue</td>
</tr>
<tr>
<td>Tree avenue</td>
</tr>
</tbody>
</table>

---

*Formal Garden Scene:* See Appendix I Part I  
*Description and Relevant Texts:*  
This wall narrative begins with Amenemhab and his wife, who are seated (far right proper) and inspect their ṣ-formal garden. The formal garden scene has a pool with white lotus. The inner avenues consist of persea and pomegranate, the middle ones consist of date and *doum*-palms, and the outer ones are likely sycamore and common figs.

Three registers of servants carry the formal garden’s produce, such as blue and white lotus blossoms, papyrus umbels, low cornflower (*Centaurea depressa* Bieb.), dates, *doum*-fruit, muskmelon, persea fruit, pomegranates, and Christ’s thorn fruit (jujube) follow. The narrative ends with Amenemhab and his wife, seated and receiving the formal garden’s produce.

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\(^{107}\) This wall narrative is based on Epigraphic Survey Negatives 2927, 2929, and 2932; Schott Photographs 3993-3394; 4131-4132; 7008-7014; and 8940-8943; and the wall’s description in Porter and Moss, *Topographical Bibliography* I, p. 175.
**TT 100 (Rekhmira)**

*Date:* Thutmose III to Amenhotep II  
*Location:* Sheikh Abd el-Qurna Cemetery  
East – right side wall of passage

**Wall Narrative:** Festival setting

---

**Formal Garden Scene:** See Appendix I Part I  
**Description and Relevant Text:**

This wall narrative begins with two registers of food preparation on Rekhmira’s estate (bottom righthand corner). The narrative continues with the feast brought to Rekhmira and the guests seated in the audience hall of his home (See the house column in the wall narrative). The feast celebrates the Beautiful Festival of the Valley,\(^{108}\) as the composition and text suggest:

\[hnsit \ m \ h3 \ h3 \ wfr \ iht \ m \ hwt-ntr \ 'mnn \ [m \ 'ipl-swt]\]

\[hr \ iht \ hswt \ hm \ n \ ntr \ pn \ hr \ imy \ hrrwnt \ n \ ity…\]

---

\(^{108}\) The Beautiful Festival of the Valley is proposed by Wilkinson, *The garden in ancient Egypt*, p. 97; while Rekhmira’s funeral feast is proposed by Geßler-Löhr, „Die Totenfeier im Gärten,“ p. 166. The dilemma is both celebrations honor the dead and have similar rituals. As a caveat, the funeral feast is typically depicted on the west (left) side of a wall while this scene is on the east (right) side. Thus, the Beautiful Festival of the Valley seems more likely.
Sitting by the thousands [in] the great hall (audience hall) upon returning from the Temple of Amun [at Karnak] [and] upon making blessings to the majesty of this god who is in the affairs of the [sovereign]...\textsuperscript{109}

Beside the guests is the formal garden scene that has a pool full of blue and white lotus, curled pondweed \textit{(Potamogeton crispus L.)}, \textit{Tilapia} spp., likely \textit{T. zillii}, and elephantfish \textit{(Petrocephalus/Marcusenius} spp.). A \textit{n\ss}mt-barque carries a statue that is censed and pulled across the pooled garden by six men towards a man with a papyrus bouquet standing in front of the garden shrine (far left). Three avenues flank the pooled garden. The inner avenue likely depicted low-growing vegetation.\textsuperscript{110} Three gardeners attend to the middle avenue of \textit{doum}-palm, date palm, \textit{argun}-palm, and mandrake.\textsuperscript{111} The outer avenue consists of sycamore figs, common figs, unidentifiable trees,\textsuperscript{112} and possibly mandrakes and grapes.\textsuperscript{113}

Two registers follow that depict rites performed on the same statue from the \textit{n\ss}mt-bark now shown inside the garden shrine.\textsuperscript{114} On the second register, offering-bearers carry the formal garden’s produce to the statue, such as blue and white lotus blossoms, Christ’s thorn fruit, persea fruit and/or mandrakes, papyrus blossoms, muskmelon, honey (Egyptian honey bees or \textit{Apis mellifera lamarckii} Cockerell), and dates. The offering-bearers say:

\begin{center}
\includegraphics[width=0.5\textwidth]{image}
\end{center}


\textsuperscript{110}When low-growing vegetation is shown stylized, it resembles Gardiner M (but smaller in scale. This composition is comparable to the low-growing (albeit realistic) vegetation around the formal gardens in the TT E2 scene, and TT 96 scene described in Chapter Three.

\textsuperscript{111}Take note of the right side and bottom right side of the middle tree avenue. There are four low-growing plants with fruit in upward clusters, not downward clusters, as with Palmae. The style of foliage is comparable to the mandrake and grapes in the TT E2 scene.

\textsuperscript{112}The paint is too deteriorated, but they were likely identifiable in antiquity.

\textsuperscript{113}See the bottom left side of the outer avenue. The last plant has remains of fruit.

\textsuperscript{114}This register is framed by a column and roof suggesting the interior of a building, likely the domestic shrine.
Presenting to you the statue offering—stands of fruits and flowers, bringing to you the choicest picks... from those, that are in [your š-formal garden]...Carrying to you every gift of every fruit and vegetable and every sweet-scented flower. Be content from its produce, be fully satisfied from its provisions, be overjoyed from its fruit and vegetables, [and] do what your ka loves in it forever and ever.  

Next is Rekhmira’s son Amenhotep presenting the formal garden’s produce to his father and mother who are seated at a table. These include blue and white lotus blossoms, dates, pintail duck, muskmelon, and other offerings that are listed above the scene:

Christ’s thorn fruit...desert date fruit...herbs...Egyptian walking onion (Allium × proliferum (Moench) Schrad. ex Willd.) and/or bulb onion (Allium cepa L.)...grapes...common figs...

Five priests (ḥm-ḥntr) cense and libate the garden produce and feast food while Amenhotep recites a prayer:

115 See Sethe, Urkunden IV, no. 1167; and Virey, « Le jardin de Rekhmara, » p. 156.
Words spoken: presenting to you lotus blossoms that grew forth from your [š-formal garden]. You do not harvest [them] from it...because its yield is for you [and] every gift of every fruit and vegetable that are in it. Be pleased from its produce, be fully satisfied from its provisions, be overjoyed from its fruit and vegetables, be refreshed in the shade of its [tree groves], [and] do what your ka loves in it forever and ever.116

Rekhmira and his wife Meryt happily receive the formal garden’s produce, responding:

\[\text{\textit{shmh ib hšt m ršwt}}\]
\[\text{\textit{sm3 m nft r sšn }<n> \text{ sh fn k ŋntyw}}\]
\[\text{\textit{m iry wpt n ks n...Rh-mi-rr mš-Š-hrw...Mryt mš(t)-hwr}}\]

What pleasure and happiness from joy! Enjoying the beauty of the lotus blossoms from the [š-formal garden] and smelling [their] perfume, fitting to the delight of the ka...of Rekhmira justified...[and] Meryt justified.117

The narrative ends with a large section dedicated to the Opening of the Mouth Ritual performed on the statue and three more vignettes where additional sons offer to Rekhmira and Meryt seated.

**TT 80 (Djehutynefer)**

**Date:** Amenhotep II

**Location:** Sheikh Abd el-Qurna Cemetery

East – right side wall of chapel

**Wall Narrative:** Funeral procession setting

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**Formal Garden Scene: See Appendix I Part I**

**Description and Relevant Texts:**
The garden scene is the focus of this wall narrative. The formal garden scene has a house with a pool (damaged) with three tree avenues of *argun*-palm, *doum*-palm, date palm persea (?), sycamore figs (?), and grapevines on a pergola.

A *nšmt*-bark and the wake at the house before the funeral cortège sails to the Necropolis on the West Bank are depicted in two registers to the right of the formal garden scene. Next are offering-bearers carrying the formal garden’s produce, such as papyrus blossoms, dates, grapes, *Tilapia* spp., and pintail duck to Djehutynefer, his wife, and his sister all seated. The narrative ends with Djehutynefer’s daughter offering the formal garden’s produce: “..._REFER... n kš.ₖ... to your *ka*...”

**TT 93 #1 (Qenamun)**

**Date:** Amenhotep II  
**Location:** Sheikh Abd el-Qurna Cemetery  
Northeast – right front wall and right rear wall of transverse hall  

**Wall Narrative #1: Theophanic setting**

**Formal Garden Scene: See Appendix I Part II**

**Description and Relevant Texts #1:**

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118 These trees, like other sections of the tomb, are unfinished and/or deteriorated. Persea and sycamore fig are suggested because they are comparable to those depicted in the TT 85 scene.

This wall narrative\textsuperscript{120} begins with a tree-goddess who stands in front of Qenamun seated under a large sycamore fig protected by two \textit{w3dt}-eyes. The tree-goddess says (relevant Text B):

\begin{multicols}{2}

\begin{center}
\begin{tabular}{c}
\texttt{dq mdw in nh(s)(t)i Nwt ink Nwt kst wr(t) m sht... hri skbb.k hr sm3w.i htp.k m htp... i’t.i hr.k t-p-dw3yt m bw nb nfr iwt n.k H’py hr htp... h3 m ht...mn n.k t.i...hkt.i...irtt.i...nk’wt. <i> ... k3yw.i...htpt...ds3w...rnp(w)t...ht nb t nfrt w’dt
\end{tabular}
\end{center}

Words spoken by the tree-goddess Nut: I am Nut, high and great on the horizon...Sit under me, cool yourself under my branches, please yourself with my offerings. I satisfy you at dawn with every good thing. Hapy is coming to you with offerings...thousands of things...offering to you my bread...my beer...my milk...[my] notched sycamore figs...my ripened sycamore figs...bundles of herbs...produce...fruits and vegetables...[and] all good and pure things...so that you may live off them, may be nourished from them, may receive them, [and] may be refreshed by them eternally.\textsuperscript{121}

The formal garden scene follows and has a pooled garden with \textit{Lotus} spp.; red-breasted geese (\textit{Branta ruficollis} Pallas); \textit{Tilapia} spp., likely \textit{T. zillii}; catfish; and elephantfish. The pooled garden is surrounded by grapevines on a pergola. Avenues of \textit{doum}-palm, date palm, sycamore fig, papyrus, desert date (?), and Christ’s thorn\textsuperscript{122} surround the pool, as well as the formal garden’s shrine. Text A is associated with the formal garden scene and reads:

\begin{center}
al\textsuperscript{120} A stela with an autobiographical text and three registers of offering-bearers faces the center of the north wall and are not associated with this formal garden scene.
\textsuperscript{121} For the reconstruction of the hieroglyphs, see Norman de Garis-Davies, et al., \textit{The Tomb of Ken-Amun at Thebes}, (New York: MMA, 1930), p. 46, pl. XLVa.
\textsuperscript{122} See the list of offerings to Geb and the newly planted sycamore figs painted above the formal garden scene.
\end{center}
A ritual offering to Geb and to the newly planted sycamore fig trees of this [ṣ-formal garden] of the Chief Steward in the Peru-nefer, Qenamun, thousands of desert date fruit...Christ’s thorn fruit...fowl...plucked green plants...[and all fresh flowers, fruits and vegetables]...

The wall narrative ends with “offering-bearers and garlanded oxen and gazelle.”

**TT 93 #2 (Qenamun)**

*Date:* Amenhotep II  
*Location:* Sheikh Abd el-Qurna Cemetery  
North – left rear side of column towards the left front wall of transverse hall  

**Wall Narrative #2:** Fishing setting  
**Formal Garden Scene:** See Appendix I Part I  
**Description and Relevant Texts #2:**

This wall narrative shows Qenamun and his wife fishing in a pooled garden full of curled pondweed, *Lotus spp.*, *Tilapia spp.*, likely *T. zillii*, carp (*Labeo* spp.), catfish, and elephantfish. The text in front of the couple reads:

\[ htp \text{ di niswt Gb n \(n\hbar(s)\hbar(t)\)w m3wt n \(s\ h\ h\)r pr n Prw-nfr [Kn-\'lmn]\} \]

\[ h\hbar s.hn...i\hbar d.w...nbs(w)...
3pdw...]\text{htil w3\hbar d.t...}\text{nmp(w)\text{t} nb(w) <t> ...} \]

Having fun in his [ṣ-formal] garden that is on the west bank of the city.\(^{125}\)

Below the scene are men who lead fattened cattle across fields.

---

\(^{123}\) For reconstruction of the hieroglyphs and translation, see Davies, *et al.*, *The Tomb of Ken-Amün at Thebes*, p. 46, pl. XLVb.  
\(^{124}\) Davies did not make a facsimile of this scene. It is possible that formal garden’s produce is depicted here, but the MMA T Series Photographs housed at the Griffith Institute have yet to be digitalized. This description comes from Porter and Moss, *Topographical Bibliography* I, p. 192.  
\(^{125}\) For the reconstruction of the hieroglyphs, see Helck, *Urkunden 17-22*, no. 1397.
TT 93 #3 (Qenamun)

Date: Amenhotep II
Location: Sheikh Abd el-Qurna Cemetery

West – halfway to the left rear and left front walls of the transverse hall

Wall Narrative #3: Inspecting setting

Formal Garden Scene: See Appendix I Part I

Description and Relevant Texts #3:

Three registers of collars and bracelets\(^{126}\) are placed above this scene.

Qenamun is seated below and inspects a table of the formal garden’s produce with persea fruit, mandrakes, and dates beside the formal garden. A gardener collects water from a pool full of *Lotus* spp.; *Tilapia* spp., likely *T. zillii*; and catfish. Around the pool are papyrus, scented mayweed (*Anthemis* or *Matricaria* spp.),\(^{127}\) and common reed (*Phragmites australis* (Cav.) Trin. ex Steud.). Avenues of *doum*-palm, date palm, and persea (?) flank the sides of the pooled garden.

TT 63 (Sobekhotep)

Date: Thutmose IV
Location: Sheikh Abd el-Qurna Cemetery

North – right side wall of passage

Wall Narrative: Theophanic setting

Formal Garden Scene: See Appendix I Part I

Description and Relevant Texts:

\(^{126}\) Perhaps they are made out of vegetation? A copy or photograph of these three registers does not exist.

\(^{127}\) The foliage is comparable to the scented mayweed depicted in TT E2.
This wall narrative begins with Sobekhotep and his wife inspecting grain, wine and fish production and then hunting in the marshes. The formal garden scene follows, consisting of a large house or manor beside a pool with blue and white lotus and Tilapia spp., likely T. zillii. Sobekhotep and his wife drink from the pool bordered by five rows of persea, sycamore figs, common figs, doum-palm, date palm, and argun-palm. Two tree-goddesses emerge from sycamore figs on the right and left sides of the pool, offering their protection and nourishment to Sobekhotep and his wife seated:

Tree-goddess on viewer’s right:

qd mdw in Nh(ṣ)ti nty ḫr kꜣ ḫ isb š.f...rn.s mkt nb.s...Sbk-ḥtp...iw ind ḫr.k in Rc ii.n.[i] stp-s3 ḫ3 nb.i...

Words spoken by the tree-goddess on the eastern side of his [ṣ-formal garden]...She is called “She-who-protects-her-lord”...Sobekhotep... “Be grateful for Ra, I have come as protection, O my lord.”

Tree-goddess on viewer’s left:

qd mdw in Nh(ṣ)ti nty ḫr kꜣ ḫ ḫnty š.f rn.s snmt nb.s... Sbk-ḥtp...iw ind ḫr.k in Rc...tw m [iḥt nbt nfrt wḥbt ḫmty.i]...

Words spoken by the tree-goddess on the western side of his [ṣ-formal garden]. She is called “She-who-nourishes-her-lord”...Sobekhotep...“Be grateful for Ra...you will be nourished with [all good and pure things, that are in me]”...

---

128 A small section of structure’s cavetto is visible in the upper left-hand corner below the fourth tree avenue. This section of the wall was destroyed by an intrusive tunnel. See Dziobek and Abd el-Raziq, *Das Grab des Sobekhotep: Theben Nr. 63*, Tafel 40.

129 Dziobek and Abd el-Raziq, *Das Grab des Sobekhotep: Theben Nr. 63*, 66, Texte 19a.

130 Dziobek and Abd el-Raziq, *Das Grab des Sobekhotep: Theben Nr. 63*, 66, Texte 19b.
The narrative continues with three registers of servants carrying garden produce, such as blue and white lotus blossoms, papyrus blossoms, dates, doum-fruit, persea fruit, Christ’s thorn fruit, grapes, sycamore figs, pomegranates, mandrakes, and pintail duck. Below the formal garden scene are butchery scenes (?) meaning to show a feast in preparation. Sobekhotep’s son offers the garden produce to his father and mother who is seated with Princess Tia on her lap. The narrative ends with a bottom register of guests enjoying the feast beside the seated couple and the princess.

**TT E2 (Nebamun)**

*Date:* Thutmose IV to Amenhotep III  
*Location:* Dra’a Abu el-Naga Cemetery?  
 West – left side wall of chapel

**Wall Narrative**: Theophanic setting

<table>
<thead>
<tr>
<th>Offering-bearers w/ formal garden's produce?</th>
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<tbody>
<tr>
<td>Offering-bearers w/ formal garden's produce?</td>
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<td>Dado?</td>
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</table>

**Formal Garden Scene:** See Appendix I Part I  
**Description and Relevant Texts:**  
This wall narrative begins with Nebamun and wife seated in front of tree-goddess emerging from a large sycamore fig and saying:

![Hieroglyphs](image)

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132 This wall narrative follows observations made in Parkinson, *The Painted Tomb-Chapel of Nebamun*, pp. 52, 134-137, figs. 63, 143; and the orientation of the text and of the tree-goddesses.  
133 For hieroglyphs, see Parkinson, *The Painted Tomb-Chapel of Nebamun*, pp. 52, 136, fig. 63.
Words spoken by the tree-goddess Nut to the lord of this δ-formal garden...Nebamun...

and pintail duck. Around the pool are papyrus, scented mayweed, opium poppy (*Papaver somniferum* L.), and low cornflower. Two avenues of persea, sycamore figs, common figs,*

doum*-palm, mandrakes, and grapevines also border the pool.

A second tree-goddess emerges from a sycamore fig on the top right and possibly offered her food and drink to another scene Nebamun and his wife seated. On the far-right side of the bottom tree avenue, a third tree-goddess might have existed to balance the scene’s composition.

Two registers of offering-bearers with the formal garden’s produce likely ended the narrative.

**TT 334 (Unknown)**

*Date:* Amenhotep III  
*Location:* Dra’a Abu el-Naga Cemetery  
   West – right front wall of transverse hall  
*Wall Narrative*: Inspecting setting  

*Description and Relevant Text:*

This wall narrative begins with the tomb-owner’s daughter offering to her parents. Next are two registers of the formal garden’s produce inspected by tomb-owner shown seated twice: one with him under a sycamore fig. The remains of the text read:

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135 Four other trees are present, but they cannot be identified because of the paint deterioration. The two registers with servants who carry the formal garden’s produce, possibly still present in the tomb, would aid in their identification in the future.

136 The text in front of this tree-goddess was destroyed when the painting was removed from the wall.

137 A pattern of four trees with three palms is depicted in the top tree avenue. Due to fragmentation, the bottom tree avenue is missing its fourth tree at the far-right end of the scene. Is the fourth tree another tree-goddess?

138 “If the decorated area of the wall was similar in height to the walls of the outer chamber, there were probably two registers beneath the [formal] garden scene.” See Parkinson, *The Painted Tomb-Chapel of Nebamun*, p. 137.

139 This wall narrative is based on “Four registers. I, Daughter with others, offers to deceased and wife. II, Deceased seated in front of house. III, Deceased seated in... garden. IV, Harvest brought before deceased,” in Porter and Moss, *Topographical Bibliography* I, p. 401; and Norman de Garis-Davies, “The Town House in Ancient Egypt,” *MMS* 1.2 (1929): fig. 9.

140 Davies, “The Town House in Ancient Egypt,” fig. 9.
Inspecting the harvest, Chief of Herdsmen [of Amun?].

The produce is difficult to identify because the depiction is very damaged; however, pintail duck, *Tilapia* spp., likely *T. zillii*, dates, and persea fruit remain visible. The formal garden scene is divided between the second and third registers. It begins with a house and large tree adjacent to the pooled garden flanked by two avenues of trees. A walled tripartite garden shrine is beside the pool with a courtyard and a double row of tree avenues leading to the shrine. Rows of trees entirely surround the shrine. On the fourth register, the sequence ends with the formal garden’s produce carried to the tomb-owner.141

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141 The formal garden’s produce in this register cannot be identified because there is no known photograph and the tomb is “blocked up.” See Reginald Engelbach, *A Supplement to the Topographical Catalogue*, (Cairo: IFAO, 1924), pp. 26-27, 31.
Discussion

Layouts, Architecture and Water Features in the Š-Formal Gardens of this Period

This type of formal garden could be laid out in various forms. The enclosure walls range from high straight walls, top undulating walls, or low straight walls. The formal garden might have one to two gates as front entrances. From the pictorial evidence, as well as from extant archaeological evidence from Amenhotep, Son of Hapu’s Memorial Temple, a š-formal garden could range from a small plot with a central water feature bordered by one tree avenue to a large plot surrounded by six tree avenues (See Figs. A3.1-A3.14). A š-formal garden further might include several types of

<table>
<thead>
<tr>
<th>Table 2.0: Possible Features of a Š-Formal Garden¹⁴²</th>
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<tbody>
<tr>
<td>Enclosure walls (pr)</td>
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<tr>
<td>Gates (sbsp)</td>
</tr>
<tr>
<td>Pools (š)</td>
</tr>
<tr>
<td>Water gardens¹⁴³</td>
</tr>
<tr>
<td>$Hsp$-plots (planting beds)</td>
</tr>
<tr>
<td>(H)</td>
</tr>
</tbody>
</table>

¹⁴² Drawings by author © 2020, after Davies (1923, 1935, and 1944), Hugonot (1989), Dziobek (1991), and Parkinson (2008), and the drawing of the gathering honey facsimile in Rekhmira (TT 100) based on de Garis-Davies’s: https://www.metmuseum.org/art/collection/search/544626.

¹⁴³ In garden history, a ‘water garden’ describes a type of garden that is either (i) planted not in but along the edge of a water feature or (ii) comprised of predominately aquatic species but not planted beside a water feature. For examples, see Fig. A1.8 and Fig. A1.13 in Appendix I. See Merriam-Webster’s Collegiate Dictionary, s.v. “water garden,” accessed June 14, 2020, https://www.merriam-webster.com/dictionary/watergarden.
Tree avenues (ḥt) and/or groves (mnw)

Seated pavilions (mṣrw)

Libation basins in the form of pools (šw)

Garden shrines (ḥwt)

Arbors and pergolas (kṣmw)

Apiaries (ḥfy)?

———

The word for an apiary in Egyptian is unclear. Honey bee was called ḥfi-n-bt (ḥfinebt) or ḥfi (ḥfine), coming from the same root as ḥfi (ḥfine) or ‘to squeeze out.’ It seems possible then that an apiary was called something along the lines of ḥfy, which as a nisba, would literally mean ‘the location/place of the honey bees/squeezing out.’ For more information, see Erman and Grapow, WB 1, nos. 413-4., 182.1-.11. Apiaries in modern Egypt continue to be fabricated similar to those of the New Kingdom with long conical honey pots called in ancient times: mnt- or mdkt-jars. Compare to the image of an apiary in Rekhmira’s tomb (TT 100) in Porter and Moss, Topographical Bibliography I, p. 206 and to the de Garis-Davies’s gathering honey facsimile https://www.metmuseum.org/art/collection/search/544626. For more information on its ethnography in modern Egypt, see Gene Kritsky, Tears of Re: Beekeeping in ancient Egypt, (Oxford: Oxford University Press, 2015), p. 85.
simple gardens into its layout, such as a water garden, $hsp$-plot, or grape arbor. A ś-garden’s pool could be rectangular, elongated, square, or T-shaped. A pool might have edging stones or one to two descending steps to facilitate access to the water, plants, fish, and waterfowl. The water gardens (see footnote 143) typically surround the pool; however, they might also be placed as separate plots fronting a pool, garden shrine, or as an additional feature beside a tree avenue. The $hsp$-plots (planting beds) are arranged into grids and planted with a variety of vegetables and herbs. Arbors and/or pergolas are supported by papyriform columns and roofed with latticework that act as peristyles, either around a pool or as a separate part of the formal garden all together (See Fig. A3.6-.7). One to seven types of trees are planted in contrasting, opposing, or randomized patterns. Architecture, such as pavilions with seats might be placed among the tree avenues for relaxation as well as places from which to inspect the ś-formal garden’s produce, as seen in TT 81. In the wall narratives of the TT E2, TT 63, TT 80, TT 85, TT 93 #3, TT 100, TT 109, and TT 334 ś-formal garden scenes, the tomb-owners and/or family members are seated beside their formal gardens, which could be interpreted as them sitting in pavilions or chairs. Libation basins in the form of pools might be placed beside the actual pool (See Fig. A3.13). Garden shrines are never located in the center of this type of formal garden but always at its terminus, as seen in TT 93 #1, TT 100, and TT 334. The shrine could be built quadrilateral with a cavetto cornice and/or torus moulding. To balance the ś-formal garden’s layout, the pool is typically placed in the center, creating a symmetrical or focused landscape (See Figs. A3.1-.2, A3.4-.11, A3.13). However, it might also be placed asymmetrically closer to the entrance, as with TT 109 and TT 334 (See Figs. A3.3, A3.11). Apiaries are not shown in the ś-formal garden scene but could have been present, as honey is sometimes included in their produce depicted beside the scene.145 Sometimes part of

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145 See the TT 100 wall narrative and the entry of the Egyptian honey bee in Appendix II.
the formal garden might be placed higher than the other parts. In TT 334, for example, the shrine is located at a higher elevation than the pool (See Fig. A1.14).

**Extant Evidence of Š-Formal Gardens during this Period**

Extant archaeological, textual, and pictorial evidence indicates royal and private Š-gardens were built during this period. From the royal sphere, a stela from the Egyptian Museum, Cairo (JE 34002) erected by Ahmose I in honor of his grandmother Queen Tetisheri, states that the pharaoh constructed a cenotaph pyramid-shrine enclosure with a Š-formal garden at Abydos for her:

![Stela](image)

...\textit{wnn is m'ch't.s m ty zt hr ss}wt Wsst sbdw dd.n nn ḥrt iw sb.n hm<..i> \textit{dit īrt n.s mr-ḥwt m tš-dsr m-śšt mnw nw ḫm<..i> šdi š.f} wdi ḥwt.f smm p3 św tf grg m rmṭw nhbw m śḥwt ḫnw-kš ḫnsbw...

...(Although) her tomb and cenotaph are at this moment on the soil of Thebes and Abydos, I have said this (to you): My Majesty desired to have made for her (also) a pyramid-shrine enclosure in the necropolis close to the monument of My Majesty. Its Š-formal garden will be dug, its trees will be planted, its offerings will be founded, equipped with people, endowed with fields, presented with herds, kš-priests, and ritual priests...\footnote{147}

Magnetometry surveys conducted by the Ahmose and Tetisheri Project discovered the enclosure (ḥwt), described in the Egyptian Museum stela, was considerably large (68.5 m x 85.5 m or 225 ft x 280.5 ft), dwarfing the cenotaph pyramid-shrine (5 m x 8 m or 16.5 ft x 26 ft) in the center.\footnote{148}

Therefore, Tetisheri’s Š-formal garden described in the Egyptian Museum stela was likely


extensive, as it must have been planted within the large enclosure in the vicinity of her pyramid-shrine (mr-hwt) and cenotaph (m‘h’t)\textsuperscript{149} (See Fig. A3.25). The shrine stood on a processional way that was equidistant from Ahmose I’s pyramid and memorial temple to the east and the terraced cenotaph temple to the west; however, excavations have yet to yield any archaeobotanical evidence of formal gardens in proximity to his Abydene monuments\textsuperscript{150} (See Fig. A3.26).

The Amun sanctuary reliefs and inscriptions in Hatshepsut’s memorial temple at Deir el-Bahari attest to the construction of š-formal gardens with libation altars, water gardens of papyrus, elongated pools full of lotus, pintail duck, \textit{Tilapia} spp., and \textit{Syndontis} spp., and \textit{hsp}-plots of cos-lettuce, which might have been in the upper court of the sanctuary\textsuperscript{151} (See Figs. A3.27, A3.30):

\[\text{šw nw irtt ir.n hmt.s r wnn hr gswy ntr pn htf htp m Dsr Dsr(w) r ñh.ti dl...hw hb(w) spd(w) sbdw hrp...}\]

š-formal gardens of milk\textsuperscript{153} made by Her Majesty, that they may be close to this god when he rests in the Holy-of-Holies in order that she may live eternally...festival food, fowl, fish brought (?)...  

Hatshepsut also built a shrine called ‘Rising-of-the-Horizon-of-Amun’ that had a š-formal garden.\textsuperscript{154} It is attested from a wall fragment (Block 243) of her Red Chapel, discovered south of the Third Pylon of Karnak.\textsuperscript{155} Interestingly, the texts are inscribed in front of a pair of fecundity

\textsuperscript{149} See the map reconstruction of the ‘Tetisheri Shrine’ and 3D surface plot in Stephen Harvey, “New evidence at Abydos for Ahmose’s funerary cult,” pp. 4, 6.

\textsuperscript{150} Harvey, “The Cults of the King Ahmose at Abydos,” pp. 96-102, 103-104; Harvey, “New evidence at Abydos for Ahmose’s funerary cult,” pp. 4-5.

\textsuperscript{151} Perhaps evidence of the pools and \textit{hsp}-plots was not found because they had been made of mudbrick and elevated like the \textit{hnty}-š-formal garden in the temple’s first court examined in Chapter Three. For example, see Édouard Naville, \textit{The Temple of Deir el Bahari V: Upper Court and Sanctuary}, (London, EES, 1899), p. 10, see esp. pl. CXLII.

\textsuperscript{152} Naville, \textit{The Temple of Deir el Bahari V: Upper Court and Sanctuary}, p. 10, pl. CXLII.

\textsuperscript{153} Likely referring to the cos-lettuce in its \textit{hsp}-plots or to the ritual pouring of libations into its pool-shaped basins, see Figs. A3.27, A3.30 in Appendix III.


\textsuperscript{155} Lacau and Chevalier, \textit{Une chapelle d’Hatchepsout à Karnak I}, p. xxvi.
figures: a female one personified as the shrine and a male one personified as the shrine’s š-formal garden:

Female fecundity figure with a hwt-ideogram above her head, saying:

\[
\begin{array}{c}
\text{hwt Msz-t-kz-Rc' } \text{Imn h' sht}
\end{array}
\]

The shrine of Ma’atkara (called) ‘Rising-of-the-Horizon-of-Amun.’

Male fecundity figure holding a š-ideogram, saying:

\[
\begin{array}{c}
\text{Imn } \text{š w'b kbb } \text{qd mdw ini n.k rnpwt nb(w)t kbb(wt) w'b(wt) imi}
\end{array}
\]

The š-formal garden of Amun (called) ‘Pure-and-Fresh.’ Words spoken: I bring to you all the fresh and pure flowers, fruits, and vegetables that are in me.

Based on textual evidence in Djehuty’s tomb (TT 110), scholars believe this particular shrine was located somewhere in the vicinity of the memorial temples and tombs in Deir el-Bahari.158

A right granite doorjamb found in the backfill of the Second Pylon attests that Amenhotep II built a š-formal garden in the Karnak precinct as a monumental donation to Amun:

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156 Note how the text is enclosed in an ideogram for shrine with an enclosure (hwt). See the text and translation in Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 75.

157 See the text and translation in Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 75, footnote 7.

158 Djehuty (TT110), who was an ‘Overseer of Construction Works’ under Hatshepsut, boasts in his tomb that he assisted in the construction of Hatchepsut’s memorial temple (‘Holy-of-Holies-of-Amun’) and a shrine called ‘Rising-of-the-Horizon-of-Amun.’ Text from his deeds: “‘Rising-of-the-Horizon-of-Amun,’ the great temple of Amun, his horizon, is found in the Western Hills.” Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, pp. 74-75; Sethe, Urkunden IV, nos. 422-423.
[The Good God], King of Upper and Lower Egypt, A’akheperura, he has made as his monument for his father Amun-Ra, the making for him a holy place of refreshment [called] ‘A’akheperura-satisfies-Amun’ by decorating [it] with his [S-formal garden called] ‘Libation-of-Amun’ of beautiful sandstone, a granite gateway, and copper door leaves. It is His Majesty who sanctifies this [S-formal garden], who adorned [it] with reeds, and who planted papyrus, lotuses, [fresh flowers, fruits and vegetables], rushes, and lotus buds, that he might make all life-giving like Ra forever.  

From the time of Thutmose IV, a British Museum stela (BM EA 1332) erected in Abydos by Iuna ‘Overseer of Shipbuilding’ mentions he crafted a Sekhmet bark to be used in a S-formal garden of the pharaoh’s palace (pr-ς), which might be the palace that was north of Karnak’s main (western) entrance and is known since the reign of Hatshepsut.

...I crafted the Sekhmet bark in the S-formal garden of the pharaoh’s palace, child of the royal nursery, Iuna...

This particular palace is likely depicted in Neferhotep (TT 49), dating to Ay, and might be the same one where Min taught archery to the young prince Amenhotep II (see the TT 109 wall narrative). For example, the palace is show beside Karnak’s main (western) entrance and has a

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159 Charles C. van Siclen III, Two Theban Monuments from the Reign of Amenhotep II, (San Antonio: Van Siclen Books, 1982), see the hieroglyphs in fig. 10 and the translation, p. 16; also see Wolfgang Helck, Historisch-Biographische, (Wiesbaden: Harrassowitz, 1975), p. 134, no. 43. Van Siclen and Wilkinson think this text refers to the ‘t-nt-ḥt-formal garden in TT 96. However, the text beside the TT 96 scene in Chapter Three explicitly states that Amenhotep II renewed the ‘t-nt-ḥt-formal garden built by his ancestors, while this doorjamb text suggests the construction of a whole new formal garden during the pharaoh’s reign.

160 ‘Thutmose IV...received news of the Nubian uprising in his Year 8 when he was ‘next to the city (dmi) of Karnak’ in Thebes to carry out worship services. So, he will have slept in the palace next to Karnak, which is also mentioned by Hatshepsut.” See Wolfgang Helck, Zur Verwaltung des Mittleren und Neuen Reichs., (Leiden: Brill, 1975), p. 6; Wilkinson, The garden in ancient Egypt, pp. 132-133, fig. 67.

161 Iorwerth E. S. Edwards, Hieroglyphic texts from Egyptian stelae, etc. in the British Museum VIII, (London: Harrison and Sons, Ltd., 1939), p. 40, pl. XXXIII.

162 Wilkinson, The garden in ancient Egypt, pp. 132-133, fig. 68.
garden with pomegranate and sycamore fig trees and grapes growing on papyriform pergolas beside its harem. Yet, this is likely another garden in the palace, as the ś-formal garden mentioned in the British Museum stela had to have had a pool to float boats and barks.

Although there is no archaeological evidence of ś-formal gardens built by Amenhotep III in Thebes, the paintings from his Malkata Palace and Harem might indirectly reflect ś-formal gardens that were once part of the palace grounds. Furthermore in TT 49, there is depiction of Karnak’s main (western) entrance: a large ś-formal garden with water gardens of papyrus, double trees avenues, grapevines, and a stepped pool full of lotus, leading to a quay in front of the Second Pylon built by Amenhotep III (See Fig. A3.32). Based on texts reinscribed near the Second Pylon by Ramesses II, some scholars believe this ś-formal garden might have been the one called ‘Glory-of-the-Trees-Beloved-of-Thebes-upon-the-Way-of-the-Ram-Headed-Sphinxes.’

An examination of the relevant titles of the tomb-owners with ś-formal garden scenes demonstrates they held positions in various institutions related to the Amun cult, such as: the double-granaries, double-treasuries, scribal and accounting work for divine offerings, or supervising priests, construction projects, or cattle herdsmen, which is enumerated into Table 2.1 on the following page. The tomb-owners’ titles suggest direct or indirect contact with the royal ś-formal gardens because as endowments to palaces, funeral monuments, or to memorial or cult temples they yielded surplus produce. This meant labor acquisition for their construction and upkeep, recordkeeping, storage, transportation, and presentation of their crop each day. Rekhmira (TT 100), for example, was the ‘Chief Scribe of the Divine Offerings of Amun’ and ‘Administrator

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165 de Garis-Davies, *The Tomb of Nefer-hotep at Thebes* II, pl. III.
The construction of the š-formal garden of Amenhotep II named ‘Libation-of-Amun’ at Karnak might have even been supervised by Rekhmira because formal gardens were construction works. These individuals’ positions likely influenced the construction of š-formal gardens of their own beside their homes, as symbols of power and status. Some individuals, for example, such as Min (TT 109) and Qenamun (TT 93) are even attested as having multiple š-formal gardens.\(^{167}\) A š-formal garden’s construction would have been prestigious in itself, as it must have been

\footnotesize

\(^{167}\) See the surrounding texts of the TT 109 scene on p. 18 of this work. Min’s son Sobekmose states his father had multiple š-formal gardens: šw.k (𓊽𓊿𓊄𓊀). Qenamun (TT 93) had three š-formal gardens, see pp. 24-27 of this work.

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Table 2.1: Relevant Tomb-owner Titles

<table>
<thead>
<tr>
<th>Theban Tomb</th>
<th>Scene</th>
<th>Years Active</th>
<th>Relevant Titles</th>
</tr>
</thead>
</table>
| TT 81       | š-formal garden | A1-T3 | ‘Overseer of All Offices in the Domain of Amun’  
‘Overseer of Construction Works at Karnak’  
‘Controller of All Construction Works at Karnak’  
‘Overseer of the Double-granary and Double-treasury of Amun’ |
| TT 109      | š-formal gardens | T3   | ‘Overseer of the Priests of Onuris’  
‘Overseer of the Priests of Osiris’ |
| TT 85       | š-formal gardens | T3-A2 | ‘Overseer of the Double-granary of Amun’ |
| TT 100      | š-formal garden  | T3-A2 | ‘Chief Scribe of the Divine Offerings of Amun’  
‘Administrator of All Construction Works at Karnak’  
‘Overseer of Every Department’ |
| TT 80       | š-formal garden  | A2   | ‘Overseer of the Treasury’ |
| TT 93       | š-formal gardens | A2   | ‘Overseer of the Cattle of Amun-Ra’ |
| TT 63       | š-formal garden  | T4   | ‘Overseer of the Priests of Sobek’  
‘Overseer of the Treasury of Sobek’ |
| TT E2       | š-formal garden  | T4-A3 | ‘Scribe and Grain Account in the Granary of the Divine Offerings of Amun’ |
| TT 334      | š-formal garden  | A3   | ‘Chief of the Herdsmen [of Amun?]’ |
resource-intensive and costly to build, even if it was small. The supervisors and workmen had to clear the land and lay the formal garden’s plan and the pools, water gardens, and hsp-plots had to be dug and assembled. Pools were fitted with stone and/or mudbrick and properly irrigated to allow the fish and fowl to be introduced. The flora had to be bought, transported, resown, and watered. Shaduf s occur after the Amarna Period, as seen in Neferhotep (TT 49), dated to Ay, and Ipuy (TT 217), dated to the Ramesside Period, while waterwheels only occur by the Graeco-Roman Period. Thus, the flora at this time had to be watered by gardeners carrying yokes with buckets. The pergolas, garden shrines, enclosure walls, gates, and other architectural features also had to be constructed, which would have been costly. Although a ś-formal garden would have been expensive to construct, kings might gift them to private individuals, as in the story of Sinuhe:

I was given a house and [ś-formal garden] that had belonged to a courtier...as is done for a Companion of the first rank...It was his majesty who ordered it made.

Likewise, Amenhotep III permitted the architect Amenhotep, Son of Hapu to place statues of himself at Karnak and to build and establish his own memorial temple with a ś-formal garden and cult at Thebes-West, as is proven from extant archaeological\(^\text{168}\) (See Fig. A3.31) as well as textual evidence inscribed on a British Museum stela (BM EA 138), and on his two seated scribal statues (JE 44861; JE 44862) in the Egyptian Museum, Cairo.\(^\text{170}\) Royal individuals could also be gifted ś-formal gardens. For example, Ahmose I gifted one to his grandmother Queen Tetisheri for her pyramid-shrine enclosure at Abydos because he “so greatly loved her beyond everything.”\(^\text{171}\)

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\(^{168}\) See the gardeners in the TT 81 and TT 100 scenes. They carry yokes with buckets and collect water from the pools to water the flora.


\(^{172}\) Breasted, *Ancient Records of Egypt* II, p. 16, §37; also see p. 35 of this work.
The texts beside the TT 81, TT 109, TT 100, TT 93 #1, TT 63, and TT E2 scenes further mention the b3 and/or k3 of the tomb-owners desired to visit their š-formal garden(s) each day. This is clear from additional tomb texts in TT 82, TT 85, TT 87, TT 91/99, TT 110, and TT 112 that mention but do not depict a š-formal garden beside the inscriptions. These individuals were active from the reign of Hatshepsut to Amenhotep III, such as the ‘Grain Account of Amun’ Amenemhat (TT 82), the ‘Overseer of the Treasuries of Amun’ Senneferi (TT 91/99), and the ‘Overseer of the Construction Works’ Djehuty (TT 110):

May you go as you please to the beautiful shore of your [pool]. May your heart rejoice in your wooded [š-formal garden], when you cool yourself under the sycamores. May your heart take satisfaction in the Nun in the fountain you have created, forever and ever. Transforming into a living ba, oh, may he glide down onto his grove, may he enjoy the shadow of his sycamores, may he rest at the corner of his [š-formal garden]...179

The ‘High Priest of Amun’ Amenemhat (TT 85):

...going into and out of the [š-formal garden] with its [pool] to cool the heart under its trees. Performing (?) the work of the goddess of the fields...of her flower, drinking water from his pond, smelling lotus blossoms and plucking buds by NN.180

The ‘Chief Servant and the Overseer of the Double-granary of Amun’ Minnakht (TT 87) and the ‘High Priest of Amun’ Menkheperraseneb II (TT 112):

Going into and out of my tomb to refresh myself in its shadow, to drink water from my pond daily, that all my limbs may flourish. May Hapi supply me with nourishment and offerings, and vegetables in their season. May I stroll at the edge of my pond daily, without cease, may my ba alight on the branches of the trees I have planted, may I refresh myself under the branches of my sycamores and eat the bread that they give.181

173 See the scene’s texts on pp. 15-16.
174 See the scene’s texts on p. 18.
175 See the scene’s texts on pp. 21-23.
176 See the scene’s texts on p. 25.
177 See the scene’s texts on p. 28.
178 See the scene’s texts on p. 29.
179 See the reconstruction of these textual variants from each tomb in Assmann, Death and Salvation in Ancient Egypt, pp. 222, 451.
180 See the reconstruction of these textual variants from each tomb in Assmann, Death and Salvation in Ancient Egypt, pp. 222, 451.
All of these texts imply that the tomb-owners’ bꜣ and/or kꜣ wanted to maintain,\textsuperscript{182} relax, drink, and smell the flora from their š-formal gardens, as well as inspect and be nourished by their produce, personified as tree-goddesses. The value of a š-formal garden to the Egyptians is evident from the fourth book of the Papyrus of Nesmin (pBM 10188)\textsuperscript{183} called the ‘Book of Knowing the Creations of Ra and Felling of Apep (Apophis),’ detailing what would happen to evildoers after death:

The tears which came forth from m[y] Eye are against you, [you] are made impotent because of this his evil character. The gods behold you...You will have no ba, no akh, no corpse, no shadow, no magic power, no bones, no hair, no magic, no saying (and) no words (anymore)! You will have no grave, no household...no grave chapel (anymore)! You will have no š-formal garden], no trees (and) no bushes (anymore)! You will have no children, no family, no heir (and) no family clan (tribe) (anymore)! You will have no head, no arms, no legs, no walking ability (and) no semen (anymore) You will no longer have a place on earth.\textsuperscript{184}

From this spell, it is clear the ancient Egyptians considered their š-formal garden with trees and plants to be just as significant as their family, clan, body parts, soul(s), house, tomb, and even ability to walk, procreate, and perform magic. Therefore, it is curious why the tomb-owners of TT 82, TT 85, TT 87, TT 91/99, TT 110, and TT 112 did not depict their š-formal gardens beside their abovementioned tomb texts. Indeed, it is particularly surprising that Djehuty (TT 110) did not depict š-formal garden scenes in his tomb because he assisted in the construction of Hatshepsut’s memorial temple and ‘Rising-of-the-Horizon-of-Amun’ shrine, which both had š-formal gardens.\textsuperscript{185} Perhaps a š-formal garden did not have to always be shown, as the written word alone would have been sufficient due to the pictorial nature of the hieroglyphic script.

\textsuperscript{182} Described as “performing the work of the field-goddess.” See the text from TT 85 on p. 42 of this work.

\textsuperscript{183} Although the Bremner-Rhind Papyrus (pBM 10188) dates to the Ptolemaic Era, earlier parallels of these spells are known from the recto of an Eighteenth Dynasty papyrus (pBM 9997) from Thebes, a prophylactic statue of Ramesses III (JE 69771), a magical statue base in Leiden, and a Ramesside magical papyrus (pTurin CGT 54065). See Seidlmayer and Hafemann, s.v. “Parallels of Papyrus of Nesmin from Thebes,” TLA, http://aaew.bbaw.de/tla/servlet/GetTextDetails?u=guest&f=0&l=0&db=0&tc=19935.


\textsuperscript{185} See the Djehuty’s deeds on p. 36, footnote 154.
The significance of a Š-formal garden to the Theban elite can further be surmised from the location of the tomb scenes in Table 2.2 below based on the information Appendix I: Catalogue. The Š-formal garden scenes in these tombs are not the main feature of the large rooms in which they are placed. However, they do play a part in the wider decorative schema of the room, focused around illustrating the tomb-owner’s unique, sociocultural experience as a member of the Theban elite.\textsuperscript{186} The Š-formal garden scenes occur on the pillars or walls in the porticos, transverse

<table>
<thead>
<tr>
<th>Theban Tomb</th>
<th>Location</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Room</td>
<td>Architecture</td>
</tr>
<tr>
<td>TT 81</td>
<td>Portico</td>
<td>Pillar</td>
</tr>
<tr>
<td>TT 109</td>
<td>Transverse Hall</td>
<td>Wall</td>
</tr>
<tr>
<td>TT 85</td>
<td>Chapel</td>
<td>Wall</td>
</tr>
<tr>
<td>TT 100</td>
<td>Passage</td>
<td>Wall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TT 80</th>
<th>Chapel</th>
<th>Wall</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT 93 #1</td>
<td>Transverse Hall</td>
<td>Wall</td>
<td>NE</td>
</tr>
<tr>
<td>TT 93 #2</td>
<td>Transverse Hall</td>
<td>Pillar</td>
<td>N</td>
</tr>
<tr>
<td>TT 93 #3</td>
<td>Transverse Hall</td>
<td>Pillar</td>
<td>W</td>
</tr>
<tr>
<td>TT 63</td>
<td>Passage</td>
<td>Wall</td>
<td>N</td>
</tr>
<tr>
<td>TT E2</td>
<td>Chapel</td>
<td>Wall</td>
<td>W</td>
</tr>
<tr>
<td>TT 334</td>
<td>Transverse Hall</td>
<td>Wall</td>
<td>W</td>
</tr>
</tbody>
</table>
halls, passages, or chapels that feature daily life ‘focal representations’ (also often referred to as *Blickpunktbilder* by Egyptian art historians).\textsuperscript{187} For example, š-formal gardens scenes are found in proximity to: ‘fish and fowl icons,’\textsuperscript{188} ‘natural resource/inspecting icons,’\textsuperscript{189} ‘banqueting icons,’\textsuperscript{190} ‘gift to pharaoh icons,’\textsuperscript{191} and ‘offering table icons.’\textsuperscript{192} Porticos, transverse halls, passages, or chapels were the areas of the tomb available for family and community members to view during funerals, festival, and feast days.\textsuperscript{193} Thus, the š-formal garden scenes could be interpreted as a type of ‘natural resource/inspecting icon,’ celebrating the tomb-owner’s achievement of having his own š-formal garden in life and perpetuating it for his *bꜣ* and *kꜣ*’s use after death.

\textsuperscript{188} See the wall narratives of TT 63 and TT 93 #2.
\textsuperscript{189} See the wall narratives of TT 63, TT 93 #3, TT 100, TT 109, and TT 334.
\textsuperscript{190} See the wall narratives of TT 63 and TT 100.
\textsuperscript{191} See the wall narratives of TT 109.
\textsuperscript{192} See the wall narratives of TT 63, TT 80, TT 85, TT E2.
\textsuperscript{193} Hartwig, *Tomb Painting and Identity in Ancient Thebes, 1419-1372 BCE*, p. 49.
Chapter Three

The Domain of Amun Formal Gardens

There are five Domain of Amun formal garden scenes found in the Theban Necropolis from the early Eighteenth Dynasty prior to the Amarna Period: TT 87, TT 90, TT 39, TT 96, and TT 161. Although the formal gardens are mutually related to the Domain of Amun in Thebes, they are studied individually due to their distinct names in Egyptian: (i) the ħnty-š-formal garden, (ii) the kšmwy-formal garden, (iii) the ss-formal garden, (iv) the āt-nt-hy-formal garden, and (v) the hrrt-š-formal garden. The chapter begins with ‘visual descriptions’ of Domain of Amun formal garden scenes. This is followed by a discussion that examines the layouts, architecture, and water features for each particular formal garden in Thebes during this period via extant archaeological, textual, or pictorial evidence. The wider significance of these formal gardens is synthesized in order to emphasize their overarching roles, functions, and implications in Eighteenth Dynasty Thebes.

TT 87 (Minnakht) – ħnty-š-formal garden

**Date:** Thutmose III  
**Location:** Sheikh Abd el-Qurna  
Southwest – left rear wall of chapel  
**Wall Narrative:** Festival Setting

<table>
<thead>
<tr>
<th>ḫḥr-frizer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Priests carry portable shrine from the nḥmt-bark towards Minnakht's statue in a pavilion being censed and given offerings (L→R)</td>
<td>Menkhope offers Ra-Horakhty and Osiris bouquets to his parents (L→R)</td>
</tr>
<tr>
<td></td>
<td>Minnakht and wife seated at feast (L→R)</td>
</tr>
<tr>
<td>Tree avenue and priests offering and censing formal garden's produce (L→R)</td>
<td></td>
</tr>
<tr>
<td>Lake with defiled Thutmose III's nḥmt-bark</td>
<td></td>
</tr>
<tr>
<td>Grape arbors and pergolas</td>
<td></td>
</tr>
<tr>
<td>Processional ramp</td>
<td></td>
</tr>
<tr>
<td>Trees</td>
<td></td>
</tr>
<tr>
<td>Tree avenue and priests offering and censing formal garden's produce (L→R)</td>
<td></td>
</tr>
<tr>
<td>Grape arbors and pergolas</td>
<td></td>
</tr>
<tr>
<td>Enclosure wall</td>
<td></td>
</tr>
<tr>
<td>Priests in procession carry portable shrine from the nḥmt-bark towards the memorial temple (L→R)</td>
<td></td>
</tr>
<tr>
<td>Mourners and celebrants (L→R)</td>
<td></td>
</tr>
<tr>
<td>Servants w/ festival food (L→R)</td>
<td></td>
</tr>
<tr>
<td>Festival feast (L→R)</td>
<td></td>
</tr>
<tr>
<td>Dado?</td>
<td></td>
</tr>
</tbody>
</table>
Formal Garden Scene: See Appendix I: Part II

Description and Relevant Text:

The wall narrative begins with rites of the Beautiful Festival of the Valley\(^\text{194}\) in the ḫnty-š-formal garden of the Memorial Temple of Thutmos III on the West Bank of Thebes.\(^\text{195}\) A nšmt-bark with the statue of the deified Thutmos III hidden in a portable shrine is sailed across the lake with blue and white lotuses while mourners or celebrants lament and witness the ceremony on the third register. Two priests with papyrus bouquets stand on the opposite side of the lake at the end of the processional ramp, leading to the memorial temple with two pylons, a courtyard with a tree grove, and the sanctuary with ambulatory shrines. To the right on the same register, a priest with two papyrus bouquets and another priest who incenses and libates, lead more priests who are carrying the portable shrine from the pharaoh’s nšmt-bark towards the memorial temple. On the register above, the portable shrine is carried towards a statue suggested to be of Minnakht\(^\text{196}\) in a pavilion in the formal garden.\(^\text{197}\) The statue is censed and given offerings for the Beautiful Festival of the Valley by his son Menkheper.

The second and fourth registers frame the formal garden scene, each consisting of two avenues of date palm, doum-palm, and sycamore figs as priests tend to the formal garden’s produce.


\(^\text{196}\) See Geßler-Löhr, „Die Totenfeier im Gärten,“ p. 163. From the surrounding decorative schema, one could interpret this as statue as one placed by Minnakht in one of the memorial temple’s shrines, as private individuals could be granted permission to do so in sanctuaries.

\(^\text{197}\) This seems possible. For example, Amenhotep, Son of Hapu was granted permission to place scribal statues of himself in the grounds of Karnak Temple. Mayor Sennefer was also granted permission by Amenhotep II to place one of him and his wife and daughter at Karnak (CG 42126) as well as at the Temple of Seth at Naqada (UC 14639). While, a scribal statue of another individual named Amenhotep, who was ‘Overseer of the Construction Works’ in Memphis, mentions he was granted permission to place the vary statue in the grounds of the Lower Egyptian version of Amenhotep III’s memorial temple that he helped construct. See Petrie, *Tarkhan I and Memphis V*, p. 33.
and pergolas with amphorae of wine, various types of bread, and incense resins (myrrh and frankincense or Commiphora erythraea var. glabrescens Engler and Boswellia frereana Birdw.). The narrative continues with servants preparing and carrying festival food to guests seated for one of the Beautiful Festival of the Valley feasts. It ends with Menkheper, the son of Minnakht, offering dates, cos-lettuce, and Ra-Horakhety and Osiris bouquets of lotus, papyrus, and mallow bindweed (Convolvulus althaeoides L.) to his parents seated at a festival feast in the formal garden:

\[ n \text{k3.k \text{cnh} n \text{Rw-Hr-[shty]} n \text{Wsir ntr c3 [hft]} htp.k m is in s\text{h} htp ntr n \text{Imn m \text{Hnkt-cnh Mn-hpr}} \]

For your *ka*, a bouquet of Ra-Horakhety and Osiris, the great god, when you go to rest in your tomb, by the ‘Scribe of the Divine Offerings of Amun in the Memorial Temple of Thutmose III,’ Menkheper.\(^{198}\)

**TT 90 (Nebamun) – *k3mnw*-formal garden**

*Date:* Thutmose IV to Amenhotep III  
*Location:* Sheikh Abd el-Qurna  
North – right rear wall of transverse hall

**Wall Narrative**\(^{199}\). Festival setting

<table>
<thead>
<tr>
<th>$\text{Thutmose III offered to Thutmose II}$ ($\text{L} \to \text{R}$)</th>
<th>Nebamun offers tribute to Thutmose III ($\text{L} \to \text{R}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tributes carried by Nebamun ($\text{L} \to \text{R}$)</td>
<td>Offering beans with bread and fowl ($\text{L} \to \text{R}$)</td>
</tr>
<tr>
<td>Two men sacrifice a bovine inside the vineyard ($\text{L} \to \text{R}$)</td>
<td>Grapes on pergola</td>
</tr>
<tr>
<td>Nebamun offers tributes ($\text{L} \to \text{R}$)</td>
<td>Two rows of vine jars ($\text{L} \to \text{R}$)</td>
</tr>
</tbody>
</table>

**TT 90 (Nebamun) – *k3mnw*-formal garden**

*Date:* Thutmose IV to Amenhotep III  
*Location:* Sheikh Abd el-Qurna  
North – right rear wall of transverse hall

**Wall Narrative**\(^{199}\). Festival setting

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</tr>
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</tr>
<tr>
<td>Nebamun offers tributes ($\text{L} \to \text{R}$)</td>
<td>Two rows of vine jars ($\text{L} \to \text{R}$)</td>
</tr>
</tbody>
</table>

**Formal Garden Scene:** See Appendix I Part II  
**Description and Relevant Texts:**

\(^{198}\) For the German translation see Guksch, *Die Gräber des Nacht-Min und des Men-cheper-Ra-seneb*, p. 64; and for the hieroglyphic text, see Sethe, *Urkunden IV*, nos. 1177-1778.  
\(^{199}\) Hartwig, *Tomb Painting and Identity in Ancient Thebes*, fig. 30.
This wall narrative begins with scenes of Nebamun offering tribute to Thutmose III standing and then enthroned in a pavilion. The narrative transitions to a number of scenes centered around Nebamun making offerings in the formal garden of an Amenhotep III shrine. Offering-bearers carry bread and fowl towards two men who sacrifice a bovine beside the formal garden’s entrance, likely to Renenutet for the Harvest Festival. The formal garden proper follows: a gated enclosure with a central path leading to grapevines on pergolas, being harvested by two gardeners. The path continues on a central axis to a T-shaped pool bordered by two tree avenues. At the terminus of the formal garden is the Amenhotep III shrine flanked by a pair of trees. At the shrine’s entrance, Nebamun libates into a lotus-shaped vase and a priest offers pintail duck and Lotus spp. while reciting a prayer that alludes to the kšmwi-formal garden’s abundance:

\[ wdn \, h² \, nbt \, nfrt \, w²bt \, ḥs \, ḫw \, w²t \, zpd \, s³n \]
\[ inHu² \, ḫnm \, nb \, ḫsty \, [n \, ḫmn-R²]...in \, ḫty \, sryt \, Nb-Imn... \]

Offering good and pure things, a thousand oxen, goats, fowl, fragrant lotus blossoms and lotus buds, [and] all favored herbs [to Amun-Ra]...by the standard-bearer Nebamun...

The narrative continues with gardeners carrying grapes from the formal garden’s pergolas to six vintners treading grapes in an ornately carved and gilded press with a papyrus column pavilion.

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200 The doorjambs of the shrine bare a dedication with his praenomen.
202 The pool appears empty due to paint deterioration but likely had Lotus spp.
203 The trees cannot be identified because of the paint deterioration.
204 To evoke Amun-Ra here is to also evoke Renenutet because the goddess was “the guardian of the granary and protector of the fields [and estates linked to] the temple of Amun, as well as, protector of food.” See Marini, “Renenutet: Worship and Popular Piety at Thebes in the New Kingdom,” p. 73.
The vintners ritually say to an image of the cobra-goddess Renenutet for the Harvest Festival:

\[ n \ k3.1 \ Rnnwt \ imi \ df3w \]

For your \textit{ka}, Renenutet, giving produce.

While, Nebamun inspects to two rows of wine amphorae:

\[ iry-p\'t \ ftiw \ ps \ ksmw \]

Hereditary nobleman, the one who causes the grapevines to be pressed.

The wall narrative now transitions to Nebamun’s house where a banquet occurs for the Harvest Festival. Servants bring festival food and produce, such as: cos-lettuce, grapes, \textit{Lotus} spp. blossoms, muskmelon, Christ’s thorn fruit, persea fruit and/or mandrake, and honey (= honey bees). Nebamun ushers military and high-ranking guests to his wife and daughter who greet them in front of their house. Meal preparation and Nebamun enjoying the feast ends the narrative.

\textbf{TT 39 (Puihra) – s\$-formal garden}

\textit{Date}: Hatshepsut-Thutmose III  
\textit{Location}: El-Khokha  
North – left rear wall of transverse hall

\textit{Wall Narrative} (See the next page): Inspecting setting

\textit{Description and Relevant Text}:

This wall narrative begins with Puimra who inspects six registers of food offerings and a cattle yard. The \textit{s\$}-formal garden scene follows, containing a duck and fish pond (\textit{s\$}) with \textit{Lotus} spp., pintail ducks, and \textit{Tilapia} spp. Avenues of \textit{doum}- and date palms and sycamore figs and

\footnote{206 See the reconstruction of the text in Helck, \textit{Urkunden 17-22}, no. 1625; and its translation in Davies, \textit{et al.}, \textit{The Tombs of Two Officials}, p. 31.}

\footnote{207 See the reconstruction of the text in Helck, \textit{Urkunden 17-22}, no. 1625; and its translation in Davies, \textit{et al.}, \textit{The Tombs of Two Officials}, p. 31.}

\footnote{208 Based on plate XVIII in Norman de Garis Davies and Mahmoud Saba, \textit{The Tomb of Puyemré at Thebes}, (New York: MMA, 1922), p. 55; and the wall’s description in Porter and Moss, \textit{Topographical Bibliography} I, p. 71.}
common figs border the pond. Three registers of servants who carry the formal garden’s produce, such as: white lotus blossoms; papyrus blossoms, mandrakes, persea fruit, muskmelon, and Tilapia spp. follow. Puimra sits and inspects the produce from his ss-f-formal garden:

\[...\]

\[m33 \text{nfr n ss.f in...}\]

Inspecting the abundance of his ss-formal garden by...

The wall narrative ends with Puimra standing and inspecting six registers of Domain of Amun workshops and agricultural scenes.

---

**Formal Garden Scene**: See Appendix I Part II

**TT 96 (Sennefer)** – ṣ-nt-ḥt-formal garden

**Date**: Amenhotep II  
**Location**: Sheikh Abd el-Qurna  
East – Left front wall of transverse hall

**Wall Narrative**: Festival setting

---

209 Due to paint deterioration, only the sycamore fig is identifiable. Other species were likely present because of the diversity of formal garden’s produce carried by the servants.  
210 Mandrakes and persea fruit are often indistinguishable in Egyptian art. This is noted in their pictorial study by Keimer and Germer, *Die Gartenpflanzen* I, pp. 172-173, 176-177.  
211 Davies and Saba, *The Tomb of Puimrê at Thebes*, p. 55, pl. XXI.2.  
212 Louant, *Comment Puimrê triompha de la mort*, pp. 38, 42-43.
**Garden Scene:** see Appendix I Part II  

**Description and Relevant Text:**

An 't-nt-ḥt-formal garden in the Domain of Amun begins the wall narrative. The formal garden is fronted by a canal with a quay, a propylon gate dedicated by Amenhotep II, an enclosure wall, and avenues of sycamore figs and two other types of trees. An avenue of date palm, dōum-palm, and trees border four walled š-formal gardens within the enclosure. The first two walled gardens are symmetrically planned on either side of the Amenhotep II gate. Their pools contain *Lotus* spp., curled pondweed, and pintail duck. Avenues of date palms, papyrus, and deciduous trees flank the pool. Beyond are two walled tree groves (w'b-ḥt).

A large walled ksmw-formal garden of six pergolas with grapevines is in the center of the 't-nt-ḥt-formal garden, leading to a water garden with papyrus, a tripartite Amun shrine with three statuary groups\(^{213}\) with bouquet and offering tables, a florist workshop and a storehouse. Two additional walled š-formal gardens are adjacent to the tripartite shrine. Their pools have lotus, curled pondweed, and pintail duck and are surrounded by two water gardens of papyrus and avenues of date palm and deciduous trees. Pavilions with shrubs are adjacent to the pools along

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\(^{213}\) The first statue shows Amenhotep II striding in prayer. The second statue shows Amenhotep II kneeling with *nw*-jars (?) in front of a seated image of a god, possibly Amun-Ra (?). *Cf.* to the granite kneeling dyad of Horemheb and Atum seated in the Luxor Museum (JE 37394/CG 42052). The third statue is destroyed but the offering tables remain.
with three more avenues of date palm, *doum*-palm, and trees. Next is Sennefer who presents the produce from the ‘t-nt-ḥt-formal garden to Amenhotep II for the New Year’s Festival:

Sennefer presents the ‘t-nt-ḥt-formal garden’s produce such as: papyrus, blue and white lotus, mallow bindweed, dates, *doum*-fruit, grapes, sycamore figs, common figs, pomegranates, persea fruit, mandrakes, Christ’s thorn fruit, and incense (incense trees). The narrative ends with an additional three registers of New Year’s Festival gifts: statues and wares, followed by Sennefer who stands in front of Amenhotep II enthroned in one of the formal garden’s pavilions, saying:

Words spoken: summoning gifts for the New Year’s Festival – the beginning of eternity, which reach out forever together with every kind of beautiful portable gift.

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214 See the hieroglyphs in Helck, *Urkunden IV*, nos. 1417-1418.
TT 161 (Nakht) – *hrrt-š*-formal garden

*Date:* Amenhotep III  
*Location:* Dra’a Abu el-Naga  
West – left side wall of passage

*Wall Narrative:* Festival setting

---

**Garden Scene:** see Appendix I Part III  
**Description and Relevant Text:**

The *hrrt-š*-formal garden scene is the focus of this wall narrative. The garden scene begins with a water garden of papyrus beside arbors and a pond with *Lotus* spp., *Tilapia* spp., *Laboe* spp., *Syndontis* spp., and Egyptian trunkfish (*Mormyrus niloticus* Bloch & Schneider). An additional five *hsp*-plots with flowers and trees are tended by nine gardeners and inspected by Nakht. Two storehouses and/or florist workshops, date palms, and *persea* are located adjacent to the third and sixth *hsp*-plots. Two registers with Nakht’s sons and daughters carrying bouquets and produce from the formal garden follow. The flora and fauna species include blue and white lotus blossoms, papyrus blossoms, *doum*-fruit, pomegranates, *doum*-fronds, *persea* fruit, mandrakes, cos-lettuce, mallow bindweed, grapes, honey (= honey bees), pintail duck, and mallard duck. Nakht and his wife Tahemet offer bouquets and produce from the *hrrt-š*-formal garden to statues of Amun-Ra and Mut for the Beautiful Festival of the Valley saying:

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218 "The Egyptian vernacular *boueza*, refers to [the] characteristic...[of] an elongated...straight snout,” according to Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, pp. 51-52.
Everything that comes forth from the offering place that bares fruit/is planted/is ripened\textsuperscript{219} for Amun...\textsuperscript{220}

The next phase of the narrative is the Beautiful Festival of the Valley feast with Nakht and Tahemet as participants. Nakht and Tahemet receive the formal garden’s bouquets and produce from their sons and daughters, these include: Amun bouquets\textsuperscript{221} made of white and blue lotus blossoms, papyrus blossom, mallow bindweed, \textit{doum}-fruit and \textit{doum}-fronds, opium poppy, low cornflower, mandrakes, persea fruit, and produce, such as: grapes, muskmelon, Christ’s thorn fruit, cos-lettuce, and dates. The end of the narrative depicts a Beautiful Festival of the Valley feast taking place with many guests, who enjoy food and music alongside amphorae and bouquets of blue and white lotus, papyrus, and lesser bindweed blossoms (\textit{Convolvulus arvensis} L.).

\textbf{Discussion}

The layouts, architecture, water features, and evidence of these five types of Domain of Amun formal gardens are discussed in order of their appearance: (i) the \textit{hnty-š}-formal garden, (ii) the \textit{ksmw}-formal garden, (iii) the \textit{sš}-formal garden, (iv) the \textit{‘t-nt-ht}-formal garden, and (v) the \textit{ḥrrt-š}-formal garden. While, the discussion of the flora and fauna and significance of these five Domain of Amun formal gardens are synthesized together for a more comprehensive and concise analysis.

\textbf{The \textit{Hnty-š}-Formal Garden: Layouts, Architecture, and Water Features}

By examining the TT 87 scene, as well as extant archaeological, textual, and pictorial evidence, a \textit{hnty-š}-formal garden was constructed in various layouts during this period. The formal garden

\textsuperscript{219} Manniche translates this as “offering table” in “The Tomb of Nakht, The Gardener, at Thebes (no. 161) as Copied by Robert Hay,” \textit{JEA} 72 (1986): p. 58, inscription 13. The translation could be more specific as \textit{wdhw} due to the fruit on the table in the palaeography and the formal garden’s function as an offering place to Amun. Also, \textit{wdḥ} as a verb means “to bear fruit; to ripen; to be planted,” according to Erman and Grapow, \textit{WB I}, no. 410.

\textsuperscript{220} This text alludes to the formal garden and Nakht and his sons’ roles in its cultivation.

\textsuperscript{221} The inscription above the siblings read \textit{s}, “coming with bouquets of Amun when he rests in his temple. May he praise you and love you. To your \textit{ka}...Nakht...Tahemet, justified.” See Manniche, “The Tomb of Nakht,” p. 59, inscription 14.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure walls</td>
<td>(pr)</td>
<td><img src="T3" alt="Enclosure walls" /></td>
</tr>
<tr>
<td>Propylon gates</td>
<td>(sḫṣ)</td>
<td><img src="H" alt="Propylon gates" /></td>
</tr>
<tr>
<td>Lakes and quays</td>
<td>(mr; mryt)</td>
<td>![Lakes and quays](TT 87 - T3)</td>
</tr>
<tr>
<td>Pools</td>
<td>(š)</td>
<td><img src="H" alt="Pools" /></td>
</tr>
<tr>
<td>Processional ways</td>
<td>(st-swtwr)</td>
<td><img src="H" alt="Processional ways" />; ![Processional ways](TT 87 - T3)</td>
</tr>
<tr>
<td>Pavilions</td>
<td>(mṣrw)</td>
<td>![Pavilions](TT 87 - T3); also see the Qenamun text on pp. 74-75 (A2)</td>
</tr>
<tr>
<td>Statuary: sphinxes and striding figures</td>
<td>(mṣi; sšp; ḫnty)</td>
<td><img src="H" alt="Statuary: sphinxes and striding figures" />; ![Statuary: sphinxes and striding figures](TT 87 - T3)</td>
</tr>
</tbody>
</table>

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222 Photographs by author and drawings by author © 2020, after the Charles K. Wilkinson (1921) facsimile (MMA 30.4.56), Hugonot (1989), Geßler-Löhr (1991), and/or the 3D model reconstructions by Altair4 Multimedia (2020).
<table>
<thead>
<tr>
<th><strong>Tree avenues (ḥt)</strong></th>
<th><img src="image" alt="Diagram of tree avenues" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree groves (mnw)</td>
<td><img src="image" alt="Diagram of tree groves" /></td>
</tr>
<tr>
<td><em>hsp</em>-plots (planting beds; circled in red)</td>
<td><img src="image" alt="Diagram of hsp-plots" /></td>
</tr>
<tr>
<td><strong>Garden altars (ḥꜣwꜣ(y)เทร; wdhw; “bz”)</strong></td>
<td><img src="image" alt="Diagram of garden altars" /></td>
</tr>
<tr>
<td>Arbors and/or pergolas (k3mnw)</td>
<td><img src="image" alt="Diagram of arbors and pergolas" /></td>
</tr>
<tr>
<td><strong>Memorial temple (ḥwt nt ḫḥw n rnpwt)</strong></td>
<td><img src="image" alt="Diagram of memorial temple" /></td>
</tr>
</tbody>
</table>
might range from a large enclosure with a central pathway bordered by small pools, tree avenues and groves (See A3.16) to one focused around a rectangular lake, bordered by tree avenues, arbors, and pavilions (See A3.18). If the layout had a pool, it might be T-shaped and among tree groves (See A3.16) while those with lakes had edging-stone, quay access, and tree avenues (See A3.18). Lakes of \( \text{hntyw-} \) formal gardens could be named. The layout could include straight and medium to high mudbrick or limestone enclosure walls, which were entered through a small propylon gate or one placed between a set of pylons (See A3.16, A3.18). Architecture, such as processional ways, quays, porticos, arbors, pergolas, and garden altars might be featured in the layout (See A3.15, A3.18). Light-rooted pavilions with wooden and painted papyriform columns were placed among the rows of trees with seating, and tables for food and drinks for festivals. Statuary, such as human-headed sphinxes might line pathways while private striding statuary could be showcased in pavilions (See A3.16, A3.18). Avenues were placed beside the pools/lakes while pairs of trees or groves flanked the entrance of a processional way or memorial temple proper (See A3.16, A3.18). Sometimes groves had \( hsp \)-plots or altars set in between them (See A3.15).

Extant Evidence of \( \text{hntyw-} \)-Formal Gardens during this Period

From the Old to Middle Kingdom, the term \( \text{hnty-} \) was used in relation to inundated land, pyramid-temple cults, and tenant farming, not developing a context associated with gardening on a large scale until the New Kingdom. The singular is \( \text{hnt(y)-} \) while the plural

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223 See pp. 62, 67 of this work.
224 It is intriguing that striding statues with sticks or staves were called \( \text{hnty} \) in Egyptian. The placement of such a statue in a \( \text{hnty-} \)-formal garden aligns well with the formal garden’s philological significance described on pp. 59-60 of this work.
is $\text{hnt}(y)w$-$\text{s}$ ($\text{xn}\text{t} \text{y}$-$\text{S}$). It is the author’s opinion that in a gardening context, an updated, literal translation from the Egyptian could be ‘the foremost of the $\text{s}$-formal garden(s),’ as both $\text{hnt}$ ($\text{xn}$) and $\text{hnty}$ ($\text{xn} \text{y}$) were used as prepositions to mean “foremost of.” The term is further related to the verbal root $\text{hnt}$, such as: $\text{hnti}$ ($\text{xn}$ $\text{t}$) or “to be pleased, to be glad”; $\text{hnt}s$ ($\text{xn} \text{S}$) or “to have enjoyment”; and $\text{hns}$ ($\text{xn} \text{s}$) to walk about freely, to stroll, alluding to how formal gardens – as a tangible, living offerings – would be pleasurable, relaxing, and enjoyable to the gods and visitors. This interpretation has premise because the following archaeological, textual, and pictorial evidence indicates that $\text{hnty}w$-$\text{s}$-formal gardens were built in palace complexes for pleasure, and more notably, in the memorial temples of pharaohs (Temple-of-Millions-of-Years), which were located in inundated fertile land ($\text{b}r\text{h}$) and were the seats of the cult of the glorified king and Amun is his form as Osiris the ‘Foremost of Westerners’ ($\text{hnty}$-$\text{imntt}$).

The earliest archaeological evidence of a $\text{hnty}$-$\text{s}$-formal garden in Thebes comes from the Middle Kingdom memorial temple of Montuhotep II at Deir el-Bahari, dated to the Eleventh Dynasty (See A3.15). The idea of a $\text{hnty}$-$\text{s}$-formal garden in a memorial temple of a pharaoh might have even become fashionable because of Montuhotep II. His $\text{hnty}$-$\text{s}$-formal garden was planted in the enclosure of the first court of his memorial temple on either side of a central processional way lined with avenues of 22 sycamore figs (See Table 3.0). Before the processional ramp and lower porticos of the temple were: a double grove of 55 tamarisk varieties, such as $\text{farash}$-tamarisk ($\text{Tamarix articulata}$ Vahl) and $\text{athel}$-tamarisk ($\text{Tamarix aphylla}$ L. Karst.), which were medium in

226 Seidlmayer and Hafemann, s.v. “$\text{hnt}$ and $\text{hnty}$,” in TLA. http://aaew.bbaw.de/tla/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=119040&db=0; http://aaew.bbaw.de/tla/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=119130&db=0.
227 Seidlmayer and Hafemann, s.v. “$\text{hnti}$,” in TLA. http://aaew.bbaw.de/tla/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=118850&db=0.
228 Faulkner, A Concise Dictionary of Middle Egyptian, p. 195.
229 Faulkner, A Concise Dictionary of Middle Egyptian, p. 195.
size (10 cm or 4 in in diameter); rectangular *hsp*-plots full of flowers (1.75-1.85 m x 6.80 m or 5.7-6.1 ft x 22 ft)\textsuperscript{230} planted in between the groves; and a large individual sycamore fig with a sizable mudbrick altar beneath it\textsuperscript{231} (See Table 3.0). The formal garden was likely dedicated to Amun, as one of the temple’s names was ‘Transfigured-are-the-Places-of-Amun.’\textsuperscript{232}

The earliest textual evidence of a *hnty*-\textsuperscript{5}-formal garden linked to the Amun cult at Thebes comes from Ahmose I’s ancestors of the Seventeenth Dynasty. Tetiky (TT 15), who was ‘King’s Son’ and ‘Mayor of Thebes’ from the reign of Ahmose I to Amenhotep I, declares on an inscribed offering table in his tomb that his father Rahotep was an ‘Overseer of the *Hntyw*-\textsuperscript{5}-Formal Gardens of Amun.’\textsuperscript{233} Rahotep likely worked in the *hntyw*-\textsuperscript{5}-formal gardens of Thebes-West under Seqenera Ta’a, Kamose the Brave, and Ahmose I due to their short reigns.\textsuperscript{234} Rahotep’s position implies that *hntyw*-\textsuperscript{5}-formal gardens existed in the Theban landscape during the kings’ reigns, although, their archaeological and/or archaeobotanical remains have yet to be discovered. From textual evidence, Seqenera Ta’a, Kamose, and Ahmose I certainly had funerary monuments in Thebes-West that could have had the formal gardens overseen by Rahotep, as they and even Montuhotep II’s memorial temple, were among the monuments inspected for looting in the Abbott Hieratic Papyrus (pBM EA 10221) or ‘Royal Tomb Robbers Papyrus’ dated to Ramesses IX.\textsuperscript{235}

Amenhotep I was the first Eighteenth Dynasty pharaoh to build his tomb separately in the

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\textsuperscript{230} Flower stems and roots were found but have yet to be identified, unfortunately. See Arnold, *Der Tempel des Königs Mentuhotep von Deir el-Bahari I*, pp. 22-24, pls. 15a, 19a; Hugonot, *Le jardin dans l’Égypte ancienne*, p. 65.

\textsuperscript{231} Arnold, *Der Tempel des Königs Mentuhotep von Deir el-Bahari I*, pp. 22-24, pls. 15a, 19a, 49, 50; Hugonot, *Le jardin dans l’Égypte ancienne*, pp. 64-65, fig. 49.

\textsuperscript{232} Arnold, *Der Tempel des Königs Mentuhotep von Deir el-Bahari II*, p. 90.


\textsuperscript{234} The length of Ahmose I’s reign is disputed; however, he is generally given a 25-year reign. His predecessor and brother Kamose is given a five-year reign; and their father Seqenenra Ta’a is given a possible two to three-year reign. See Janine Bourriau, “The Second Intermediate Period,” in *The Oxford History of Ancient Egypt*, ed. by Ian Shaw, (Oxford: OU Press, 2000), pp. 197-206, and the chronology of kings, p. 484.

\textsuperscript{235} See Breasted, *Ancient Records of Egypt IV*, p. 256, §518-520; also note the mention of *Dert*, which is a toponym for the Theban Necropolis on the West Bank of Luxor.
Valley of the Kings (KV 36?), as well as have a memorial temple for his deified cult on the West Bank of Thebes. Any evidence of a hnty-š-garden there from the time of Amenhotep I has likely been concealed and/or has been demolished, as Hatshepsut built her own memorial temple’s first terrace above his own. Like his grandfather (Sequenra Ta’a), uncle (Kamose), and father (Ahmose I), it is possible Amenhotep I had planted a hnty-š-formal garden at his temple.

Regarding Thutmose I, a hnty-š-formal garden was likely planted at his memorial temple, as the temple and the formal garden’s lake (mr) are personified as a pair of fecundity figures on the Red Chapel of Hatshepsut (Block 290):

Female fecundity figure with a text in a hwt-ideogram above her head:

\[
\text{hwt } 'z-\text{hpr-}kz-\text{-r } \text{hnmt-}n\text{h}(t)\]

The Temple of A’akheperkara (called) ‘The-One-United-with-the-West (Necropolis).’

Male fecundity figure holding a mr-ideogram beside her, saying:

\[
\text{mr niswt } 'z-\text{hpr-}kz-\text{-r } dq \text{ mdw ini } n.k \text{ } h(t) \text{ } \text{rnpt mnwt nb(}t) \text{ } kbb(}t) \text{ } w'b(}t) \text{ imi}
\]

The lake of the king (called) ‘Great-is-the-Manifestation-of-the-kz-of-Ra.’ Words spoken: I bring to you everything, all the fresh and pure offerings that are in me.

Ineni (owner of the TT 81 scene) might have assisted in the memorial temple and hnty-š-formal garden’s construction, as he was an ‘Architect’ during the pharaoh’s reign. Archaeological evidence of the lake and the rest of hnty-š-formal garden has yet to be found. This is likely because

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238 Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 79.
239 See the use and translation of hnmt-`nh in Erman and Grapow, WB III, no. 379.1.
240 Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 80.
the temple is located in inundated land (bʔh) that flooded and silted up each year prior to the High Aswan Dam’s construction in the 1960s.\textsuperscript{241}

Thutmose II might have intended to plant a hnty-š-formal garden in his memorial temple on the West Bank had he not died young, only reigning for 13 to 14 years.\textsuperscript{242} Scholars have proposed that Hatshepsut’s memorial temple initially began as Thutmose II’s and that she later converted it to her own temple following her ascension to the throne as coregent and pharaoh.\textsuperscript{243}

Concerning Hatshepsut, the half-sister and a great wife (queen) of Thutmose II and coregent and stepmother of Thutmose III, there is archaeological evidence for a hnty-š-formal garden in the first court of her memorial temple at Deir el-Bahari with two T-shaped pools (š), two groves of around 42 Puntite incense trees, date palms, human-headed sphinxes (MMA 31.3.166), and two pairs of persea in front of the propylon gate and first processional stairway.\textsuperscript{244} Textual evidence of her hnty-š-formal garden also exits from the Punt Expedition reliefs on the Second Terrace and the Amun sanctuary reliefs on the Third Terrace that mentions it as an offering:

Punt Expedition reliefs:

\begin{verbatim}
srd.tn M2z-t-kz-rº m [hnt(y)-š.f hr gswy] hwt-nfr.f mì hd.t n it. <t>\textsuperscript{246}
\end{verbatim}

Your planting of trees, Ma’atkara in his hnt(y)-š-formal garden on the two sides of his temple, is like your brightness to your father.

Amun sanctuary reliefs:

\begin{verbatim}
\end{verbatim}

\textsuperscript{242} Jürgen von Beckerath, Chronologie des pharaonischen Ägypten, (Mainz am Rhein: PvZ, 1997).
\textsuperscript{244} Winlock, Excavations at Deir el-Bahari 1911-1931, fig. 12, p. 213.
\textsuperscript{245} Sethe, Urkunden IV, no. 328.
\textsuperscript{246} A mixture of suffix pronouns is used in Hatshepsut’s texts. Sethe put it.s but it.t agrees more with the proceeding hd.t. See Sethe, Urkunden IV, no 328.
The installation of tree groves...upon the two sides of his temple in his hnt(y)-š-formal garden...in order to embellish and purify the reeds in the pool of [the Lord of the Gods.]

There is even a granite kneeling statue of Hatshepsut (MMA 30.3.1) with nw-jars as ‘Ma’atkarawho-Offers-Fresh- Produce-to-Amun’ that was placed with others (MMA 30.3.2; 29.3.1) on the processional way or sometimes within the Amun sanctuary at Deir el-Bahari (See Table 3.0). A quartzite statue of her ‘Chief Architect’ Senenmut from Karnak Temple further confirms the continued presence of the other hntyw-š-formal gardens, as one of his titles was an ‘Overseer of the Hntyw-š-Formal Gardens of Amun’ during the reign of Hatshepsut. Senenmut even listed in his tomb (TT 71) that he desired three bundles of offerings arranged in the hntyw-š-formal gardens presented to him daily, as well as a water vessel for them:

...ḥtpw m tpy-š(wi) 3 nb n hntyw-š r...n.i n sn hntnśw r is.i n ḫrt-nṯr r...n...r.nb n nḥḥ

...3 bundles of offerings, each of the best quality, from the hntyw-š-formal gardens. I will be given them together with a water vessel for my tomb in the necropolis, for...of...every day forever.

For Thutmose III, a ḫnst-nḥswt or “Sitting of the King Announcement” on the Sixth Pylon of Karnak details he continued to administer the hntyw-š-formal gardens of Amun at Thebes:

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247 Sethe, Urkunden IV, nos. 352-353.
248 The use of “his” here is likely referring to Amun.
I requisitioned for Him many fields, [hntyw-š-formal gardens], and ploughlands...to provide...[for the daily divine offerings]...on a yearly basis...including fowl, incense, wine, fruit, and all good things from a tax quota of each year.  

Furthermore, a limestone stela (TN.20.3.25.3) discovered in Sheikh Abd el-Qurna and erected by Nefermenu (TT 138) during the reign of Thutmose III, suggests that the king constructed a hnty-š-formal garden and continued to maintain those of his predecessors’ for Amun’s enjoyment:

...[i]nw m rnpwt s’nh [kd m h]rrt mhwy.f m rnpwt nbt ir(.w) msw n nb-tswy m-d bḥ it.f ’lmn-Rc’...[imy-rx] hnt(yw)-š m b’ḥ m Wṣṣt ḫy ḫmzw [hm.f m] rnpwt n ḫkt.f m st ṣḥmh-lb n [’lmn-Rc’]...[Nfr-m]nw

...bringing fresh flowers, fruits, and vegetables (rnpwt), the florist (s’nh)256 [who forms with] fresh flowers (ḥrrt), who fills [his] two arms [with] all fresh flowers, fruits, and vegetables (rnpwt), who makes the bouquets of the Lord of the Two Lands as per the requirement by his father Amun-Ra...Overseer of the Hntyw-š-Formal Gardens in the inundated land (b’ḥ) of Thebes, Chief of what [His Majesty has created from] fresh flowers, fruits, and vegetables (rnpwt)257 of His plunder258 in the recreation place259 of [Amun-Ra]...[Neferme]nu.

Interestingly, according to the text, Nefermenu was a ‘Florist,’ a ‘Chief of the Royal Florists,’ and

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256 Florists like sculptors were called s’nh(w) or literally ‘those who cause/form life.’
257 That is to say: the ‘Chief of the Royal Florists.’
258 This suggests that some of the bouquets arranged by Nefermenu and his colleagues in the hntyw-š-formal gardens of Thebes were created from the foreign flora that was brought back to Egypt from abroad.
259 ‘Recreation place’ might be referring to the hntyw-š-formal gardens themselves or their pavilions (mṣrw), see the text on the following pages from Qenamun (TT 93) about the harem pavilion in the hnty-š-formal garden of the Perunefer Palace, p. 68 of this work.
an ‘Overseer of the Hntyw-š-Formal Gardens in the Inundated Land (bḥ) of Thebes,’ who created floral bouquets made of the foreign flora brought by Thutmose III from abroad. This ‘plunder’ is likely referring to the flora and fauna that were bought back by the Thutmose III as offerings to Amun from Syro-Palestine during his tour of the empire in his Year 25 as per the sh-ṃnw-temple’s inscriptions at Karnak:

Year 25 of the King of Upper and Lower Egypt, Menkheperra, may he be given life forever, plants were found by his Majesty in Syro-Palestine (Rtmw)...All sorts of beautiful and extraordinary plants were found in the God’s Land by his Majesty...in the northern lands under his authority.

It is then evident that the foreign flora and fauna transported by Thutmose III from the Levant was disseminated for planting and cultivation in various formal gardens in Thebes proper and its West Bank, such as the Hntyw-š-formal gardens that Nefermenu oversaw and made bouquets of foreign flora, as well as the other Domain of Amun gardens mentioned in this Chapter. In terms of pictorial evidence from the TT 87 scene, the Hnty-š-formal garden of Thutmose III’s memorial temple had a central rectangular lake and a quay with two tree avenues on each side, pavilions, a tree grove in front of the sanctuary and shrines, and statuary erected by private individuals and the king (See Fig. A1.16). The Spanish mission conserved the court depicted in the TT 87 scene of his memorial temple, which had eight trees planted in pits lined with limestone. Minnakht seems to have been given permission to erect a striding statue of himself in one of the pavilions of the formal garden.

The date palms of the formal garden would have been maintained for a time by Samut who recorded on his statuary group in Paris (Louvre A. 53) that he was a ‘Chief Guardian of the Date

---

260 This is often termed the ‘Third Military Campaign.’ However, it is a misnomer, as it was not military in nature, but was “an inspection tour” of the Northern Empire in the Levant, see Natalie Beaux, Le cabinet des curiosités de Thoutmosis III, (Leuven: Oriëntalistiek, 1990), p. 42.
261 Beaux, Le cabinet des curiosités de Thoutmosis III, p. 40.
262 See the photograph of the pits lined with limestone and the recently reintroduced trees on their Facebook page: https://www.facebook.com/templofunerariodetutmosisIII/photos/pcb.2847920512153218/2847911892154080.
263 See the wall narrative of the TT 87 scene.
Palms in the Memorial Temple of Thutmose III\textsuperscript{264} during the reign of Amenhotep II. The memorial temple and the lake (\textit{mr}) of the hnty-\textit{s}-formal garden are further personified as a pair of fecundity figures on the Red Chapel of Hatshepsut (Block 290):

Female fecundity figure with a text in a hwt-ideogram above her head:

\[\textit{hwt Mn-hpr-\textit{r} Hnkt-\textit{n}h}\]

The Temple of Menkheperra (called) ‘He-who-Offers-Life.’

Male fecundity figure holding a mr-ideogram beside her, saying:

\[\textit{mr niswt Mn-hpr-\textit{r} st ib Nwn}\]

The lake of the king Menkheperra (called) ‘The-Seat-of-the-Heart-of-Nun.’

The name of the formal garden’s lake recalls the Hermopolitan creation myth in which the Ogdoad joined together as frogs and snakes in the primaeval waters of Nun to form the mound of creation from which all life sprang forth. Diwya further recorded on his black granite statuette (JE 42122) that he was an ‘Overseer of the Construction Works of Amun in the Memorial Temple of Thutmose III,’\textsuperscript{267} suggesting that he could have assisted in the formal garden’s construction. Archaeological evidence of the lake and the rest of the formal garden in the enclosure has not been discovered yet\textsuperscript{268}. This is likely due to the silting up of the inundated land (\textit{bʰḥ}) on which it is located, the rui-

\textsuperscript{265} Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 80.
\textsuperscript{266} Lacau and Chevalier, Une chapelle d’Hatchepsout à Karnak I, p. 81.
\textsuperscript{267} Legrain, Statues et statuettes des rois et de particuliers I, p. 72, left inscription (d); Legrain, « Notes d’inspection sur le temple Manakhpirri-henq-ankh, », p. 183.
\textsuperscript{268} Iwaszczuk, “Temple of Thutmose III – \textit{Hnkt-\textit{n}h},” in Sacred Landscapes of Thebes during the Reign of Hatshepsut, pp. 162-163.
-nous state of the structure, and the fact that a modern road runs through the enclosure.²⁶⁹

Amenhotep II’s memorial temple located in proximity to the Ramesseum on the West Bank is poorly preserved with only parts of its stone wall foundations and colonnades intact.²⁷⁰ A limestone stela of Nebwawy, who was a ‘High Priest of Osiris’ at Abydos (JE 34018) does detail that the pharaoh donated to the Memorial Temple of Thutmose III’s “divine offerings, fields and a [single hnty-š-formal garden].”²⁷¹ Thus, if the Memorial Temple of Amenhotep II had had a hnty-š-formal garden, the Architect and Overseer Minmose likely assisted in its construction, as he is recorded on a statuary group dedicated by his father Minmose in the British Museum (BM EA 2200) as being an ‘Overseer of Construction Works in the Temples of Upper and Lower Egypt’ during the pharaoh’s reign.²⁷² Moreover, Qenamun (owner of the TT 93 scenes), who was also an ‘Overseer of the Perunefer Palace,’ has a tomb scene that depicts him, officials, a young prince Amenhotep II, and the prince’s tutor seated. According to the scene’s texts, they are meant to be seated in the harem pavilion in the hnty-š-formal garden of one of the palaces at Perunefer in order to watch a performance of singers, dancers, and musicians:

²⁷⁰ Petrie, “The temple of Amenhotep II,” in Six temples at Thebes, pp. 4-6, pls. XXII-XXIII.
²⁷⁴ Or quite literally ‘the viewing place,’ see Lesko and Lesko, A Dictionary of Late Egyptian 1, p. 207.
Perunefer is thought to have been an important naval base with harbors, dockyards, multiple large palace complexes, army camps, and a town located in between the nearby sites of Tell el-Daba’a and Qantir in the Eastern Delta. Following Ahmose I’s ultimate defeat of the Hyksos, whose ‘Fifteenth Dynasty’ ruled Lower Egypt as a sovereign kingdom for one-hundred years, the important royal base of Perunefer was established and administered by Ahmose and his Thutmoside successors in the vicinity of the former Hyksos capital of Avaris. Thutmoside kings possibly frequented the palaces of Perunefer several times per year when they were on business in Lower Egypt. For example, although little remains of the Perunefer Palace Complex of Thutmose III and Amenhotep II dated to the Eighteenth Dynasty, archaeologists did discover beside its Palaces F, G, and J a large New Kingdom lake with a garden built beside it, which might be the ḫnty-š-formal garden that Qenamun mentions. Likewise, another palace at Perunefer was located near the town center dated to the late Eighteenth to Nineteenth Dynasties where archaeologists found the remains of a garden. The remains are centrally situated between the palace proper, an additional small temple or palace wing, and the living quarters of elite individuals who were working in and/or visiting the naval base.

275 For more information, Manfred Bietak, “Perunefer: The principal New Kingdom naval base,” *EA* 26 (2009), pp. 15, 16, see. esp. fig. 1: the ancient location of Avaris and Per-Ramesses; as well as Manfred Bietak, “Minoan presence in the pharaonic naval base of Peru-nefer,” in Cretan Offerings: Studies in Honour of Peter Warren, ed. by Olga Krzyszkowska, (London: BSA, 2010), pp. 18-20, figs. 2.3 and 2.7; and Manfred Bietak, „Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab‘a),“ pp. 314-328, Tafel XI, fig. 7; and finally, Manfred Bietak, “Rich beyond the Dreams of Avaris,” p. 187, fig. 2.

276 See the maps of the palaces and the large lake and (formal) gardens in “The Palatial Precinct at the Nile Branch (Area H),” fig. 1; “The Late Hyksos Period,” fig. 2; and “The Palace District of the Tuthmoside Period,” fig. 2 in Manfred Bietak, *Tell el-Dab‘a – Elzbiet Helmi - Ancient Avaris*, [http://www.auaris.at/html/ez_helmi_en.html](http://www.auaris.at/html/ez_helmi_en.html).

277 Manfred Bietak, “Perunefer: The principal New Kingdom naval base,” p. 17 and fig. 2: Avaris and Per-Ramesses in the late Eighteenth Dynasty and Nineteenth Dynasties; Bietak, “Minoan presence in the pharaonic naval base of Peru-nefer,” fig. 2.7.

278 Manfred Bietak, “Perunefer: The principal New Kingdom naval base,” p. 17 and esp. fig. 2: Avaris and Per-Ramesses in the late Eighteenth Dynasty and Nineteenth Dynasties; Bietak, “Minoan presence in the pharaonic naval base of Peru-nefer,” p. 19, esp. fig. 2.7; Manfred Bietak, „Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab‘a),“ pp. 314-328, Tafel XI, fig. 7; Manfred Bietak, “Rich beyond the Dreams of Avaris,” p. 187, fig. 2.
Based on archaeological excavations, Thutmose IV’s memorial temple is believed to have been organized similarly to that of Thutmose III’s: two courts fronted by a pair of large and small pylons, leading to a terraced portico with an inner peristyle court, sanctuary, and the ambulatory shrines.\footnote{Sir William Flinders Petrie, “The temple of Tahutmes IV,” in \textit{Six temples at Thebes}, (London: Bernard Quaritch, 1897), pp. 7-8, pls. XXII, XXIV; Betsy M. Bryan, \textit{The Reign of Thutmose IV}, (Baltimore; London: Johns Hopkins University Press, 1991), p. 174.}

The site is poorly preserved but a \textit{hnty-š}-formal garden with a lake likely existed, as Ipy (TT C6) was an ‘Overseer of the Boats in the Memorial Temple of Thutmose IV.’

In regard to Amenhotep III, textual evidence from a scribal statue of a private individual named Amenhotep, who was ‘Royal Scribe’ and ‘Overseer of Construction Works in the Temple-of-Millions-of-Years (called) ‘United-with-Ptah’,’ states the king personally asked him to direct the construction of his Memphite memorial temple situated in inundated land (\textit{brḥ}), which had a \textit{hnty-š}-formal garden with a pool (š) and groves of foreign trees that provided divine offerings:

\footnote{See the hieroglyphic text in Georg Steindorff, \textit{Urkunden des ägyptischen Altertums XX: Historische Inschriften Amenophis III.}, (Berlin: Akademie-Verlag, 1957), nos. 1793-1796; and its early translation in Petrie, \textit{Tarkhan I and Memphis V}, pp. 33-34, pls. LXXVIII-LXXX.}
t3-ntr...rwdt ḫr mḥt.s nfrw kst tn “ḥ”.n wḥh.n ḫm.f ḫtp-ntr msw m ḫrt-hrw nt r’-nb...r ḫ.n ḫm.f wn ḫw t ḫ ṣdf3 n ḫw t Pḥ ṭ m drf.s nb ḫi-n-b3 n ḫwmt n b3(w) n nswt btty nty ḫr gswy (ḏt.f ʿlmm n nwt rṣy(t)...

(This statue was) given as a favor from the king and placed in the Temple of Nebma’atra ‘United-with-Ptah,’ which His Majesty, may he be given l.p.h., made anew for his father Ptah-South-of-His-Wall in his inundated land west of the Temple-of-the-k3-of-Ptah...He (the king) appointed me to direct the construction works in his Temple-Of-Millions-Of-Years, which His Majesty made anew in his inundated land west of the Temple-Of-the-k3-of-Ptah on the two banks of Memphis (‘ mh-tṣwy)...as a monument to his father Ptah, a brilliant enduring structure (made) from the fine white limestone of Turah. Its beauty was like the horizon of heaven. Its doors were (made) from the Mediterranean cypress (‘š or Cupressus sempervirens L.?281) of (its) ḫnty-š-formal garden.282 The choicest things from Gau Harbor,283 fashioned with gold from the foreign lands, fine gold, and precious stones...Its pool (š) was dug and established, its tree groves (mnw) planted and made dazzling with every kind of noble tree from the finest of Punt (t3-nṭr)...These construction works were made beautifully (and) His Majesty established new divine offerings in the course of every day...and His Majesty caused this temple to provide provisions in the Ptah enclosure in all its decrees, just as the Temples-of-the-b3w-of-the-Kings-of-Upper-and-Lower-Egypt, which are located beside his father Amun in the Southern City (Thebes)...

It is believed the temple described by Overseer Amenhotep was the Memphite equivalent of the well-documented memorial temple of Amenhotep III at Kom el-Hettan on the West Bank of Thebes.284 A similar ḫnty-š-formal garden likely existed at Kom el-Hettan, as the recto of the granite ‘Israel Stela’ (JE 31408/CG 34025) initially erected by Amenhotep III in his Theban memorial temple concerning his construction works and later reused by Merneptah, states that the

281 This is not referring to Lebanese cedar (Cedrus libani Loud.), as it was called mrw (𓎆𓏺𓎂). It is another coniferous species that was also imported from Syro-Palestine and Turkey, likely the Mediterranean cypress (Cupressus sempervirens L.) more than the Cilician or Taurus conifer (Abies cilicica Carr.). The Mediterranean cypress is more probable because Old Kingdom archaeobotanical evidence of it has actually been found in the formal garden of the Bent Pyramid’s temple at Dahshur dated to the reign of Sneferu of the Fourth Dynasty. See the identification, s.v. “š,” in Germer, Handbuch, pp. 47-49; and also see “There were over 260 trees, including palms and sycamores, as well as cypresses imported from the Levant,” in Arnold, “Cult Buildings of the Bent Pyramid at Dahshur,” Archaeology in Egypt: Magazine of the German Archaeological Institute in Cairo 5 (Nov. 2019): p. 49.

282 Wood from ḫntyw-š-formal gardens was used not only for temple doors, but also for sacred barks, see the entry on the term “ḥnt-š” in Hugonot, Le jardin dans l’Egypte ancienne, p. 17.


284 The statue was unfortunately not found in situ and “we lack any direct archaeological evidence as to the location of the sanctuary.” See Petrie, Tarkhan I and Memphis V, p. 35.
enclosure had a lake (mr) with fish, fowl, and flowers for offerings:

...mr.s mh.w m ḫpy wr nb šbdw ṣpdw ḫtpw ḫb(w)...

...Its lake is full of the Great Hapy, the master of fish, birds, and pure floral offerings...

The name of the formal garden’s lake remains unknown. Archaeobotanical evidence has been discovered at Kom el-Hettan; however, due to the salinization of the soil over the past century, it was impossible to identify the species of flora found.286

**The Kšmwy-Formal Garden: Layouts, Architecture, and Water Features**

From an examination the TT 90 scene, as well as extant textual evidence, a kšmwy-formal garden could be surrounded by a rectangular wall entered through a gate with wooden doors that led to a central pathway flanked by pergolas,287 tree avenues, and ending with a T-shaped pool beside a shrine fronted by a lotus-shaped libation basin, a pair of trees, and an ornate winepress (See Fig. A1.17). The pool seems lined with stone, either evoking the Nile and its Delta or perhaps the Egy-

<table>
<thead>
<tr>
<th>Table 3.1: Possible Features of a Kšmwy-Formal Garden288</th>
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<td>Enclosure walls (pr)</td>
</tr>
<tr>
<td>(A2); (A3)</td>
</tr>
<tr>
<td>Gates (šb3)</td>
</tr>
<tr>
<td>(A2); (A3)</td>
</tr>
</tbody>
</table>


286 I was kindly informed of this evidence by word of mouth from Dr. Hourig Sourouzian on site at Kom el-Hettan this past February 2020.

287 “Although the terms often are used interchangeably, trellises, arbors, and pergolas are distinctly different structures...An arbor usually incorporates a trellis into its structure, creating a tunnel-like passageway of climbing plants. Arbors have a continuous run of latticework from one side of the “tunnel” to the other, often in an arched shape. Pergolas, too, are designed to support climbing plants. Unlike arbors, though, pergolas have posts supporting an open, roof-like structure. They’re most commonly used to shade a walkway...” See Robyn Doyon-Aitken and Chip Harley, “What’s the Difference: Trellis, Arbor, and Pergola,” *Fine Home Building Magazine* (April/May 2009): [https://www.finehomebuilding.com/2009/05/01/whats-the-difference-between-a-trellis-an-arbor-and-a-pergola](https://www.finehomebuilding.com/2009/05/01/whats-the-difference-between-a-trellis-an-arbor-and-a-pergola).

<table>
<thead>
<tr>
<th><strong>Arbors and pergolas</strong> <em>(kṣm̩w)</em></th>
<th><img src="A2" alt="Image" /> (A2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tree avenues</strong> <em>(ḥt)</em></td>
<td><img src="A3" alt="Image" /> (A3)</td>
</tr>
<tr>
<td><strong>Pools</strong> <em>(š)</em></td>
<td><img src="A3" alt="Image" /> (A3)</td>
</tr>
<tr>
<td><strong>Statuary</strong> <em>(twt; ṣps; sšm̩w)</em></td>
<td>Statue of ‘Amenhotep-of-the-<em>Kṣm̩w</em>-Formal-Garden’ (A1)</td>
</tr>
<tr>
<td><strong>Lotus-shaped libation basins</strong> <em>(sšn)</em></td>
<td><img src="A3" alt="Image" /> (A3)</td>
</tr>
<tr>
<td><strong>Shrines</strong> <em>(hw̱t)</em></td>
<td><img src="A3" alt="Image" /> (A3)</td>
</tr>
<tr>
<td><strong>Ornate wine press</strong> <em>(nm)</em></td>
<td><img src="A3" alt="Image" /> (A3)</td>
</tr>
<tr>
<td><strong>Apiaries</strong> <em>(ḥḥy)</em>&lt;sup&gt;289&lt;/sup&gt;</td>
<td>![Image](TT 100) (TT 100)</td>
</tr>
</tbody>
</table>

<sup>289</sup> See the discussion of the possibility of this term on p. 33, footnote 144.
-ptian word for floral offerings: ḫtpw (𓊩𓊴𓊢𓊲𓊰). The kṣmwt-formal garden can also be a large, gated, and square enclosure with a central pathway flanked by rows of pergolas (See Fig. A3.19). Its shrine might be made of stone with a painted cavetto cornice, dedication inscriptions, and wooden flag poles while the columns of the pergolas might be carved in the form of papyrus. Apiaries must have been present too since the produce from the kṣmwt-formal garden scene includes honey. Statuary showing the king could be placed in the formal garden, as is evident from the textual evidence dated to Amenhotep I described in the following section.

**Extant Evidence of Kṣmwt-Formal Gardens during this Period**

Ancient Egyptian grape wine could be made from and/or include the addition of various fruits and/or flora so it should not be assumed that a kṣmwt-formal garden only had vineyards for grape production. The kṣmwt-formal garden in the TT 90 scene, for example, seems to have raised grapes, pomegranates, as well as white lotus and pintail duck. Interestingly, the term kṣmwt (𓊩𓊴𓊢𓊲𓊰) was further used for the New Kingdom “gardener and/or vintner.” Thus, a kṣmwt-formal garden must have been closely linked to those skilled in horticulture and viticulture, and could be interpreted literally as ‘the one that creates liquid (mw) provisions (kṣ)” or kṣ mw (𓊩𓊴𓊢𓊲𓊰) in Egyptian. Evidence of kṣmwt-formal gardens in Thebes during this period comes from the time of Amenhotep I, Amenhotep II, and Amenhotep III. The Abbott Hieratic Papyrus (pBM EA 10221) or ‘Royal Tomb Robbers Papyrus’ dated to Ramesses IX mentions that his officials inspected for looting a temple called ‘Temple-of-Amenhotep-l.p.h.-of-the-Kṣmwt-Formal-Garden’:

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290 See the TT 90 wall narrative and the entry for the Egyptian honey bee in Appendix II.
292 See Erman and Grapow, *WB* V, nos. 106.10-11; and Seidlmayer, s.v., “kṣmwt,” in *TLA*, http://aaew.bbaw.de/tdl/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=163560&db=0.
293 See the use of kṣ used as ‘food/provisions’ in Erman and Grapow, *WB* V, nos. 91.3.-13; and Seidlmayer, s.v. “kṣ,” in *TLA*, http://aaew.bbaw.de/tdl/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=162890&db=0.
The eternal horizon of [Djeserkara], l.p.h. son of Ra, Amenhotep (I), l.p.h., which is 120 cubits deep measured from its superstructure ['hrʔ'],294 which is called ‘The-High-Ascent’ [or ‘The-Height’] north of the ‘Temple-of-Amenhotep-l.p.h.-of-the-[Ksmw-Formal-Garden],’ concerning which the mayor of the city Paser, had reported to the governor of the city and vizier Kha[e]mw[as]...saying: “The thieves have broken into it.” Inspected on this day, it was found uninjured by the inspectors.295

Based on the depth of the passage (120 cubits = 62 meters or 206 feet) described above and archaeological evidence examined in the late 1890s,296 scholars believed this temple fronted a rock-cut sepulcher in the cliffs of Deir el-Bahari.297 This ksmw-formal garden then likely abutted the temple and while its layout, water features, and flora and fauna are not certain; it apparently had statuary showing the king as ‘Amenhotep-of-the-Ksmw-Formal-Garden,’ which was later moved by Hatshepsut into the ancestor shrine on the upper third terrace of her memorial temple.298

Amenhotep II incorporated a ksmw-formal garden into the center of his expansive ‘tnt-ht-formal garden depicted in Sennefer’s tomb (TT 96) (See Fig. A3.23). The formal garden was a large square enclosure with a central path bordered by six long rows of grape arbors and pergolas fronted by a gate. This ksmw-formal garden might even have been the artistic inspiration for the ceiling of Sennefer’s cenotaph tomb built below TT 96 proper, which is painted with expansive and intricate grape arbors, and nicknamed the ‘Tomb of the Vineyards.’ While, the ksmw-formal garden depicted in TT 90 scene seems to be one built by Amenhotep III, as the doorjambs of the shrine bear dedications with his praenomen. Hundreds of wine, fat, beer, meat, honey, and ben

294 “Either a stela or some name for a structure which stood at [its] mouth,” see T. Eric Peet, The great tomb-robberies of the twentieth Egyptian dynasty: Being a critical study with translations and commentaries of the papyri in which these are recorded, (Oxford: Clarendon Press, 1930), p. 43, footnote 4.
295 This translation is a synthesized version of those done in English by Breastted, Ancient records of Egypt IV, p. 252, §513; and Peet, The great tomb-robberies of the twentieth Egyptian dynasty, pp. 37-38, 43, footnote 4.
297 “This passage has never been found, but its entrance was certainly located on the plain, by the tombs of the Eleventh and Thirteenth Dynasties...A temple of Amenhotep I was found here by Spiegelberg” see Breastted, Ancient records of Egypt IV, p. 252, footnote a.
298 Wilkinson, The garden in ancient Egypt, p. 95.
Tree oil (Moringa oleifera Lam.) jar labels with hieratic inscriptions were discovered in the refuse heaps of the village beside Amenhotep III’s Malkata Palace Complex near the Birket Habu Harbor, allowing archaeologists to better understand the components of the palace complex and the produce that was raised in or imported from the surrounding region.  

Five wine jar labels (nos. 23, 54-56, 58) state that they came from a ksmw-formal garden located in the Malkata Palace Complex (ts ḫwt pr-ss) known in antiquity as the ‘Splendor-of-Aten’ (tḥn ḫtn) Palace. Wine jar seal no. 55, for example, which has parallel inscriptions on nos. 54 and 56, was inspected by a man named Ptahmay:

\[rnpt-hsb\ 37\ irp\ n\ itrw\ imnty\ n\ pr\]  
\[Nb-msr-r ṣnh(.w)\ wdš(.w)\ snb(.w)\ tḥn\ ḫtn\ pr-hry\ ksmw\ Ptḥ-m'y\]

Year 37: Wine of the western watercourse of the Palace of Nebma’atra, may he be given l.p.h., (called) ‘Splendor-of-Aten’ (from) the upper part of the ksmw-formal garden, (inspected by) Ptahmay.

Perhaps the TT 90 scene depicts this ksmw-formal garden in the Malkata Palace proper or one that might have been situated in the vicinity of its Northern Palace or its Amun temple enclosure with a festival hall that was called the ‘Temple-of-Amun-in-the-House-of-Rejoicing’ and constructed for the king’s second Jubilee Festival (ḥb-sd).

The Sš-Formal Garden: Layouts, Architecture, and Water Features

Various features would have been in a sš-formal garden based on the extant pictorial and textual

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300 Hayes, “Inscriptions from the Palace of Amenhotep III,” no. 55, fig. 6 and compare to nos. 54-56.

301 A shortened form perhaps of ts ḫwt pr-ss on other jar labels. See Hayes, “Inscriptions from the Palace of Amenhotep III,” nos. 58-59, figs. 6-7.

evidence from this period. The only known example of a layout of šš-formal garden during this period comes from the TT 39 scene, which is dated to the time of Thutmose III, and depicts an enclosure with a central pond bordered by tree avenues (See Fig. A3.17). The enclosure wall looks to be made of mudbrick and a gate might have existed on the viewer’s left had that entire half of

Table 3.2: Possible Features of a šš-Formal Garden\(^3\)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Image (T3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure walls (pr)</td>
<td></td>
</tr>
<tr>
<td>Gates (sbs)?</td>
<td>Destroyed?</td>
</tr>
<tr>
<td>Ponds (šš)</td>
<td></td>
</tr>
<tr>
<td>Tree avenues (ḥt)</td>
<td>(T3)</td>
</tr>
<tr>
<td>Aviaries (ḥt-ṣ; hrwt)</td>
<td>(T3)</td>
</tr>
<tr>
<td></td>
<td>(Ti’s mastaba-tomb, reign of Teti); (Amenemhat II’s Fragment M text on p. 79.)</td>
</tr>
</tbody>
</table>

\(^3\): Drawings by the author © 2020, after Davies (1922), pl. XVIII and Montet (1925), fig. 25.
the scene not been completely destroyed. The pond is square and supported lotus and pintail duck while and the rows of pomegranate and common figs, as well as doum- and date palms were planted in contrasting patterns. Aviaries for certain fowl could have been located in proximity to the ss̱-formal garden too (See Fragment M from the Annals Inscriptions of Amenemhat II below). This type of aviary seemed to consist of a wooden structure with a latticed ceiling supported by columns based on the palaeography of its ideogram in the Amenemhat II inscription (𓊞) and the columned aviary enclosure shown in the mastaba-tomb of Ti in Saqqara, dating to Teti.304

**Extant Evidence of Ss̱-Formal Gardens during this Period**

From the Old Kingdom onwards, the term ss̱ denoted marsh thickets bordering the Nile or its watercourses that were used by the elite for hunting, shooting, and spearing game.305 A reused block with an inscription of the Annals of Amenemhat II (Fragment M) from the Ptah Temple Enclosure at Memphis (Mit Rahina) suggests that by the Middle Kingdom the ss̱ further denoted a type of formal garden that was centered around fish and fowl propagation:

...ḥtp-ntr...sḥn.sn...ḥt-ṣ ḫṯs 20 ss̱ 80 [snt ḫd 36]...

...divine offerings...according to their requirement... (from) the aviary (ḥṯs307): 20 ḫṯs-ducks308 (and from) the ss̱-formal garden: 80 Egyptian turtle doves (Streptopelia turtur rufescens Brehm) (and) 36 incense balls...

304 It seems to be a modified, more architectural version of Gardiner T26 (𓊞), used for the word sḥt (𓊞𓊞) or “bird-trap,” and similar to the columned aviary enclosure (ḥrw[t]) shown in the mastaba-tomb of Ti. For further information and examples, see Pierre Montet, Scènes de la tombe privée dans les tombeaux égyptiens de l’Ancien Empire, (Paris; Strasbourg: Librarie Istra, 1925), pp. 116-118, esp. fig. 25; Faulkner and Saba, *Egyptian Grammar*, p. 515; the palaeography of ḫt-s in the Altenmüller and Moussa, „Des Inschrift Amenemhets‘ II,“ pl. V; and the discussion of the various poultry-yards and aviaries used from the Old Kingdom onwards in Bailleul-LeSuer, „From Kitchen to Temple: The Practical Role of Birds in Ancient Egypt,“ in *Between Heaven and Earth*, pp. 26-27, fig. 1.9.


306 Altenmüller and Moussa, „Des Inschrift Amenemhets‘ II,” p. 7, pl. V.

307 Translated as “poultry yard/fowl-pen” in the past. If one translates the term literally it might denote something along the lines of ‘the great wood(lands)/grove,’ perhaps situating it among trees. See Erman and Grapow, *WB III*, s.v. “ḥt-s,” in *TLA*, http://aaew.bbaw.de/tda/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=121320&db=0.

308 It is interesting that this unknown editable duck species had the same name as this type of aviary (ḥt-s).
This is further evident from the surrounding scenes and texts of the TT 39 scene, which states that Puimra’s sš-formal garden was located in the vicinity of his tomb (ḥwt) that is situated in the El-Khokha District of the Theban Necropolis.309 A hieratic graffito in Sobekhotep’s tomb (TT 63) further indicates that the tomb-owner constructed a sš-formal garden in proximity to his tomb (ḥwt), which is located in the Sheikh Abd el-Qurna District of the Theban Necropolis:

He found that in his opinion [the tomb is] more beautiful than any temple. It is like the permanent sky. Its walls are real mountains. His fields are filled with all good things. His [sš-formal garden] is full of fish... 310

The bird- and fish-rich pond (or lit. the sš (𓊨𓊪𓊶)) in the sš-formal garden, might be interpreted as a recreation of the sacred primaeval marsh thicket of Akhmim (Khemmis), and thus: (i) recalled the Theban funerary hymn to Ptah-Sokar-Osiris, which states that “...the great god has returned coming forth from primaeval waters,”311 as well as (ii) evoked rebirth and resurrection symbolism. Therefore, a sš-formal garden would have been constructed in proximity to a cult temple or private elite tomb in a necropolis to be used by the gods or the glorified dead, recreating the wild recreational and/or sacred primaeval marsh thickets along the banks of the Nile and its tributaries that they frequented in life. The formal garden was centered around fish and fowl together with some incense and fruit cultivation.

The ṣt-nt-ḥt-Formal Garden: Layouts, Architecture, and Water Features

The ṣt-nt-ḥt-formal garden depicted in Sennefer’s tomb (TT 96) is a masterpiece of Egyptian formal garden design, as multiple types of formal gardens are incorporated into its extensive and impressive layout: four ḟ-formal gardens and a kṣmw-formal garden (See Fig. A3.23). A massive enclosure wall with rounded merlons and crenels encloses the formal garden proper with a grand,

309 See the description of the TT 39 scene on p. 58.
310 Dziobek and Raziq, Das Grab des Sobekhotep: Theben Nr. 63, pp. 88-90, 2d, 20a-b.
<table>
<thead>
<tr>
<th>Feature Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canal (mr) and quays (dmit; mryt)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
<tr>
<td>Enclosure walls (pr)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
<tr>
<td>Gates (sb3)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
<tr>
<td>Tree avenues (ht)</td>
<td><img src="A2" alt="Diagram" /></td>
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<tr>
<td>Tree groves (mnw)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
<tr>
<td>Sacred groves (w*b-ht)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
<tr>
<td>Shrubbery (b∅)</td>
<td><img src="A2" alt="Diagram" /></td>
</tr>
</tbody>
</table>

### Notes

312 Drawings by the author after the Rosellini (1834) facsimile and from the New York Public Library Public Domain: [https://digitalcollections.nypl.org/items/510d47d9-4779-a3d9-e040-e00a18064a99](https://digitalcollections.nypl.org/items/510d47d9-4779-a3d9-e040-e00a18064a99).

313 Seidlmaier, s.v. “w*b-ht,” in TLA [http://aaew.bbaw.de/tla/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=44610&db=0](http://aaew.bbaw.de/tla/servlet/GetWcnDetails?u=guest&f=0&l=0&wn=44610&db=0).

Pools (ḏ)

Water gardens

Arbors and pergolas (kšmw)

Pavilions (mšrw)

Garden shrines (ḥwt)

Statuary of king in adoration and offering to the gods (twt; śps; sšmw)

Bouquet altars (ḥtpw) and offering tables (wḏḥw)

Florist workshop and storehouse (ḥnw\(^{315}\))

---

cavetto, propylon gate dedicated by Amenhotep II, as well as a row of trees alongside the stair access-quay, leading to an artificial watercourse. Minor enclosure walls fronted by two small wooden gates surround four large, symmetrical Ś-formal gardens with square or rectangular pools bordered by watered gardens, trees rows, avenues, groves, pavilions, shrubbery. Two of the Ś-formal gardens have small walled sacred groves (w°b-HT) with a private gate. A large walled and gated ksmw-formal garden, already examined on p. 75, is located in the very center of the Ś-nt-HT-formal garden (See Fig. A1.19). The central avenue that runs the length of the formal garden terminates at a tripartite garden shrine with a private water garden of papyrus. Inside the shrine is statuary dedicated by the king, bouquets and offering tables. The florist workshop and storehouse with thatched siding, doors, and windows is adjacent. The statuary in the garden shrine displays the king in adoration or on his knees offering, presumably to a seated image of Amun in the middle shrine.316 The layouts of its Ś-formal gardens begin with square water gardens bordered by two rows of trees and and palms. The rows of trees lead to pools and more water gardens. Additional rows and groves of trees and palms surround the entire Ś-nt-HT-formal garden proper. At the end of the Ś-formal gardens are the light-roofed, wooden pavilions with balustrades, and presumably seating. The pavilions are placed beside watered gardens of papyrus, rows of shrubbery, and trees.

**Extant Evidence of Ś-nt-HT-Formal Gardens during this Period**

If one was to literally translate the Ś-nt-HT-formal garden ( ) from Egyptian, it might mean something along the lines of the ‘the dwelling/field of woodlands/trees,’ as the term derives from the same nominal root as Ś ( ) or “room/department/dwelling”317; ( ) or “fields”318, and HT ( ) or “fields”

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316 For parallels of similar statues (MMA 30.3.1; 30.3.2; 29.3.1), see p. 53, footnote 213 of this work.
meaning “woodland(s)/wood(s)/trees.” Based on pictorial and textual evidence from the reign of Thutmose III, Amenhotep II, and Amenhotep III, an ‘t-nt-ḥt-formal garden was built in the vicinity of a palace or cult temple during this period.

Based on the transportation of flora and fauna by Thutmose III from the Syro-Palestine to Egypt in Year 25 during his tour of the empire and his construction works in Thebes, it seems possible that the ‘botanical garden’ reliefs and texts in the htp-shaped Amun shrine beside the hry-ib-festival hall of his sh-mnw-temple at Karnak might be a reference to an ‘t-nt-ḥt-formal garden that had once existed beside it. This is plausible because there would have been much more space available to construct formal gardens in the precinct during the reign of Thutmose III, as the Karnak Temple Complex was much smaller in the mid Eighteenth Dynasty compared to its current Graeco-Roman state. For example, Karnak’s immense sacred lake or hrw (𓊘𓊚𓊜) full of geese was built by Thutmose III during this time as well, filling in a vast area of the right side of the complex. The name of the sh-mnw (𓊚𓊜 𓊏𓊚𓊜) temple proper meant the ‘Most-Glorious-of-Monuments.’ Mnw (𓊚𓊜 𓊚𓊜 𓊚𓊜 𓊚𓊜), however, may further denote “tree groves/orchards.” The name of the structure, therefore, could be interpreted as a double entendre: (i) the temple proper as ‘Most-Glorious-of-Monuments’ and (ii) a possible name of its ‘t-nt-ḥt-formal garden as the ‘Most-Glorious-of-Tree-Groves/Orchards,’ as formal gardens were also monuments to the gods.

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319 Erman and Grapow, WB III, nos. 339.10-341.11.
320 See the translation of reliefs’ texts on p. 66 of this work.
322 See Breasted, Ancient records of Egypt II, p. 223, § 559; Sethe, Urkunden IV.III, no. 745.
323 See the texts that mention the tree groves (mnw; 𓊚𓊜 𓊚𓊜 𓊚𓊜) planted beside the hnty-š-formal garden of Hatshepsut’s memorial temple on pp. 63-64 of this work; also see its use in Erman and Grapow, WB II, nos. 71.13-16.
324 For example, see the Karnak doorjamb inscription that details Amenhotep II’s construction of a š-formal garden in the temple precinct as a “monument (mnw or 𓊚𓊜 𓊚𓊜) for his father Amun-Ra,” pp. 37-38 of this work; also see its use in Erman and Grapow, WB II, nos. 69.9-72.2.
black granite striding statue of Thutmose III as ‘Menkheperra-who-Offers-Fresh-Produce-to-
Amun-from-Karnak’ (JE 42056) was further discovered in the w3dq-t-hall of Karnak in proximity
to Hatshepsut’s obelisk and the slh-mnw-temple (See Fig. A3.46).\textsuperscript{325} The pharaoh is shown in the
guise of a fecundity figure, offering to Amun beautifully detailed lotus blossoms, papyrus umbels,
and pintail duck bundles, which likely came from the formal gardens in the Karnak precinct (See
Fig. A3.48).\textsuperscript{326} There is an additional ‘t-nt-hjt-formal garden of Amun-Ra in the Domain of Amun
depicted in Sennefer’s tomb (TT 96), which is stated as being ‘renewed’ by Amenhotep II. Thus,
this particular ‘t-nt-hjt-formal garden must have been constructed by one of the previous
Thutmoside pharaohs; however, which one remains unclear.\textsuperscript{327} The shrine has multiple statues of
the pharaoh offering to Amun and their style and attitude evoke those of Hatshepsut and Thutmose
III depicted as ‘Offering-Fresh-Produce.’\textsuperscript{328} An alternative ‘t-nt-hjt-formal garden was constructed
by the king as well in proximity to one of the palaces at Perunefer via the same text that mentions
its hnty-š-formal garden(s) in Qenamun (TT 93).\textsuperscript{329} It is interestingly revealed in the song sung by
the singers, musicians, and dancers who entertain Qenamun, officials, the young Amenhotep II
and the prince’s tutor in the harem pavilion of the hnty-š-formal garden of the palace:

\begin{center}
\texttt{wrḥ ‘nt(y)w ms(w) m bṣk irt hrw nfr msw w3wh m ‘t-nt-hjt.k sṣn r fnqd.k lmn-hṭp ṣn k n
nn nbḥ m swt-īb. <k> nfrwy ḥr.k m ḫ niswt <k> ḥṭp.ti ḫ(y)t st wrt...}
\end{center}

Anointing/smearing myrrh and frankincense, ms-vases of morgina tree oil, passing a bea-

\textsuperscript{325} Legrain, \textit{Statues et statuettes des rois et de particuliers} I, p. 34, pl. XXXII; Legrain, « Notes d’inspection sur le
temple Manakhpirri-henq-ankh, » pp. 182-183.
\textsuperscript{326} Legrain, \textit{Statues et statuettes des rois et de particuliers} I, pl. XXXII.
\textsuperscript{327} See the description of the TT 96 scene on p. 60.
\textsuperscript{328} See the statues mentioned on p. 53, footnote 213 of this work.
\textsuperscript{329} See p. 68 of this work.
\textsuperscript{330} Helck, \textit{Urkunden} 18, no. 1396, ‘Song of the Singers,’ lines 5-11.
-utiful day, bouquets (msw\textsuperscript{331}) (and) floral wreaths/garlands from your \textit{\textit{t}-nt-\textit{ht}-}formal garden, (placing) a lotus blossom to your nose, O Amenhotep, you made for them eternity by means of your joy, this beautiful place is because of you by means of your royal hoe\textsuperscript{332} (\textit{h\textsuperscript{c} nisw} \textsuperscript{333}), may offerings be upon your great throne...

Since this \textit{\textit{t}-nt-\textit{ht}-}formal garden was in one of the palaces of Perunefer, it could be referring to the extensive tree groves/orchards discovered beside the Late Hyksos palace at Avaris/Perunefer (Tell el-Daba’a/Qantir): a large cluster of around 100 tree pits and 40 potted flower beds.\textsuperscript{334} Likewise, another palace at Perunefer was located near the town center dated to the late Eighteenth to Nineteenth Dynasties, where archaeologists found the remains of (formal) garden,\textsuperscript{335} which could be the \textit{hnty-š} and/or \textit{\textit{t}-nt-\textit{ht}-}formal gardens that Qenamun mentions. The remains are centrally situated between the palace proper, a small temple or palace wing, and the elite living quarters.\textsuperscript{336}

Concerning Amenhotep III, the Malkata Palace not only had a \textit{ksw} form-garden but also an \textit{\textit{t}-nt-\textit{ht}-}formal garden that produced wine and the aromatic \textit{mnw}-plant. The formal garden is mentioned on one of the hieratic wine jar seals (no. 60) found in the rubbish heaps of the palace’s nearby town along the Birket Habu Harbor on the West Bank of Thebes:

![Inscriptio](rnpt-ḥsb 37 irp n \textit{\textit{t}-nt-\textit{nt}-\textit{ht}-\textit{mnw} R mnw 6)

\textsuperscript{331} See the similar palaeography of this term in the Nefermenu stela text translated on p. 65 of this work.

\textsuperscript{332} This analogy is very intriguing because it references the ancient royal ritual of the king who ceremoniously used a hoe to commence the digging of a canal, lake, and now even possibly a formal garden. See the depiction of the ceremony from thousands of years prior on the ‘major part’ of King Scorpion’s macehead (c. 3000 B.C.) found in the Early Dynastic temple of Horus at Hierakonpolis (Nekhen) and now on display in the Ashmolean Museum, Oxford.

\textsuperscript{333} Erman and Grapow, \textit{WB} III, nos. 243.1-2.

\textsuperscript{334} See the remains in “The Late Hyksos Period,” fig. 2 in Bietak, \textit{Tell el-Dab’a – Elzbet Helmi - Ancient Avaris, http://www.auaris.at/html/ez_helmi_en.html}.

\textsuperscript{335} Bietak, “Perunefer: The principal New Kingdom naval base,” p. 17 and the fig. 2: Avaris and Per-Ramesse in the late Eighteenth Dynasty and Nineteenth Dynasties; Bietak, “Minoan presence in the pharaonic naval base of Perunefer,” fig. 2.7.

\textsuperscript{336} Bietak, “Perunefer: The principal New Kingdom naval base,” p. 17 and esp. fig. 2: Avaris and Per-Ramesse in the late Eighteenth Dynasty and Nineteenth Dynasties; Bietak, “Minoan presence in the pharaonic naval base of Perunefer,” p. 19, esp. fig. 2.7; Bietak, „Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab’a),“ pp. 314-328, Tafel XI, fig. 7; Bietak, “Rich beyond the Dreams of Avaris,” p. 187, fig. 2.

\textsuperscript{337} Hayes, “Inscriptions from the Palace of Amenhotep III,” fig. 7.
Year 37: wine of the ‘t-nt-hḥt-formal garden of Nebma’atra (and) 6 pots of mnw-plants.\textsuperscript{338}

Thus, the palace’s ‘t-nt-hḥt-formal garden, like its k3mnw-formal garden, might have been located in vicinity to the Malkata Palace proper or perhaps in proximity to its Northern Palace or its Amun temple and festival hall that were built by the king for his second Jubilee Festival (\textit{hb-sd}).

**The Hrrt-ḫš-Formal Garden: Layouts, Architecture, and Water Features**

Based on the TT 161 scene as well as extant archaeological and textual evidence, the \textit{hrrt-ḫš}-formal

<table>
<thead>
<tr>
<th>Table 3.4: Possible Features of a \textit{Hrrt-ḫš}-Formal Garden\textsuperscript{339}</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pools (§)</strong></td>
</tr>
<tr>
<td>Water gardens</td>
</tr>
<tr>
<td>\textit{Ḥsp}-plots (planting beds)</td>
</tr>
</tbody>
</table>

\textsuperscript{338} \textit{Mnw}-plant was some type of aromatic flora, but its identification remains unclear. See Erman and Grapow, \textit{WB} II, no. 71.17.

\textsuperscript{339} Drawings by author after Hugonot (1989) and the de Garis-Davis’s gathering honey facsimile (1930), https://www.metmuseum.org/art/collection/search/544626.; as well as those by David Seifkin, merged together by the author and courtesy of his Creative Commons Universal Public Domain Dedication: https://commons.wikimedia.org/wiki/File:Gardens_of_Nakh_1.JPG; and screenshots from the YouTube video by 7reasons and the Austrian Academy of Sciences entitled “A Puzzle in 4D - Tell el-Daba”: https://www.youtube.com/watch?v=pS9-jr_sTTM&list=FLTrhZBDGvGvzcB0ne4jNA
<table>
<thead>
<tr>
<th>Tree groves ((mnw))</th>
<th>Garden seating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florist workshops and storehouses ((hnw))</td>
<td>Belvedere porticos ((hzyt))</td>
</tr>
<tr>
<td>Pavilion ((m3rw))</td>
<td>Apiaries ((fly))(^{340})</td>
</tr>
</tbody>
</table>

\(^{340}\) See the discussion of the possibility of this term on p. 33, footnote 145.
garden would have been built in various layouts. From the pictorial evidence in TT 161 scene, a \textit{hrrt-š}-formal garden might incorporate a rectangular pool bordered by water gardens, numerous \textit{hsp}-plots, and tree groves, as well as garden seating, florist workshops and storerooms (See Fig. A1.21). The Middle Kingdom to Late Hyksos Period example features rows of \textit{hsp}-plots flanked by palm groves, a pavilion, and a belvedere portico (See Fig. A3.42). Garden seating could be placed beside the tree groves too. The \textit{hsp}-plots range from long to small plots and were either planted in extensive rows with a mixture of flora or a specific type (See Figs. A3.40-A3.43). The groves are planted were between the \textit{hsp}-plots and could include tree and palm species. The florist workshops and storerooms are similar to the ones depicted in the ‘\textit{t-nt-hé}-formal garden scene in Sennefer (TT 96) with mudbrick walls and thatched doors and windows as well as seating for the gardeners to rest (See Fig. A1.21). Long columned porticos could be constructed as a belvedere while a pavilion fronted by painted lotiform columns could be adjacent to the \textit{hrrt-š}-formal garden proper (See Figs. A3.41-A3.43).

\textbf{Extant Evidence of \textit{Hrrt-š}-Formal Gardens during this Period}

An updated, literal translation of \textit{hrrt-š} (\begin{symbol}{1111}
\begin{symbol}{1111}
\begin{symbol}{1111}
\end{symbol}
\end{symbol}
\end{symbol}) as a ‘formal flower garden’ is possible since \textit{hrrt} (\begin{symbol}{1111}
\begin{symbol}{1111}
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\end{symbol}
\end{symbol}) was used as a general word for ‘flower(s)’ in Egyptian. The nominal root of \textit{hrr} in \textit{hrrt-š} could likewise be related to the Semitic loan verb \textit{hrr} (\begin{symbol}{1111}
\begin{symbol}{1111}
\begin{symbol}{1111}
\begin{symbol}{1111}
\end{symbol}
\end{symbol}
\end{symbol}) or “to squint,”\textsuperscript{342} possibly alluding to the fact that one often will squint or close one’s eyes while smelling flowers. Extant evidence from this period derives from the reigns of Thutmose III, Amenhotep II, and Amenhotep III while the earliest derives from the Middle Kingdom and Late Hyksos phases of Palace F/I at Avaris later renamed Perunefer (Tell el-

\textsuperscript{341} Erman and Grapow, \textit{WB} III, nos. 149.8-18; Sethe, \textit{Urkunden} IV, nos. 775.16, 915.4, 1668.19; Lesko and Lesko, \textit{A Dictionary of Late Egyptian} II, p. 135; also see its use in Nefermenu’s stela on p. 65 of this work.

\textsuperscript{342} Erman and Grapow, \textit{WB} III, no. 150.
Daba’a/Qantir) by the Thutmoseide kings. The earliest archaeological evidence of a ħrīt-š-formal garden comes from oldest part of the site: Palace F/I at Avaris, dating from the early Middle Kingdom to the Late Hyksos Period.**343** Rows of ḥsp-plots with trees in between and a pavilion (Square G in Grid Reference 23k of Stratum d/1) were constructed in the Middle Kingdom on the eastern side of Palace F/I while a large hall with a long portico of red protodoric columns overlooking the ħrīt-š-formal garden was added in c. 1765 B.C. by the Late Hyksos rulers (See Fig. A3.42).**344** Opium poppy, white lotus, mandrakes, and cos-lettuce are thought to have been grown in these ḥsp-plots**345** and likely low cornflower,**346** true cardamom (*Elettaria cadamomum* L. Maton),**347** cilantro/coriander (*Coriandrum sativum* L.), and scented mayweed spp.**348**

Concerning Thutmose III, an inscription from king’s annals termed ‘New Feasts and Offerings from Conquests’ recorded on the south half of the Sixth Pylon at Karnak, mentions that he constructed in Thebes for the first time a ħrīt-š-formal garden to Amun:

![Image of a formal garden](https://example.com/image)

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**344** Bietak, “Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab’a 1979-1984),” pp. 312-349; and Aspöck, Tell el-Dabaa: Palace Area F/I - Phase Model and Wooden Model,” [https://4dpuzzle.orea.oew.ac.at/reconstruct_phaseModel/](https://4dpuzzle.orea.oew.ac.at/reconstruct_phaseModel/).

**345** “Rows of regularly set flowerbeds were found in front of a small kiosk, which already existed in an older phase of the building complex. Trees had been planted in between [them] to provide shade. We have evidence that [low cornflower], [opium] poppies, [true cardamom], white lilies, [scented mayweed], and mandrakes grew in Ancient Egypt. L[ettuce] as well as coriander are also documented for this period. See Aspöck, *Tell el-Daba: Palace Area F/I – Garden area to the east of the palace*, [https://4dpuzzle.orea.oew.ac.at/reconstruct_walkthrough/](https://4dpuzzle.orea.oew.ac.at/reconstruct_walkthrough/).

**346** Aspöck states “cornflowers.” However, low cornflower (*Centaurea depressa* Bieb.) is more likely, as the cornflower (*C. cyanus* L.) is native to Europe.

**347** Aspöck states “wild ginger.” It is more likely though another species, such as true cardamom of the same family Zingiberaceae, as wild African ginger (*Siphonochilus ethiopicus* (Schweif.) B. L. Burt) is native to South Africa while true ginger (*Zingiber officinale* Roscoe) was not introduced into Africa until the Graeco-Roman Period in Egypt and the Arab Conquest in Ethiopia in the Thirteenth Century A.D.

**348** Aspöck states “chrysanthemums.” Yet, it is more likely scented mayweed of the *Anthemis* or *Matricaria* spp., as chrysanthemums (*Chrysanthemum indicum* L.) are native to East Asia, specifically China.

My Majesty made for Him a hrrt-š-formal garden for the first time, planted with every pleasant tree, in order to offer freshly grown (rd) produce (ḥrps) therein for daily divine offerings, which My Majesty founded anew as surplus of that which was prior...

The Middle Kingdom to Late Hyksos hrrt-š-formal garden planted on the eastern side of Palace F/I at Avaris was focused around flower production and this suits the formal garden’s literal translation from Egyptian as ‘formal flower garden.’ This Middle Kingdom to Late Hyksos hrrt-š-formal garden as well as Thutmose III’s importation of many types of foreign flora from Syro-Palestine during his tour of the empire in his Year 25 could have been the king’s inspiration for his construction of a Theban hrrt-š-formal garden for the first time. The surrounding landscape of the TT 161 scene is less specific, but from the excerpt of Thutmose III’s Annals mentioned above, this hrrt-š-formal garden was definitely situated somewhere in the Domain of Amun in Thebes.

The only caveat is that the Theban hrrt-š-formal garden of Thutmose III incorporated pools, water gardens, groves, fish and fowl, and beekeeping. From the textual and pictorial evidence dating from Amenhotep II and Amenhotep III, the hrrt-š-formal garden constructed by Thutmose III in Thebes was ‘renewed’ by his successors. A column inscription between the Fourth and Fifth Pylons of Karnak, for example, states that Amenhotep II renewed the hrrt-š-formal garden, which is likely the same hrrt-š-formal garden built by his father Thutmose III:

...[
...[ir].n. <i> n.f [hrrt]-š m3[wt]...

...I made anew for Him the hrrt-š-formal garden...

This ‘anew’ or ‘renewal’ might denote either simply the original formal garden’s upkeep and/or

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350 See the TT 161 description and narrative on pp. 55-56 of this work on the Annals’ text on the top of this page.
351 Helck, *Urkunden* 17-22, no. 1331.
maintenance or possibly an expansion or renovation therein. It is difficult to assess how much the formal garden might have been altered due to the current lack of archaeological evidence for the actual Theban $\text{hrn}_-\text{s}$-formal garden of Amun. Nonetheless, the Theban $\text{hrn}_-\text{s}$-formal garden was definitely still active at least into the reign of Amenhotep III since the TT 161 scene is dated to his reign, as well as the fact that the tomb-owner Nakht and his sons were ‘Gardeners/Offering Bearers of the Floral/Divine Offerings of Amun.’

Wider Significance of the Domain of Amun Formal Gardens to the Tomb-Owners

The emergence of the Domain of Amun formal garden scenes in the early to late-mid Eighteenth Dynasty is a result of the expansion of the empire, the enlargement in the palatial and temple construction projects, donations, and administrations of the Amun cult at Thebes. Muhs explains that “kings [during this dynasty]... endowed... on a greater scale than ever before... The temple of Amun-R[a] at Karnak in Thebes in particular benefited from building programs and donations of land and booty following successful military campaigns, [tours, and expeditions]... especially under Thutmose III.”

Consequently, the construction of the formal gardens and introducing of native and foreign trees and animals in them by the Thutmoside pharaohs was justified because they functioned as living offerings, which Amun-Ra and the kings in life and in death would have been used for pleasure and repose. The lakes of the $\text{hn}_\text{ntyw}_-\text{s}$-formal gardens in the memorial temples on the West Bank were used by sacred barks and $\text{n}_\text{šmt}$-barks of the glorified kings for religious observances, such as the Beautiful Festival of the Valley (See the TT 87 scene). While the $\text{hn}_\text{nty}_-\text{s}$-, $\text{k}_\text{smw}_-$-, $\text{s}_\text{s}$-, $\text{r}_\text{-nt}_-\text{ḥt}$-, and $\text{hr}_\text{rrt}_-\text{s}$-formal gardens would have cultivated surplus garden produce, fish and fowl, wine, and/or honey for private dinners, feasts, festivals, offerings, medicine

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and/or cults, their pavilions and landscaping could have acted as a sort of theatrical stage for entertainment, such as singers, musicians, and dancers as well.\textsuperscript{354}

Evidently, the \textit{hnty-š-}, \textit{ṭnt-ht-}, and \textit{ḥrт-š}-formal gardens acted as social gathering and/or pastime locales for the king, great wives and minor wives, children of the royal harems, members of the royal court, as well as permanent or visiting elite officials based on some of their placement in palatial complexes of Perunefer, Malkata, and Thebes. These formal gardens seem to have had a lasting impression on Amenhotep II in his youth, as he was possibly taught archery in the formal garden of the royal palace beside Karnak as a child and further watched performances with his tutor and high officials, such as Qenamun (TT 93), in the pavilions of the \textit{hnty-š}-formal garden of the Perunefer Palace – described as his “favourite place.”\textsuperscript{355}

The increase in palatial and garden construction and temple donations at Thebes meant the enlargement of the administrations to run it.\textsuperscript{356} For example, the Papyrus Harris I dated to Ramesses III states that Thebes over a period of almost 31 years had 86,486 workers and 433 gardens in its many possessions as well as donations to its institutions, including:

...124 fan bouquets, 3,100 tall bouquets, 15,500 scented bouquets, 1.97 million floral bouquets, 1.97 flower bundles, 60,450 flower wreaths, 620 flowers, 12,400 flower chains, 465,000 flower ‘hands’, 110 flower ‘heaps’, 144,720 lotus bouquets, 3,410 lotus bouquets, 110,000 small lotus flower ‘hands,’ and 19,150 [cos-]lettuce and flower bouquets...9,105 jars of incense, honey, and oil...22,566 jars of wine...24,650 bundles of vegetables...289,530 water-fowl...8,160 geese...\textsuperscript{357}

It is conceivable that the Domain of Amun of Eighteenth Dynasty Thebes had a comparable number of workers, gardens, and divine offering that had to be administered \textit{en masse}. The tomb-

\textsuperscript{354} See the text about the singers, musicians, and dancers performing in a \textit{hnty-š}-formal garden on p. 68 of this work.
\textsuperscript{355} See Bietak, “Minoan Presence in the Pharaonic Naval Base of \textit{Peru-nefer},” p. 18.
\textsuperscript{356} Troy, “Religion and Cult during the Time of Thutmose III,” 124.
\textsuperscript{357} Breasted, ‘Papyrus Harris,’ in \textit{Ancient records of Egypt} IV, pp. 97, 99-100, 102, 104; also see the excerpt on the floral offerings part in Manniche, \textit{An Ancient Egyptian Herbal}, p. 24; or Michael Hasse, „Tempel und Gärten,” pp. 178-179.
owners with Domain of Amun formal garden scenes from this period held positions in the priesthood and administration, which has been organized into Table 3.5 above based on the information in Appendix I. Indeed, these titles suggest direct or indirect contact with the Domain of Amun formal gardens because as endowments to the gods, they were used for worship and festivals, and to yield surplus produce, which meant labor acquisition for their construction and upkeep, recordkeeping, storage, transportation, and the arrangement and presentation of their produce into divine offerings, particularly floral arrangements, for the altars of the gods and private deceased persons each day, such as in Senenmut’s tomb (TT 71). While these elite individuals

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358 See his texts that request three bouquets daily from the ḫntyw-š-formal gardens for his tomb cult on p. 74.
held esteemed titles, they were hardly honorary in nature and would have required apprenticeship, specialized skills, knowledge, and prior work-related experience. For example, Puimra (TT 39), who has a ss-formal garden scene and who was ‘Second Priest of Amun’ during the coregency of Hatshepsut and Thutmose III, oversaw the weighing of incense gum and resin in all of the Theban temples of the Domain of Amun based on an inscription in his tomb\(^{359}\) (See Fig. A3.50).

Individuals with the position of ‘Gardeners of the Divine Offerings of Amun’ like Nakht (TT 161), his father Gurer, and his four sons, would have likely tended, harvested, and collected the gum and resin from the avenues, rows, and groves of trees in the Domain of Amun formal gardens. Puimra would have likely weighted, enumerated, and securely stored the gum and resin in the treasuries of Amun\(^{360}\) alongside those who worked there, such as: Amenhotep (TT C3), Djehuty (TT 11), Baki (TT 18), Djehutynefer (TT 80), Sennefer (TT 99), and Amenmose (TT 228) who were ‘Overseers/Scribes/Deputies/Treasurers of the Treasuries of Amun’ (See Fig. A3.50).

Minnakht (TT 87), who was an ‘Overseer of the Double-granaries of Amun,’ and his son Menkheper, who was ‘Scribe of Divine Offerings of Amun in the Memorial Temple of Thutmose III,’ would have interacted directly with the produce of the Domain of Amun formal gardens, likely overseeing, enumerating, and inventorying it into the double-granaries of Amun alongside others there, such as: Nakht (TT A20), Khamhat Meh (TT 57), Nebamun (TT 65), Menkheperraseneb (TT 79), Rekhmira (TT 100), Amenemhat (TT 123), Nebamun (TT 179), Khnummose (TT 253), Amenemipet Tjanefer (TT 297), and Djehutynefer (TT 317), who were ‘Chief Scribes/Overseers/High Officials/Accountants in the Granaries of the Divine Offerings of Amun.’

Sennefer (TT 96) who was an ‘Overseer of the \(\text{Hntyw-š}\) and ‘\(\text{t-nt-ḥt}\)-Formal Gardens of Amun’ states in his tomb texts that his position included:

\(^{359}\) Iwaszczuk, *Sacred Landscapes of Thebes during the Reign of Hatshepsut*, p. 150.
\(^{360}\) Iwaszczuk, *Sacred Landscapes of Thebes during the Reign of Hatshepsut*, p. 150.
• Commanding the plucking of the trees and flowers
• Arranging/presenting all the fresh flowers, fruits, and vegetables (*rnpwt*)
• Organizing their offering each day, and
• Organizing their arrangement for special occasions, such as for the New Year Festival[^61]

‘Offering-bearers of the Floral Offerings of Amun’ probably were assisted and overseen by individuals like Sennefer or Nefermenu (TT 138), who was a ‘Florist and a ‘Chief of the Royal Florists.’ Producing floral arrangements must have been a highly skilled vocation that likely required apprenticeship and an extensive knowledge of all the flowers, herbs, and fruit, as well as of types of bouquets, garlands, wreaths, chains, and/or collars. Flower, honey, wine, and fish and fowl offerings would have had to be created like clockwork based on the sheer amount offered in the Domain of Amun over a 31-year period[^62]. The floral, vegetable, fruit, fish, fowl, wine or honey offerings then would have been inspected or supplied to a certain temple, monument, tomb, or palace: (i) to be offered to the gods and/or glorified dead, or (ii) to be placed in the palace complexes and royal courts, as requested by those like Ptahmay (TT unknown),[^63] Neferrenpet (TT 43), Ray (TT 124) and Amenirneferu (TT 199), who were ‘Overseers of the (Royal) Storerooms,’ Djehutymose (TT 248) a ‘Supplier of Offerings,’ Minnakht (TT 87) a ‘Chief Servant of Amun,’ the brother of Queen Tiye and the brother-in-law of Amenhotep III A’anen (TT 120) a ‘Second Priest of Amun,’ or Qenamun (TT 93) an ‘Overseer of the Perunefer Palace.’

The aviaries and apiaries in the formal gardens were likely maintained by those, such as: Tjay (TT 349) and Nakht (TT C8) who were ‘Overseers of the Aviaries in the Domain of Amun,’ as well as Neferkhaut (TT undiscovred) who supervised the beekeepers as a ‘Chief Beekeeper of

[^61]: See the description of the TT 96 scene on p. 53-54 of this work.
[^62]: See the Papyrus Harris I excerpt on p. 92 of this work.
[^63]: See his inspection graffito of wine amphorae and pots of *mnw*-plants from the *k3mnw*-formal garden of ‘Splendor-of-Aten’ Palace at Malkata on p. 76 of this work.
Amun’ based on his funerary cones (Davies & Macadam #405; BM EA 35675) discovered on the West Bank of Thebes.\textsuperscript{364} Although individuals who tended to pond/pool/lake cultures during the Eighteenth Dynasty are unknown, Old Kingdom elite individuals with titles, such as ‘Overseer of the Pond (\textit{ss})’\textsuperscript{365} and ‘Overseer of the Ponds of Recreation’\textsuperscript{366} are known to have existed.

If the Domain of Amun formal gardens were in need of new pavilions, arbors, pergolas, porticos, statues, and boats, or simply repairs, individuals, such as Huy (TT 54) a ‘Sculptor of the Domain of Amun’ and Amenhotep Huy (TT 368) ‘Overseer of the Sculptors of Amun in Thebes,’ as well as Amenhotep (TT C1) an ‘Overseer of the Carpenters of Amun,’ and Ipy (TT C6) an ‘Overseer of the Boats in the Memorial Temple of Thutmose IV’ likely would have been liaised. All of these individuals who worked directly or indirectly with or in the Domain of Amun formal gardens would have been honored and grateful for their occupations, vocations, and/or professional duties,\textsuperscript{367} as the flora, incense, honey, wine, and fowl and fish cultivated in them would have been considered luxury items, as they were for the gods each day or for upcoming meals, feasts, and/or festivals in the temples and/or royal palace complexes and courts. The ‘Chief of Royal Florists’ Nefermenu (TT 138), for example, would have had privileged access into the palace complexes to place floral offerings in the early morning,\textsuperscript{368} as they were arranged at nighttime to keep them fresh.\textsuperscript{369} The Thutmosides would have been familiar with the formal

\textsuperscript{364} Neferkhaut’s tomb is likely located in El-Khokha or El-Asasif Districts of the Theban Necropolis. See the funerary cone’s entry in Kento Zenihiro, \textit{The Complete Funerary Cones}, (Tokyo: Tocho Company Ltd., 2009), p. 168; Kritsky, \textit{Tears of Re: Beekeeping in ancient Egypt}, fig. 7.6g.

\textsuperscript{365} Erman and Grapow, \textit{WB} III, no. 484.13; Jones, \textit{An index of ancient Egyptian titles, epithets and phrases of the Old Kingdom I}, no. 767.

\textsuperscript{366} Jones, \textit{An Index of Ancient Egyptian Titles, Epithets and Phrases of the Old Kingdom I}, no. 818.

\textsuperscript{367} See esp. the additional text from Nefermenu’s stela: “Receiving praise daily...passing the years of a long lifetime...being under good orders, without saying “I wish I had” about any thing...” in El-Maenshawy, “Aspects of the office of temple gardener in ancient Egypt,” pp. 60-61.

\textsuperscript{368} See esp. the additional text from Nefermenu’s stela: “...moving freely (in) the secret place, attending immediately in the early morning...” in El-Maenshawy, “Aspects of the office of temple gardener in ancient Egypt,” pp. 60-61.

\textsuperscript{369} Marija Tomashevksa, “Sacred floral garlands and collars from the New Kingdom period and early third intermediate period in ancient Egypt (1550 B.C. – 943 B.C.),” MA thesis, (Leiden: Leiden University, Faculty of
gardens, storehouses, and/or double-granaries of Amun since they performed certain rituals to the gods in them, according in Thutmose III’s Annals,370 as well as from the depiction of Amenhotep II likely seated in one of ‘t-nt-ḥt-formal garden of Amun’s pavilions to receive its offerings and gifts presented to him by Sennefer during the New Year Festival.371

Thus, working in the Domain of Amun formal gardens seems to have had a lasting impression on certain private individuals who included them as scenes in the decorative schema of their tombs, which has been collated into Table 3.6 based on the information in Appendix II on the following page. These five Domain of Amun formal garden scenes are not the focal point of the rooms in which they are placed; however, they are located in prime areas of the transverse halls, passages, and chapels centered around the tomb-owner’s unique, sociocultural experience as a member of the Theban elite, which family and community members would have viewed more so than other scenes during funerals, festival, and feast days.372 Furthermore, the scenes are on walls near daily life ‘focal representations.’373 The šš-formal garden scene, for example, is located in proximity to ‘natural resource/inspecting icons.’374 The ḫnty-š-, ksmw-, and hrrt-š-formal garden scenes are located near ‘banqueting icons.’375 The ‘t-nt-ḥt-formal garden scene is situated beside a ‘gift to pharaoh icon’ and ‘royal [pavilion] icon.’376 While, the hrrt-š-formal garden scene is further placed in vicinity to ‘offering table icons.’377 Thus, these five Domain of Amun formal

371 See the wall narrative of the TT 96 scene on pp. 59-60 or in Appendix II.
374 See the wall narrative of TT 39.
375 See the wall narratives of TT 87, TT 90, and TT 161.
376 See the wall narrative of TT 96.
377 See the wall narrative of TT 161.
Table 3.6: Location of Domain of Amun Formal Garden Scenes in Tombs

<table>
<thead>
<tr>
<th>Theban Tomb</th>
<th>Location</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scene</td>
<td>Room</td>
</tr>
<tr>
<td>TT 39 Puimra</td>
<td>$ss$-formal garden</td>
<td>Transverse Hall</td>
</tr>
<tr>
<td>TT 87 Minnakht</td>
<td>$lnty-š$-formal garden</td>
<td>Chapel</td>
</tr>
<tr>
<td>TT 90 Nebamun</td>
<td>$k3mw$-formal garden</td>
<td>Transverse Hall</td>
</tr>
<tr>
<td>TT 96 Sennefer</td>
<td>$c't-nf-ḥt$-formal garden</td>
<td>Transverse Hall</td>
</tr>
<tr>
<td>TT 161 Nakht</td>
<td>$hrtrt-š$-formal garden</td>
<td>Passage</td>
</tr>
</tbody>
</table>
garden scenes could be interpreted as a sort of ‘career icon’ that celebrated the tomb-owner’s professional life, proudly displaying it to viewers after death. Especially, due to the fact that Egyptians truly respected those with professions associated with simple or formal gardens due to the sheer upkeep they required, as recorded in Middle Kingdom didactics of *The Satire of Trades*:

The gardener carries a yoke, His shoulders are bent as with age; There’s a swelling on his neck and it festers. In the morning he waters vegetables, The evening he spends with the herbs, While at noon he has toiled in the orchard. He works himself to death, More than all other professions.378

Given the number of individuals who worked directly or indirectly in the Domain of Amun formal gardens, it is certainly tempting to consider which could have formal garden scene(s) in their tombs if they are ever discovered in the future. Nakht’s (TT 161) father Gurer and his four sons Huynefer, Waser, Pareheny, and Kha who were ‘Gardeners/Offering-bearers of Floral Offerings of Amun,’ for example, possibly might have *hrrt*-ś-formal garden scenes in their tombs while Nefermenu might have a *hnty*-ś-formal garden scene since he was an ‘Overseer of the *Hntyw*-ś-Formal Gardens of Thebes.’ The tomb of Minnakht’s (TT 87) son Menkheper, who was a ‘Scribe of Divine Offerings in the Memorial Temple of Thutmose III,’ might have an additional scene of *hnty*-ś-formal garden in the Memorial Temple of Thutmose III too. Conversely, Senenmut (TT 71) and Sennefer (TT 96) did not depict *hntyw*-ś-formal garden scenes in their tombs even though they were ‘Overseers of the *Hntyw*-ś-Formal Gardens.’ Likewise, Qenamun (TT 93) only mentions in his tomb texts the *hnty*-ś- and *t-nt-ḥt*-formal gardens in proximity to the palaces of Perunefer, which he frequented as an ‘Oversee of the Perunefer Palace,’ and reposed in with the king and officials. Tomb-owners chose their tomb’s decorative schema, so to not include the formal gardens in which they worked/interacted as scenes could be a result of (i) cost, (ii) lack of available space in the tomb, or (iii) simply because they had not wanted to depict them.

Chapter Four

Patterns of Flora and Fauna in Theban Formal Gardens

By examining these ṣ- and Domain of Amun formal garden scenes, their texts, and/or surrounding decorative schema, as well as extant archaeological,\textsuperscript{379} textual, and pictorial evidence, the early to mid-late Eighteenth Dynasty formal gardens in Thebes could have incorporated at least 42 floral and 11 faunal species into its pools/ponds/lakes, ḫsp-plots, water gardens, tree avenues, (sacred) groves, arbors, and/or pergolas. This has been collated into Tables 4.0-4.2 based on Appendix II:

<table>
<thead>
<tr>
<th>Tree/Palm Species</th>
<th>Blooming/Fruiting Period</th>
<th>Months</th>
<th>Growth Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egyptian riverhemp</td>
<td>Winter-summer (flowers)</td>
<td>Year-round</td>
<td>Annual</td>
</tr>
<tr>
<td>Argun-palm</td>
<td>Winter-spring (fruit)</td>
<td>January-May</td>
<td>Annual</td>
</tr>
<tr>
<td>Egyptian willow</td>
<td>Winter-spring (flowers)</td>
<td>February-May</td>
<td>Annual</td>
</tr>
<tr>
<td>Persea tree</td>
<td>Late winter-early spring (flowers/fruit)</td>
<td>February-March</td>
<td>Annual</td>
</tr>
<tr>
<td>Myrrh tree</td>
<td>Spring (flowers)</td>
<td>March-April</td>
<td>Annual</td>
</tr>
<tr>
<td>Frankincense tree</td>
<td>Non-flowering -</td>
<td>-</td>
<td>Annual</td>
</tr>
<tr>
<td>Desert date</td>
<td>Spring (fruit)</td>
<td>March-April</td>
<td>Annual</td>
</tr>
<tr>
<td>Pomegranate tree</td>
<td>Spring (flowers)</td>
<td>March-April</td>
<td>Annual</td>
</tr>
<tr>
<td>Mediterranean cypress</td>
<td>Spring (flowers/cones)</td>
<td>March-May</td>
<td>Annual</td>
</tr>
<tr>
<td>Moringa tree</td>
<td>Spring (flowers/pods)</td>
<td>March-May</td>
<td>Annual</td>
</tr>
<tr>
<td>Doum-palm</td>
<td>Spring-summer (fruit)</td>
<td>April-June</td>
<td>Annual</td>
</tr>
<tr>
<td>Sycamore fig</td>
<td>Spring-fall (flowers/fruit)</td>
<td>April-September</td>
<td>Annual</td>
</tr>
<tr>
<td>Atil-tree</td>
<td>Summer (flowers)</td>
<td>June-August</td>
<td>Annual</td>
</tr>
<tr>
<td>Tamarisk spp.</td>
<td>Summer (flowers)</td>
<td>June-August</td>
<td>Annual</td>
</tr>
<tr>
<td>Carob tree</td>
<td>Summer (pods)</td>
<td>June-August</td>
<td>Annual</td>
</tr>
<tr>
<td>Common fig</td>
<td>Summer-fall (fruit)</td>
<td>June-September</td>
<td>Biennial</td>
</tr>
<tr>
<td>Pomegranate tree</td>
<td>Later summer-mid fall (fruit)</td>
<td>August-October</td>
<td>Annual</td>
</tr>
<tr>
<td>Date palm</td>
<td>Fall (fruit)</td>
<td>September-October</td>
<td>Annual</td>
</tr>
<tr>
<td>Carob tree</td>
<td>Fall (flowers)</td>
<td>September-October</td>
<td>Annual</td>
</tr>
<tr>
<td>Christ’s thorn tree</td>
<td>Fall to winter (flowers/fruit)</td>
<td>October-January</td>
<td>Annual</td>
</tr>
</tbody>
</table>

\textsuperscript{379} Archaeobotanical evidence of other species exists from the Eighteenth Dynasty in Thebes. However, they are not attested in these images or their associated extant evidence. For more information, see Christian Tutundjian de Vartavan, \textit{et al.}, \textit{Codex of ancient Egyptian plant remains}, (London: SAIS Publishing, 2010).
In reality, š- and Domain of Amun formal gardens would have raised a mixture of annual, biennial, and perennial species of flora that are only in bloom and harvestable at certain times throughout the year in Egypt. The formal gardens were seasonal with only a certain number of species producing flowers, fruit, herbs, or vegetables for bouquets, meals and/or offerings at any given time during the three ancient Egyptian seasonal cycles: the growing season, prt (𓊡𓊧𓊙), from October to February (fall/winter); the agricultural harvest season, šmw (𓊡𓊧𓊧), from March to May (spring); and the inundation season, sḥt (𓊨𓊤𓊧), from July to September (summer). The
information concerning the growth cycles of the aquatic, herbaceous, or low-growing species is particularly enlightening as 15 are annuals, meaning they had to be resewn and replanted each year. Whereas, those that are biennials or perennials only needed to be resewn and replanted after two years or more. Tree and palm species on the other hand simply had to be planted into pits, growing flowers and/or fruits annually with the exception of the common fig, which produces biennially, or the *doum*-palm, which does not produce its fruit annually until six to eight years of age. Table 4.0 demonstrates the horticultural knowledge and refined labor organization needed to be upheld each season by the overseers, gardeners, floral-offering bearers, florists, scribes, priests, who worked in these ṣ- and Domain of Amun formal gardens.

Both native and foreign flora could have been raised in ṣ- and Domain of Amun gardens during this period and their distribution in antiquity, detailed in Appendix II, is seen in Table 4.1:

<table>
<thead>
<tr>
<th>Tree/Palm Species</th>
<th>Distribution in Antiquity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argun-palm</td>
<td>Sudan</td>
</tr>
<tr>
<td>Atil-tree</td>
<td>Egypt, North Africa, Middle East</td>
</tr>
<tr>
<td>Desert date</td>
<td>Sub-Saharan Africa, Middle East</td>
</tr>
<tr>
<td>Egyptian riverhemp tree</td>
<td>Sudan, Nile Basin</td>
</tr>
<tr>
<td>Egyptian willow</td>
<td>Sudan, Ethiopia</td>
</tr>
<tr>
<td>Myrrh tree</td>
<td>Sudan, Ethiopia, Djibouti, Somalia, Arabian Peninsula</td>
</tr>
<tr>
<td>Frankincense tree</td>
<td>Sudan, Ethiopia, Djibouti, Somalia, Arabian Peninsula</td>
</tr>
<tr>
<td>Tamarisk spp.</td>
<td>North Africa, Levant</td>
</tr>
<tr>
<td>Carob tree</td>
<td>Sinai Peninsula, Eastern Mediterranean Basin</td>
</tr>
<tr>
<td><em>Doum</em>-palm</td>
<td>Egypt, Nile Basin</td>
</tr>
<tr>
<td>Common fig</td>
<td>Mesopotamia (Southern Iraq), Asia Minor</td>
</tr>
<tr>
<td>Mediterranean cypress</td>
<td>Asia Minor, Syro-Palestine, Lebanon, Cyrenaica (Eastern Libya), Iran, Iraq, Greece, Rhodes, Cyprus</td>
</tr>
<tr>
<td>Pomegranate tree</td>
<td>Asia Minor, Bosporus Region</td>
</tr>
<tr>
<td>Date palm</td>
<td>Egypt, North Africa, Middle East</td>
</tr>
<tr>
<td>Christ’s thorn tree</td>
<td>Nile Basin, North Africa, Levant</td>
</tr>
<tr>
<td>Moringa tree</td>
<td>North Africa, Sudan, Ethiopia</td>
</tr>
<tr>
<td>Persea tree</td>
<td>Ethiopian Highlands, Eritrea, Somalia</td>
</tr>
<tr>
<td>Sycamore fig</td>
<td>Egypt</td>
</tr>
<tr>
<td><em>ksbt</em>-tree</td>
<td>?</td>
</tr>
</tbody>
</table>
Extant pictorial evidence from the New Kingdom dated from Hatshepsut to Amenhotep II\textsuperscript{380} (See Figs. A3.51-A3.53) exhibits how foreign tree and palm species were imported young and potted,\textsuperscript{381} aboard ships and/or over land, from the Northern (Syro-Palestine) and Southern (Sudan/Nubia) Territories and ‘foreign lands,’ such as: Minoan Crete, Mycenaean Cyprus, the Hittite Empire (Asia Minor), Punt (Ethiopia, most probably), and the Babylonian Empire (Mesopotamia). Based on Fragment M from the Ptah Temple at Memphis, two Middle Kingdom expeditionary vessels, for example, outbound from Lebanon to Egypt during the reign of Amenemhat II carried:

7 jars of cinnamon [tree products (\textit{Cinnamomum} spp.) or \textit{ti-šps}\textsuperscript{382}], 92 jars of frankincense, 8.5 barrels of \textit{tntm}-tree fruit, [nearly] 56 barrels of [cilantro/coriander fruit (\textit{Coriandrum}...)

\textbf{Herbaceous Species} | \textbf{Distribution in Antiquity}
---|---
Egyptian walking/bulb onion & Egypt, Mediterranean Basin
Mallow bindweed & Mediterranean Basin
Lesser bindweed & Mediterranean Basin
Cos-lettuce & North Africa, Mediterranean Basin
Low cornflower & Syro-Palestine, Iran, Armenia, Afghanistan, Pakistan
Opium poppy & Crete, Cyprus
True cardamom & Sumer and Mesopotamia (Southern Iraq), India
Mandrake & Syro-Palestine, Israel
Muskmelons & Egypt, Sudan
Cilantr/coriander & North Africa, Southern Europe, Southwest Asia
Papyrus & Egypt, Nile Basin, Sudan, Sub-Saharan Africa
Common reed & Egypt, Eastern Mediterranean Basin
Grapevine & Egypt, Mediterranean Basin
Scented mayweed & Egypt
Blue/white lotus & Egypt, Sub-Saharan Africa, Palestine, Yemen
“Herbs” & Egypt, Nile Basin, Mediterranean Basin
\textit{lh}-plant & ?
\textit{mnw}-plant & ?
\textit{mnwḫ}-plant & ?
\textit{twn}-plant & ?
sativum L.) or $sw^{383}$, 4 barrels of [dried thallus or lichen from the old man’s beard tree (Usnea barbata L.) or $kst-$sw$^{384}$], medicinal herbs, 73 common fig trees, 1 sycamore fig tree, 4 sacks of $szbt$-plants, 197 sacks of $bh3w$-plants, and [an unknown number] of sacks of $sdsft$-plants...\(^{385}\)

From the excerpt of Fragment M above and Thutmose III’s Annals,\(^{386}\) it is clear that many types of foreign tree and plant species were imported from Mesopotamia, Asia Minor, Syro-Palestine, Israel, the Levant, Crete, or Cyprus as trees, fruit and/or seeds.\(^{387}\) The same was likely true for those plants that were native to Egypt but localized to a certain region, such as the carob tree native to the Sinai Peninsula ($bi3w$). Thus, the fruit or seeds of the low cornflower, opium poppy, mandrake, true cardamom, and cilantro/coriander would have likely been planted and naturalized, reproducing seeds the following year in the formal garden in which it was planted instead of being bought again or already grown and potted each time. For the native species, these could have been purchased already grown and potted locally, from seeds from local gardeners, or from the owners’ other gardens.

Similar knowledge can be discerned concerning the fish, fowl, and insects present in the formal gardens. Fish and fowl breeding and growth patterns, as well as honey production by the Egyptian honeybee, described in Appendix II, was organized into Table 4.2 on the next page. These patterns would have determined when the ancient Egyptians were able to gather fish and fowl from their formal gardens during the year. For example, the fish species in the water features would spawn eggs from $smw$ to $p3t$ (spring to fall/winter), maturing around six months after their

\(^{383}\) Germer, Handbuch, pp. 124-125.

\(^{384}\) “The determinative does not match the tree lichen (Parmelia furfuracea L.) because it has a flat, lobed thallus. If it is supposed to be a lichen, it must have been the beard lichen (Usnea barbata L.) found together with the Parmelia furfuracea L. Both types of lichen were imported from the Middle East [and used in mummy embalming]. In Egypt, no beard lichen grows. However, it is entirely open whether $kst-$sw$ is an herbal product at all,” see Germer, Handbuch, p. 143.

\(^{385}\) See the German translation in Altenmüller and Moussa, „Des Inschrift Amenemhets’ II,“ pp. 14-16, M 18-21.


\(^{387}\) Seeds are also considered by El-Maenshawy, “Aspects of the office of temple gardener in ancient Egypt,” p. 53.
Concerning waterfowl, breeding would have occurred in šnw (spring) while the eggs would have hatched and matured into a juvenile or adult over the course of one year. Egyptian honey bees pollinate almost year-round but would have only produced honey in š- and Domain of Amun formal gardens during their citrus and clover seasons in šnw (spring). The ancient Egyptians would have been well-versed in the breeding and production patterns of these fauna. And although the fish and waterfowl species would not have produced year-round; this was dim-

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388 *The typical fishing substance pattern along the Nile is believed to have two peaks with the year, at the beginning of the floods (Akhet) when fish spawn in shallow water, and at the end of the flood season, when the Nile recedes and fish can be harvested from residual pools...the average length of the fish from residual ponds is smaller than those collected from the Nile spawning places,” Pierre M. Vermeersch, *Palaeolithic Living Sites in Upper and Middle Egypt*, (Leuven: Leuven University Press, 2000), pp. 154, 194; Fred Wendorf, “Wadi Kubbaniya,” in *Encyclopaedia of the archaeology of ancient Egypt*, ed. by Kathryn M. Bard, (London: Routledge, 1999), p. 874.

389 This is a misnomer. In beekeeping, this is the nectar and pollen collection season for honey bees.

390 ‘Citrus’ season is a misnomer, as it includes all species of fruit-bearing trees and palms not only citrus species.


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<table>
<thead>
<tr>
<th>Fish</th>
<th>Spawning Season</th>
<th>Months</th>
<th>Growth to Juvenile and/or Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carp spp.</td>
<td>Spring-early summer</td>
<td>March-June</td>
<td>± Six months</td>
</tr>
<tr>
<td>Elephantfish spp.</td>
<td>Summer</td>
<td>June-September</td>
<td>± Six months</td>
</tr>
<tr>
<td>Egyptian trunkfish</td>
<td>Summer</td>
<td>June-September</td>
<td>± Six months</td>
</tr>
<tr>
<td>Catfish spp.</td>
<td>Summer</td>
<td>June-September</td>
<td>± Six months</td>
</tr>
<tr>
<td>Tilapia spp.</td>
<td>Fall-spring</td>
<td>November-April</td>
<td>± Six months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bird</th>
<th>Breeding Season</th>
<th>Months</th>
<th>Growth to Juvenile and/or Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egyptian turtle dove</td>
<td>Spring</td>
<td>March to May</td>
<td>± One year</td>
</tr>
<tr>
<td>Pintail duck</td>
<td>Spring</td>
<td>March-May</td>
<td>± One year</td>
</tr>
<tr>
<td>Mallard duck</td>
<td>Spring</td>
<td>March-May</td>
<td>± One year</td>
</tr>
<tr>
<td>Red-breasted goose</td>
<td>Spring</td>
<td>March-May</td>
<td>± One year</td>
</tr>
<tr>
<td>htr's-duck</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Insect</th>
<th>Honeyflow Season</th>
<th>Months</th>
<th>Honey Season</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egyptian honey bee</td>
<td>Winter-early summer</td>
<td>January-June</td>
<td>Spring-early summer</td>
<td>April-June</td>
</tr>
</tbody>
</table>
-inished by the fact that many of these species would have beautified the pools/ponds/lakes and naturally kept them clean, as they are either bottom feeders, and/or are particularly known for their tendency to eat waterborne insects, as well as invasive aquatic leaves, grasses, algae, and/or detritus.392

These $\delta$- and Domain of Amun formal gardens could have provided surplus produce for private and/or palatial households’ regular meals, medicine, perfumes, ointments, private banquets, entertainment, feasts, funerals or wakes. In the sacred sphere, the vegetables, fruit, herbs, and flowers from the formal gardens would have been administered by priesthounds who ran memorial or temple cults and prepared or arranged them into meals or bouquets for daily offerings or during festivals and feast days throughout the calendrical year. Beginning in the reign of Ahmose I, for example, celebrants ate common figs with honey and placed fresh floral $m\bar{s}-h\bar{r}w$-wreaths on statues in temples and tombs during the Festival of Thoth,393 which evoked Spell 20 or the ‘Incantation for the $m\bar{s}-h\bar{r}w$-Wreaths’ from the Book of the Dead.394 While, at the time of the Khoiak Festival of Sokar-Osiris, fresh Egyptian walking or bulb onions and blue and white lotus were strung into collars and wreaths395 to be offered in the Theban Necropolis, reinstating the otherworldly powers of Sokar-Osiris and the glorified dead ($\textit{sh}$).396

Accordingly, $\delta$- and Domain of Amun formal garden were used as a platform to propagandize the owner’s status, power, and wealth during important Theban societal events.

392 See the eating habits of these fauna species detailed in Appendix II.
394 See the incantation’s mention in the entry for the common fig in Appendix II.
395 See the depiction of these onion and lotus bouquets in Roy (TT 255) and in Nakhtamun (TT 341).
Hatshepsut, Thutmose III, Amenhotep II, and Amenhotep III boast that they built š- and Domain of Amun formal gardens, with luxurious materials, and sometimes foreign flora, in temples as monuments to show their devotion to Amun and in palaces to enhance their prestige and power in the royal court. In the private sphere, Ineni (TT 81) grew nearly 500 native and foreign species in his š-formal garden while Min (TT 109) and Qenamun (TT 93) owned multiple š-formal gardens. During the Beautiful Festival of the Valley, for example, celebrations seem to have also taken place on the East Bank in the š-, hnty-š-, or hrrt-š-formal gardens of palaces, homes, and/or temple domains before or after royal and private citizens had visited the memorial temples (see the TT 87 scene) and tombs on the West Bank to dine with their ancestors and offer them bouquets of lotus, papyrus, mandrake, opium poppy, and/or doum-fronds. In the TT 100 wall narrative, Rekhmira hosts a grand banquet with hundreds of guests “upon returning from the Temple of Amun at Karnak and upon making blessings to the majesty of this god.” Guests enjoy a large feast in his š-formal garden while rituals are performed on statues in the pool and in the garden shrine. During the New Year Festival or the Harvest Festival of Renenutet and Nepri the 't-nℓ-hṭ- and k3mw-formal gardens had some of their crop ritually sacrificed to the gods and/or offered to the king, who could be an active participant, as in the TT 96 wall narrative with Amenhotep II likely seated in one of the formal garden’s pavilions, or in the wall reliefs from the

397 See the texts mentioned on pp. 37-38, 83-84 of this work.
398 See the TT 81, TT 109, and TT 93 #1-#3 scenes, pp. 15-16, 18, 24-27 of this work.
399 Logistically speaking, the Beautiful Festival of the Valley and all its pomp and splendor likely spanned more than one day. The Opet Festival during the time of Thutmose III, for example, was an 11-day affair. See John C. Darnell, “Opet Festival,” UCLAEE 1.1 (2010): p. 1. During the Beautiful Festival of the Valley, priests and celebrants (i) carried and witnessed the Theban Triad barks leave Karnak Temple, (ii) the sacred barks sailed across the Nile, (iii) the sacred barks were paired with the deified pharaoh’s nšmt-bark and ritually sailed in memorial temples on the West Bank, and (iv) all ancient Egyptians went to their family tombs to feast with the dead, as well as feasted in their homes on other days of the festival, as in TT 100 scene and TT 161 scene in Chapter Three.
400 This might be alluding to their return from the festivities occurring at Karnak Temple on the first day of the festival. The Beautiful Festival of the Valley began with grand procession of the Theban Triad’s barks from Karnak Temple to quays for them to cross to the Nile in order to visit the memorial temples on the West Bank. See Martin Stadler, “Procession,” UCLAEE 1.1 (2008): p. 7.
401 See the TT 100 wall narrative and surrounding scenes and texts, pp. 20-23 of this work.
Second Terrace of Memorial Temple of Hatshepsut where she performs rites on the Puntite incense trees of her $hnty$-$\delta$-formal garden (See Fig. A3.54). Kings could participate in these rituals in absentia if necessary, such as Hatshepsut, Thutmose III, and possibly Amenhotep II, who erected statues of themselves as ‘NN-who-Offers-Fresh- Produce-to-Amun’ or Amenhotep I’s as ‘NN-of-the-NN-formal-garden’402 (See Figs. A3.46-A3.49).

By contrast, when banquets and feasts were not busying domestic and palatial households, the $\delta$- and Domain of Amun formal gardens would have been places of relaxation, repose, pleasure, aesthetics, entertainment, and even sports.403 Palatial, sacred, and private $\delta$- and Domain of Amun formal gardens could have been multifaceted microcenters of supplementary herb, vegetable, fruit, fish, fowl, wine, and honey production to be used for banquets, meals, collars, garlands, wreaths, bouquets, perfumes, unguents, aromata,404 medicine, offerings, festivities, and even for wood for sacred temple doors and barks405 to name but a few.406 The flora and fauna species would have had various practical uses, deeply rooted religious symbolism related to the sun, moon, creation and/or rebirth cycles, as well as certain levels of prestige due to their historical roots.407 And although the produce of these formal gardens was allocated to many occasions throughout the year, Thebans did not need to worry about it being expended because they raised a mixture of annual, biennial, and perennial species in bloom and harvestable at different times throughout the year.

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402 See pp. 52, 63, 75, 82 of this work.
403 See Ineni and his wife relaxing in the pavilion in the TT 81 scene; Min teaching archery to the young prince Amenhotep II in the royal palace on the East Bank beside the TT 109 scene; Qenamun and his wife fishing in the TT 93 #2 scene; and Qenamun watching a performance with others in the $hnty$-$\delta$-formal garden of one of the palaces at Perunefer.
404 Myrrh and frankincense were not the only tree species to be burned by the ancient Egyptians for their scent. For more information, see the entries on the flora in the formal gardens located in Appendix II.
405 For temple doors, see the text about the felling some Mediterranean cypress from the $hnty$-$\delta$-formal garden of the Memphite memorial temple of Amenhotep III in order to be crafted into doors for the structure on pp. 70-71, footnote 281 of this work; For sacred barks, see the construction of a $n\text{snmt}$-bark beside the TT 109 $\delta$-formal scene in Appendix I.
406 See the myriad uses of the floral and faunal species in ancient Egyptian society in Appendix II.
407 See Appendix II for the entire list of distribution, uses, and religious symbolism of these floral and faunal species.
Chapter Five

Conclusion

This thesis assessed the formal gardens represented in the private Theban funerary art of the early to mid-late Eighteenth Dynasty (TT E2, TT 39, TT 63, TT 80, TT 81, TT 85, TT 87, TT 90, TT 93 #1-3, TT 96, TT 100, TT 109, TT 161, and TT 334) prior to the reign of Amenhotep IV/Akhenaten. The ancient Egyptians had specific words for their simple and formal gardens from the Old Kingdom onward. Over the past century, scholars have translated the formal gardens’ names into numerous modern language equivalents, obscuring our understanding of them. Although archaeological examples are known from the Old Kingdom onwards, the study of ancient Egyptian gardens still strongly relies on their extant pictorial and textual evidence recorded in private tombs and other material culture, such as statuary, papyri, and stelae. A review of the prior scholarship revealed that although notable studies have been conducted on aspects of ancient Egyptian gardens since the early Twentieth Century, an updated and chronological examination of the formal garden scenes was warranted, as there was scope for a deeper understanding of the role that these gardens played in the lives of their owners.

This study’s methodology produced a typology of the formal gardens scenes by their Egyptian names. Two groupings of scenes became evident: ṣ- and the Domain of Amun formal garden scenes, which were examined individually based on their distinct names: (i) the ḫnty-ṣ-formal garden, the ksmw-formal garden, the ṣṣ-formal garden, ḫn-nt-ḥt-formal garden, and the ḫṛṛt-ṣ-formal garden. In Chapters Two and Three, the ṣ- and Domain of Amun formal garden scenes were visually examined through formal analysis. These formal analyses were followed by discussions of the extant textual, pictorial, and/or archaeological evidence of the formal gardens from the time period, their location and relationship to the surrounding decorative schema and
texts in the tombs, their significance in terms of the tomb-owners’ relevant titles, their function for the tomb-owner after death, and ultimately the growth cycle, symbolism, uses, and nomenclature of the flora and fauna that they contained.

**Findings: Š-Formal Gardens**

In Chapter Two, the formal analysis of the images of the 13 Š-formal garden in the private Theban tombs (TT 81, TT 109, TT 85, TT 100, TT 80, TT 93 #1-#3, TT 63, TT E2, and TT 334) and the discussion of their extant archaeological, pictorial, and textual evidence from this period revealed that the actual Š-formal gardens seem to have been constructed close to a private home, palace, cult, and/or memorial shrine/temple during this period. The pictorial evidence from these tombs as well as the extant archaeological evidence demonstrated that a Š-formal garden might be constructed in 14 different layouts during this period (See Figs. A3.1-A3.14), incorporating various features, such as: enclosure walls, gates, pools, water gardens, ḫsp-plots, tree avenues and groves, pavilions with seating, libation basins, garden shrines, arbors and/or pergolas, and apiaries (See Table 2.0).

Examples of extant archaeological, textual, and pictorial evidence of Š-formal gardens included royal ones, such as: the one within the Queen Tetisheri Enclosure at Abydos, gifted to her by Ahmose I⁴⁰⁸ (See Fig. A3.24); the one that was located somewhere in the enclosure of the Memorial Temple of Hatshepsut at Deir el-Bahari on the West Bank of Thebes⁴⁰⁹ (See Fig. A3.30); the one called ‘Pure-and-Fresh’ located at the ‘Rising-of-the-Horizon-of-Amun’ Shrine constructed by Hatshepsut on the West Bank of Thebes⁴¹⁰; the one called ‘Libation-of-Amun’ constructed by Amenhotep II within the Karnak Temple Complex of Amun-Ra on the East Bank

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⁴⁰⁹ Naville, *The Temple of Deir el Bahari V: Upper Court and Sanctuary*, p. 10, pl. CXLII.

of Thebes\textsuperscript{411}; the one at a Theban palatial residence (\textit{pr-\(\text{rs}\)}) located north of Karnak’s main (western) entrance and known since the reign of Hatshepsut\textsuperscript{412}; and the one that was possibly called ‘Glory-of-the-Trees-Beloved-of-Thebes-upon-the-Way-of-the-Ram-Headed-Sphinxes’ situated at Karnak’s main (western) entrance on the East Bank\textsuperscript{413} (See Fig. A3.32). Non-royal, private versions included the one in the First Court of the Memorial Temple of Amenhotep, Son of Hapu, and gifted to him by Amenhotep III\textsuperscript{414} (See Fig. A3.31). The extant evidence for the royal \(\delta\)-formal gardens and the location of the private ones in the tombs in relation to the surrounding decorative schema and texts indicated that royal and private \(\delta\)-formal garden provided aesthetic landscapes for either sports, leisure, festivities, wakes, and private banquets, as well as providing surplus wine, fruit, fish, fowl, honey, herb, flower and/or incense production for the institution to which it was connected. Although the location, features, layouts, and uses for each \(\delta\)-formal garden might have differed, what they have in common is their nomenclature as a \(\delta\) (\(\bar{\text{\(\text{ds}\)}}\); \(\bar{\text{\(\text{ds}\)}}\)) in Egyptian.

The titles of the tomb-owners who have \(\delta\)-formal garden scenes in their tombs suggested direct or indirect contact with the actual royal \(\delta\)-formal gardens mentioned above because as endowments to palaces, funeral monuments, or to memorial or cult temples these gardens raised subsidiary produce for use in daily offerings, private meals and banquets, medicine, floral arrangements and/or rites and festivals. These individuals’ positions, such as ‘Overseer/Controller/Administrator of Construction Works at Karnak,’ ‘Overseer of the Double-granary and Double-treasury of Amun,’ and ‘Chief Scribe/Scribe/Grain Accountant of the Divine Offerings of Amun,’ likely influenced them to establish \(\delta\)-formal gardens of their own beside their

\textsuperscript{411} van Siclen III, \textit{Two Theban Monuments from the Reign of Amenhotep II}, p. 16, fig. 10.
\textsuperscript{412} Edwards, \textit{Hieroglyphic texts from Egyptian stelae, etc. in the British Museum} VIII, p. 40, pl. XXXIII; Wilkinson, \textit{The garden in ancient Egypt}, pp. 132-133, fig. 68; de Garis-Davies, \textit{The Tomb of Nefer-hotep at Thebes II}, pl. I.
\textsuperscript{413} de Garis-Davies, \textit{The Tomb of Nefer-hotep at Thebes II}, pl. III; Gardiner, \textit{Late-Egyptian Miscellanies}, p. 10; Nims, “Places about Thebes,” p. 112; Wilkinson, \textit{The garden in ancient Egypt}, p. 134.
\textsuperscript{414} Robichon and Varille, \textit{Le temple du scribe royal Amenhotep, fils de Hapou}, pp. 28, 35, 37, pls. III-V, X-XI.
homes (See Table 2.1). Formal gardens would have been symbols of power and status, as the construction of both royal and private š-formal gardens would have been a costly and labor-intensive endeavor, even if it was small. Some Theban elite had the resources available to construct extensive and/or multiple š-formal gardens for themselves, such as Ineni (TT 81), Min (TT 109) and Qenamun (TT 93). The supervisors and workmen had to clear the land and lay the formal garden’s plan and the pools, water gardens, pools, architecture, and hsp-plots had to be dug and/or assembled. The flora had to be bought, transported, introduced, resown, and watered and tended throughout the year, as well as the water features and/or apiaries that hosted fauna. A private elite owner of a š-formal garden demonstrated that they had too the power and resources necessary to construct and maintain a living monument like the pharaohs or that the tomb-owner had royal favor, as š-formal gardens could be gifted to private or royal individuals by the king. The ancient Egyptian elite clearly cherished the š-formal gardens planted close to their homes, as they appear on the list of what Ra would revoke if one were an evildoer in life.

Indeed, the š-formal garden scenes in the tombs played a wider part in the decorative schema of the room in which they were located (See Table 2.2). The š-formal garden scenes are positioned on the pillars or walls in the porticos, transverse halls, passages, or chapels that feature daily life ‘focal representations,’ which are dedicated to portraying the tomb-owner’s personal, sociocultural experience as a member of Theban society, such as ‘fish and fowl icons,’ ‘natural resource/inspecting icons,’ ‘banqueting icons,’ ‘gift to pharaoh icons,’ and ‘offering table icons.’ (See Table 2.2). Thus, the š-formal garden scene might be interpreted as type of ‘natural

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415 See the list of the 500 plants grown in Ineni’s š-formal garden (TT 81 scene), and the texts mentioning the multiple š-formal gardens of Min (TT 109 scene), and Qenamun’s three š-formal gardens (TT 93 #1-#3 scenes) on pp. 15-16, 18, 24-27 of this work.
416 Lichtheim, Ancient Egyptian Literature I, p. 233; Breasted, Ancient Records of Egypt II, p. 16, §37; also see p. 35 of this work.
resource/inspecting icon,’ which immortalized the tomb-owner’s achievement of working in
and/or having had the means to construct his own š-formal garden that supplied subsidiary produce
in life and perpetuating it after death. The tomb-owners’ inclusion of their š-formal garden as
scenes in their tombs would have further allowed their kā and bā to visit them in perpetuity for
pleasure and nourishment, as in the surrounding scenes and texts of the TT 100 scene:

Words spoken: presenting to you lotus blossoms that grew forth from your [š-formal
garden]. You do not harvest [them] from it...because its yield is for you [and] every gift of
every fruit and vegetable that are in it. Be pleased from its produce, be fully satisfied
from its provisions, be overjoyed from its fruit and vegetables, be refreshed in the shade
of its [tree groves], [and] do what your ka loves in it forever and ever.418

As well as from the tomb texts of ‘Chief Servant and the Overseer of the Double-granary of Amun’
Minnakht (TT 87) and the ‘High Priest of Amun’ Menkheperraseneb II (TT 112):

Going into and out of my tomb to refresh myself in its shadow, to drink water from my
pond daily, that all my limbs may flourish. May Hapi supply me with nourishment and
offerings, and vegetables in their season. May I stroll at the edge of my pond daily, without
cease, may my ba alight on the branches of the trees I have planted, may I refresh myself
under the branches of my sycamores and eat the bread that they give.419

Findings: Domain of Amun Formal Gardens

In Chapter Three, ‘Domain of Amun’ was used as an umbrella term for these formal garden scenes
due to their mutual relationship to the Amun cult at Thebes, but textually, each had its own
Egyptian name: the ḫnty-š-formal garden scene in TT 87; the ksimw-formal garden scene in TT 90,
the sš-formal garden scene in TT 39; the ‘t-nt-hjt-formal garden scene in TT 96; and the ḫrrt-š-
formal garden scene in TT 161. The formal analysis of the images of these Domain of Amun
formal garden scenes and their extant archaeological, pictorial, and textual evidence from the
period demonstrated how intimately connected the actual physical formal gardens were to the
tomb-owner’s relevant titles, such as those of ‘Overseer of the ḫntyw-š-Formal Gardens of Amun,’

418 Sethe, Urkunden IV, nos. 1158-1165; Virey, « Le jardin de Rekhmara, » p. 160.
419 Guksch, Die Gräber des Nacht-Min und des Men-cheper-Ra-seneb, p. 152.

A ḫnty-š-formal garden was constructed in a pharaoh’s memorial temple(s) located in fertile, inundated land (ḫbḥ) and/or in palaces, such as those in the important royal naval base of Perumefer (former Avaris) in the Eastern Delta, providing an aesthetic locale for the glorified king and Amun is his form as Osiris the ‘Foremost of Westerners’ (ḥnty-imnrt) to visit, as evident from the texts at Hatshepsut’s memorial temple:

...[incense] trees were taken up in the God’s Land, and set in the ground in Egypt...for the king of the gods...to establish for him a Punt...in his [ḥnty-š-formal garden], just as he commanded me for in Thebes...It is large for him. He walks...under them.420

An up-to-date interpretation of ḫnty-š from the Egyptian could be ‘the foremost of the š-formal garden(s),’ as the word is related to ḫnt (ẖnt) and ḫnty (ẖnty) meaning ‘foremost of,’ as well as the verbs: ḫnti (ẖnt) or ‘to be pleased, to be glad’; ḫntš (ẖnt) or ‘to have enjoyment’; and ḫntš (ẖntš) or ‘to walk about freely, to stroll.’421 It did not seem coincidental then that the pharaohs were the only ones to construct ḫntyw-š-formal gardens with extensive lakes or pools for themselves or for the gods, as this formal garden would have been the choicest type for pleasure, relaxation, boat rites, and dance, song, and music entertainment uses, as well as raised incense, birds, fish, fruit, flowers, and wood for the palace or memorial temple that adjoined them. The floral arrangements that the overseers/gardeners/florists of the ḫntyw-š-formal gardens like Nefermenu (TT 138) produced were so beloved by the pharaohs422 and Theban elite that

420 Breasted, Ancient Records of Egypt III, p. 293.
421 See the full discussion on pp. 59-60 of this work.
422 Selim, “Two unpublished Eighteenth Dynasty stelae from the reign of Thutmose III at the Cairo Museum TN 20.3.25.3 and TN 21.3.25.14 (pl. I-II),” pp. 329-330, fig. 1; see the full discussion of Nefermenu’s stela on pp. 65-66 of this work.
individuals, such as Senenmut (TT 71), ‘Chief Architect’ and ‘Overseer of the Ḥntyw-š-Formal Gardens of Amun’ requested that they be placed in water and vases in his tomb-chapel every day.\textsuperscript{423}

A $k₃mw$-formal garden was located in proximity to a palace, and/or cult and memorial temple and was closely linked to those skilled in horticulture and viticulture, as the term literally means ‘the one that creates liquid ($mw$) provisions ($k₃$)’ or $k₃$ $mw$ (𓆤𓊆𓎋𓎌) in Egyptian.\textsuperscript{424} The $k₃mw$-formal gardens of this period would have raised grapes and pomegranates, as well as white lotus and pintail duck, and their shrines and ornate wine presses would have been ritually used for the Harvest Festival of Renenutet and Nepri that coincided with $šmw$ (spring).

A $sš$-formal garden was constructed beside a cult temple or private elite tomb and is known as early as the Middle Kingdom.\textsuperscript{425} The $sš$-formal garden was centered around fish and fowl propagation with minor floral production. The $sš$-formal garden’s name in Egyptian referenced its bird- and fish-rich pond or $sš$ (𓊆𓎋𓎌, $sš$) and its specific type of aviary called a $ḥt$-$ḫt$ (𓋐𓋎) or literally ‘the great wood(land)/grove’ and ultimately recreated the wild hunting and/or sacred marsh thickets along the banks of the Nile and its watercourses that the Theban elite enjoyed in life.\textsuperscript{426}

An $῾t$-$nt$-$ḥt$-formal garden of this period was constructed in proximity to cult temples or palaces and can be interpreted literally from the Egyptian as ‘the dwelling/field of woodland(s)/tree(s),’ as the term is related to $῾t$ (𓋐𓋎) or ‘room/department/dwelling’; $῾(w)t$ (𓋐𓋎) or ‘fields’; and $ḥt$ (𓋌𓋎, 𓋋𓋎) meaning ‘woodland(s)/wood(s)/trees.’\textsuperscript{427} The $῾t$-$nt$-$ḥt$-formal gardens of Thebes incorporated multiple types of formal gardens into their layouts, such as

\textsuperscript{423} Wolfgang Helck, „Die Opferstiftung des Ĝn.mwt,” pp. 25, 32; and the full discussion on p. 64 of this work.
\textsuperscript{424} See the full discussion on p. 74 of this work.
\textsuperscript{425} Altenmüller and Moussa, „Des Inschrift Amenemhets’ II,” p. 7, pl. V.
\textsuperscript{426} See the full discussion on p. 79 of this work.
\textsuperscript{427} See the full discussion on pp. 82-83 of this work.
the š- and ksmw-formal gardens (See the TT 96 scene), and were ‘renewed’ by the kings and prized for their native and foreign fruit, flower, incense, and faunal production, which were allocated for divine food offerings and floral arrangements to the gods or for the king’s palatial residences at Malkata and Perunefer.\footnote{Helck, *Urkunden* 18, no. 1396, ‘Song of the Singers,’ lines 5-11; S Hayes, “Inscriptions from the Palace of Amenhotep III,” fig. 7; See the full discussion on the ‘botanical reliefs’ of the šm-nmw-temple of Karnak, as well as of those located at Malkata and Perunefer on pp. 83-86.}

A ḫṛrt-š-formal garden was constructed in the vicinity of a palatial residence or a cult temple domain from at least the Middle Kingdom onwards in Avaris (later Perunefer)\footnote{Bietak, “Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab’a 1979-1984),” pp. 312-349; and Aspöck, Tell el-Dabaa: Palace Area F/I - Phase Model and Wooden Model”, https://4dpuzzle.orea.oeaw.ac.at/reconstruct_phaseModel/.} while its first construction in Thebes occurred during the reign Thutmose III,\footnote{Sethe, *Urkunden* IV, no. 749; also based on the translation in Breasted, *Ancient Records of Egypt* III, p. 225, §567.} which was ‘renewed’ by his son Amenhotep II and successor Amenhotep III.\footnote{Helck, *Urkunden* 17-22, no. 1331; see the full discussion on pp. 89-91 of this work.} The tomb-owner Nakht with the TT 161 scene of the Theban ḫṛrt-š-formal garden and his father Gurer and four sons Huynaefer, Waser, Pareheny, and Kha must have worked there, as they were ‘Gardeners/Offering-bearers of Floral Offerings of Amun.’ Thus, a ḫṛrt-š could be interpreted literally as a ‘formal flower garden’ since ḫṛrt (šqr, hhr) was used as a generic term for ‘flower(s)’ in Egyptian and a major feature of its layout was its many hsp-plots.\footnote{See the full discussion on p. 88 of this work.} The ḫṛrt-š-formal garden might even be related to the Semitic loan verb hrr (̱šqr) or ‘to squint’ because one usually squints or close one’s eyes while smelling flowers.\footnote{See the full discussion on p. 88 of this work.}

From the tomb scenes and their extant archaeological evidence, nine different layouts are known for these Domain of Amun formal gardens (See Figs. A3.15-A3.23), including features, such as: propylon gates, lakes, pools, ponds, processional ways, pavilions, statuary, tree avenues

\footnote{\textsuperscript{428} Helck, *Urkunden* 18, no. 1396, ‘Song of the Singers,’ lines 5-11; S Hayes, “Inscriptions from the Palace of Amenhotep III,” fig. 7; See the full discussion on the ‘botanical reliefs’ of the šm-nmw-temple of Karnak, as well as of those located at Malkata and Perunefer on pp. 83-86.}
\footnote{\textsuperscript{429} Bietak, “Eine Palastanlage aus der Zeit des späten Mittleren Reiches und andere Forschungsergebnisse aus dem östlichen Nildelta (Tell el-Dab’a 1979-1984),” pp. 312-349; and Aspöck, Tell el-Dabaa: Palace Area F/I - Phase Model and Wooden Model”, https://4dpuzzle.orea.oeaw.ac.at/reconstruct_phaseModel/.}
\footnote{\textsuperscript{430} Sethe, *Urkunden* IV, no. 749; also based on the translation in Breasted, *Ancient Records of Egypt* III, p. 225, §567.}
\footnote{\textsuperscript{431} Helck, *Urkunden* 17-22, no. 1331; see the full discussion on pp. 89-91 of this work.}
\footnote{\textsuperscript{432} See the full discussion on p. 88 of this work.}
\footnote{\textsuperscript{433} See the full discussion on p. 88 of this work.}
and groves, hsp-plots, apiaries, aviaries, garden altars and shrines, florist workshops, and arbors and/or pergolas (See Tables 3.0-3.4). These Domain of Amun formal gardens would have required a large, well-trained workforce evidenced by the sheer amount of their produce recorded over a 31-year period in the Papyrus Harris I, dating to the reign of Ramesses III, and that were used in daily offerings, private meals and banquets, medicine, floral arrangements and/or rites and festivals.\textsuperscript{434} As monumental endowments by the kings and gifts to the gods, Domain of Amun formal gardens provided wine, fruit, fish, fowl, herb, flower and/or incense production for the cult and/or memorial temples or palace to which they were adjoined. Thus, the formal gardens had to be cultivated, administered, maintained, and facilitated by individuals, such as the respective tomb-owners and their associated colleagues who worked in the double-treasuries, double-granaries, aviaries, apiaries, and floral, wood, and stone workshops of Amun. The formal gardens had to be upheld on numerous levels: the foundation, planning, and maintenance of its landscape and architecture by the overseers of construction works and craftsmen, such as: Puimra (TT 39) who was an ‘Architect,’ Ineni (TT 81) and Rekhmira (TT 100) who were ‘Overseers of All Construction Works at Karnak and Offices in the Domain of Amun,’ Huy (TT 54) who was a ‘Sculptor of the Domain of Amun,’ Amenhotep Huy (TT 368) who was an ‘Overseer of the Sculptors of Amun in Thebes,’ and Amenhotep (TT C1), who was an ‘Overseer of the Carpenters of Amun.’

Moreover, there was the introduction and maintenance of its flora and fauna by gardeners, overseers of the pond(s), beekeepers, aviculturists, and florists, such as: Nakht (TT 161), his father Gurer, and four sons who were ‘Gardeners/Offering-bearers of Floral Offerings of Amun,’ Tjay (TT 349) and Nakht (TT C8) who were ‘Overseers of the Aviaries in the Domain of Amun,’ and Neferkhaut (TT undiscovered) who was a ‘Chief Beekeeper of Amun.’

\textsuperscript{434} See the entire excerpt in Breasted, ‘Papyrus Harris,’ in Ancient records of Egypt IV, pp. 97, 99-100, 102, 104; for the floral, see Manniche, An Ancient Egyptian Herbal, p. 24; or Hasse, „Tempel und Gärten,“ pp. 178-179.
The formal gardens had to have the collection, distribution and administering of its produce into the double-granaries and/or treasuries of Amun completed by overseers, priests, and scribes, such as: Amenhophet (TT C3), Djehuty (TT 11), Baki (TT 18), Djehutynefer (TT 80), Sennefer (TT 99), and Amenmose (TT 228), who were ‘Overseers/Scribes/Deputies/Treasurers of the Treasuries of Amun’; and Nakht (TT A20), Khamhat Meh (TT 57), Nebamun (TT 65), Menkheperraseneb (TT 79), Rekhmira (TT 100), Amenemhat (TT 123), Nebamun (TT 179), Khnummose (TT 253), Amenemipet Tjanefer (TT 297), and Djehutynefer (TT 317), who were ‘Chief Scribes/Overseers/High Officials/Accountants in the Granaries of the Divine Offerings of Amun.’ Additionally, there was the distribution of the formal gardens’ produce into offerings and/or floral arrangements that were prepared at nighttime to be ready in the morning for the institutions to which they were connected, by suppliers, gardeners and florists, such as: Rahotep (TT unknown), Sennefer (TT 96), Senenmut (TT 71), and Nefermenu (TT 138), who were ‘Overseers of the Hntyw-š-Formal Gardens of Amun,’ Sennefer (TT 96), who was also an ‘Overseer of the ‘t-nt-ḥt-Formal Gardens of Amun,’ Nefermenu (TT 138) who was further a ‘Florist’ and a ‘Chief of the Royal Florists,’ Neferrenpet (TT 43), Ray (TT 124) and Amenirneferu (TT 199), who were ‘Overseers of the (Royal) Storerooms,’ Djehutyemose (TT 248), who was a ‘Supplier of Offerings,’ and Qenamun (TT 93), who was an ‘Overseer of the Perunefer Palace.’

Although, the Domain of Amun formal garden scenes in the tombs were not the focal point of the rooms in which they are situated, they were positioned in key parts of the transverse halls, passages, and chapels with ‘focal representations’ that illustrated the tomb-owner’s unique,

435 See the list of the tomb-owners’ colleagues and their titles in the discussion on pp. 93-97 of this work.
sociocultural experience as a member of the Theban elite (See Table 3.6). ‘Focal representations’ in these areas of the tomb were focused around visually communicating the important worldly events of the deceased’s life and acted as images of self-glorification, which were frequently viewed by family and community members, especially during funerals, festival, and feast days. Thus, the Domain of Amun formal garden scenes functioned as its own type of ‘career focal representation,’ as the titles of these tomb-owners proposed direct or indirect contact with the actual physical formal gardens in Thebes at the time (See Table 3.5). For example, the TT 87 scene, which depicts the ḫnty-š-formal garden of the Memorial Temple of Thutmose III, is adjacent to an image of the tomb-owner’s son Menkheper, who was a ‘Scribe of the Divine Offerings of Amun in the Memorial Temple of Thutmose III.’ While other examples include the TT 96 scene of an ‘t-nt-hšt-formal garden of Amun ‘renewed’ by Amenhotep II and supervised by the tomb-owner Sennefer, who was an ‘Overseer of the Ḥntyw-š- and ‘t-nt-hšt-Formal Gardens of Amun.’

Findings: Growth Cycle of the Formal Gardens

In Chapter Four, the growth cycle of the formal gardens was examined, particularly in terms of when the 42 floral and 11 faunal species would have been in bloom and in harvest throughout the seasons of the ancient Egyptian year: prt (fall/winter), šmw (spring), and šḥt (summer). This examination was supported by the information provided in Appendix III: Herbarium and Faunarium, which included an entry for each floral and faunal species alphabetically in terms of taxonomy and distribution, as well as usage, symbolism, historical roots, and nomenclature for the ancient Egyptians. The study of the growth cycle revealed that the ancient Egyptians cultivated a mixture of both native and foreign annual, biennial, and perennials species in these formal gardens (See Tables 4.0–4.2). Moreover, only certain flora or fauna would have been available each season for use in the daily offerings, medicine, food, and floral arrangements due to their distinct blooming
and fruiting, mating and maturing, and/or honeyflow and honey periods (See Tables 4.0, 4.2). If a certain native or foreign species appeared in one of the formal gardens, it was likely grown from a seed or young potted specimen purchased from local gardeners or one’s other gardens, or transported/traded via trade aboard vessels and/or on foot from the Northern and Southern Territories within the Egyptian Empire or from trade with neighboring areas (‘foreign lands’) of the Eastern Mediterranean and Near East, as attested from the Punt Expedition and private tomb reliefs437 (See Table 4.1 and Figs. A3.51-A3.54). While, an earlier example of plants, trees, and fruits being transported/traded aboard vessels from abroad included Fragment M from the Ptah Temple at Memphis concerning two Middle Kingdom expeditionary vessels outbound from Lebanon to Egypt during the reign of Amenemhat II.438

The Study of Ancient Egyptians Gardens in the Foreseeable Future

The Š- and Domain of Amun formal garden scenes in private Theban tombs required an up-to-date, chronological investigation in order to advance our understanding of the layouts, water features, architecture, and the flora and fauna that they sustained. The location of the Š- and Domain of Amun formal garden scenes in the tombs, their relationship to the surrounding scenes and texts, the relevant tomb-owners’ titles, and their extant archaeological, pictorial, and or textual evidence from the period expanded our understanding of their actual layouts, features, flora and fauna, and functions and significance in Thebes prior to the Amarna Period. It is the author’s hope that this study will assist those in identifying specific types of simple or formal gardens from either archaeological, pictorial, or textual sources that already exist or those that might be discovered.

Due to advances in technology over the past decades, computer science gives us the ability

437 See the depiction of potted incense trees in TT 39, TT 100, and TT 143, as well as the Punt Expedition reliefs in the second portico of the First Terrace of Hatshepsut’s memorial temple at Deir el-Bahari.
438 See the German translation in Altenmüller and Moussa, „Des Inschrift Amenemhets’ II,“ pp. 14-16, M 18-21; see its discussion on pp. 103-104 of this work.
to reconstruct and preserve archaeological remains and material culture through digital media, such as 3D-printing, modeling, and virtual reality. An example is the 3D augmented virtual interactive model of the TT 96 ‘t-nt-ht’-formal garden scene created by Zaak Augmented Reality Works for an exhibition at the Museum Rietberg, Zürich in 2016.\(^{439}\) (See Fig. A1.20). Archaeology is an ever-evolving discipline. It is the author’s hope that in the coming decades, archaeology will continue to shift towards even more interdisciplinary and digital methods and approaches in the field and that are our meticulous investigations of sites, performed in tandem with other specialists, might garner more discoveries of simple and formal gardens, including the actual remains of their architecture, statuary, layouts, and flora and fauna. Even the smallest bits of new evidence will expand our understanding of these aesthetic landscapes that were so beloved by the ancient Egyptians. Some examples include the formal garden with over 260 tree pits discovered by the German Mission in 2014 in proximity to the Bent Pyramid of Sneferu of the Fourth Dynasty\(^ {440}\) and the discovery of a well-preserved ḫsp-plot in 2017 by the Spanish-Egyptian Mission located in proximity to Djehuty’s tomb (TT 10)\(^ {441}\) (See Fig. A3.24 and A3.44).


Appendix I
Catalogue of Formal Garden Scenes

Part I
The Š-Formal Garden Scene

Part II
The Domain of Amun Formal Garden Scenes:
The Ḥnty-š-, The Kšmw-, The Sš-, The τ-nt-ḥt-, and The Ḥrṛt-š-Formal Gardens
Part I
The Š-Garden Scene
TT 81 (Ineni)

*Date:* Amenhotep I to Thutmose III  
*Location:* Sheikh Abd el-Qurna  

West – left rear wall of pillar 4 in the portico

**Wall Narrative and Formal Garden Scene:** Inspecting setting

---

**Figure A1.1:** Š-formal garden of Ineni. Drawing by author © 2020, after Plate XI in Boussac (1896) and Plate XXIII in Dziobek (1992).

**Description and Relevant Text:** See Chapter Two

**Main Literature:**


*Materials:* Gypsum plaster and polychrome pigment

*Technique:* Painting

*Relevant Owner Titles:*

- ![Hieroglyphs] – *imy-r3 šnwty n 'Imn* – Overseer of the Double-granary of Amun
- ![Hieroglyphs] – *imy-r3 ıst nbt m pr 'Imn* – Overseer of All Offices in the Domain of Amun
- ![Hieroglyphs] – *imy-r3 kst m 'Ipt-'Iswt* – Overseer of Construction Works at Karnak
- ![Hieroglyphs] – *ḥrpr kst nbt m 'Ipt-'Iswt* – Controller of All Construction Works at Karnak
- ![Hieroglyphs] – *imy-r3 prwy ḫḏ* – Overseer of the Double-treasury
- ![Hieroglyphs] – *ḥnty-ꜣ m niwt* – Mayor of the City

*Relevant Family Titles:*

Paheri (brother):

- ![Hieroglyphs] – *imy-r3 pr n ḫm-nṯr tpy n 'Imn* – Overseer of the House of the First Prophet of Amun

Waserhat (brother):

- ![Hieroglyphs] – *ḏw b n 'Imn* – ḫw-priest of Amun

Qen (brother):

- ![Hieroglyphs] – *ḥm-nṯr n Mwt* – Priest of Mut

---

See text 4a for pillar 4 in the transverse hall.
TT 109 (Min)

**Date:** Thutmose III  
**Location:** Sheikh Abd el-Qurna  
South – left rear wall of transverse hall

**Wall Narrative**[^1]: Inspecting setting

<table>
<thead>
<tr>
<th>Drawing</th>
<th>1 register of seated relatives (L→R)</th>
<th>Temple offerings (L→R)</th>
<th>Temple offerings (L→R)</th>
<th>Temple offerings (L→R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure A1.2: 道路上的花园场景。作者绘制，© 2020，参考Virey (1891)。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Figure A1.3: 画面中池塘的植物和动物特写。作者绘制，© 2020，参考Schott Photograph 8585。</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[^1]: This wall narrative is based on Schott Photographs nos. 5764-5769, 5577-5588, and 8585; and Porter and Moss, *Topographical Bibliography* I, p. 226, see esp. walls (3-5).

126
Description and Relevant Texts: See Chapter Two

Main Literature:


Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:

- 𓊂𓊈𓃩 n Ini-ḥrt – Overseer of the Priests of Onuris
- 𓊄𓊈𓃩 n ḫt – ḫty-s n ḫny – Mayor of Thinis (Tjeny)

Relevant Family Titles: none
**TT 85** (Amenemhab called Mahu)

**Date:** Thutmose III to Amenhotep II  
**Location:** Sheikh Abd el-Qurna  
East – right side wall of chapel

*Wall Narrative*: Inspecting setting

<table>
<thead>
<tr>
<th><strong>fbr-frize</strong></th>
<th><strong>Tree avenue</strong></th>
<th><strong>Tree avenue</strong></th>
<th><strong>Tree avenue</strong></th>
<th><strong>Tree avenue</strong></th>
<th><strong>Min and wife inspect the formal garden (L→R)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Min and wife receive the formal garden's produce (L←R)</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
</tr>
<tr>
<td><strong>Servants w/ formal garden's produce (L←R)</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Pool</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
</tr>
<tr>
<td><strong>Servants w/ formal garden's produce (L←R)</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
<td><strong>Tree avenue</strong></td>
</tr>
</tbody>
</table>

- **Servants w/ formal garden's produce (L←R)**

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**Formal Garden Scene:**

---

Figure A1.4: Š-formal garden of Amenemhab. Drawing by author © 2020, after Epigraphic Survey Negatives 2927, 2929, and 2932.

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\[444\] This wall narrative is based on Epigraphic Survey Negatives 2927, 2929, and 2932; Schott Photographs 3993-3394; 4131-4132; 7008-7014; and 8940-8943; and the wall description in Porter and Moss, *Topographical Bibliography* I, p. 175.
Description and Relevant Texts: See Chapter Two

Main Literature:


Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:

- o [symbol] – *imy-r3 šnwty n’Imn* – Overseer of the Double-granary of Amun

Relevant Family Titles: none
**TT 100 (Rekhmira)**

**Date:** Thutmose III to Amenhotep II  
**Location:** Sheikh Abd el-Qurna  
East – right side wall of passage  
**Wall Narrative:** Festival setting

---

**Figure A1.5:** Detail of the surrounding decorative schema of the TT 100 scene. Drawing by author © 2020, after Figure 2 in Geßler-Löhr (1991).
Formal Garden Scene:

Figure A1.6: Š-formal garden of Rekhmira. Drawing by author © 2020, after Plate CX in de Garis-Davies (1935).

Description and Relevant Text: See Chapter Two

Main Literature:


Virey, Philippe. « Le jardin de Rekhmara. La réception des invités. Les apprêts du festin. » In Mémoires publiés par les membres de la Mission archéologique française au Caire V,

Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:

- \text{šš tp ḫtpw nṯr n īmn} – Chief Scribe of the Divine Offerings of Amun
- \text{mr pr n īmn} – Steward of Amun
- \text{ḥrp kṣt nbt m ḫpt-īswt} – Administrator of All Constructions Works at Karnak
- \text{īmy-rṣ mrw prw} – Overseer of Every Department
- \text{mr niswt} – Mayor of the City

Relevant Family Titles:

Vizier Neferweben (father):

- \text{wḥb n īmn} – wḥb-priest of Amun
- \text{ḥṣ} – ḫṣty – Vizier
**TT 80 (Djehutynefer)**

*Date:* Amenhotep II  
*Location:* Sheikh Abd el-Qurna  
East – right side wall of chapel  
*Wall Narrative:* Funeral setting

<table>
<thead>
<tr>
<th><strong>Décor-tize</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sister offers to Djehutynefer and wife (L←R)</td>
<td></td>
</tr>
<tr>
<td>Funeral rituals (L←R)</td>
<td>Funeral rituals (L←R)</td>
</tr>
<tr>
<td>Vineyard on pergola</td>
<td>Tree Avenue</td>
</tr>
<tr>
<td>Funeral rituals leaving the home (L←R)</td>
<td>Pool?</td>
</tr>
<tr>
<td>Off-towers with formal garden produce (L←R)</td>
<td>Tree Avenue</td>
</tr>
<tr>
<td>House</td>
<td>Tree Avenue</td>
</tr>
<tr>
<td></td>
<td>Funeral ritual preparations (L←R)</td>
</tr>
</tbody>
</table>

| **Dado** |   |

**Formal Garden Scene:**

![Diagram of Formal Garden Scene](image)

Figure A1.7: Š-formal garden of Djehutynefer with possible reconstruction. Drawing by author © 2020, after Scene 2.4 in Shedid (1988).

**Description and Relevant Texts:** See Chapter Two

**Main Literature:**

**Materials:** Gypsum plaster and polychrome pigment

**Technique:** Painting
Relevant Owner Titles:
- Overseer of the Treasury

Relevant Family Titles:
Takhat (wife):
- \(\text{ḥt} \text{n} \text{nt} \text{lmn} – \text{ḥt} \text{n} \text{nt} \text{lmn} – \text{Chantress of Amun}\)

Hunay (brother):
- \(\text{w} \text{ḥ} \text{n} \text{lmn} – \text{ḥt} \text{n} \text{nt} \text{lmn} – \text{Chantress of Amun}\)

Meryt (sister):
- \(\text{ḥt} \text{n} \text{nt} \text{lmn} – \text{ḥt} \text{n} \text{nt} \text{lmn} – \text{Chantress of Amun}\)
**TT 93 #1, #2, and #3 (Qenamun)**

**Date:** Amenhotep II  
**Location:** Sheikh Abd el-Qurna

#1: Northeast – right front wall and right rear wall of transverse hall  
#2: North – left rear side of column towards the left front wall of transverse hall  
#3: West – halfway to the left rear and left front walls of the transverse hall

**Wall Narrative #1: Theophanic setting**

<table>
<thead>
<tr>
<th>West wall</th>
<th>North wall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doorway</strong></td>
<td><strong>Doorway</strong></td>
</tr>
<tr>
<td>Text A (L←R)</td>
<td>Text about Ennead (L→R)</td>
</tr>
<tr>
<td>Tree avenue</td>
<td>Text about Ennead (L→R)</td>
</tr>
<tr>
<td>Tree avenue</td>
<td>Tree goddess (L←R)</td>
</tr>
<tr>
<td>Tree avenue</td>
<td>3 registers of offering bearers (L→R)</td>
</tr>
<tr>
<td>Doorway</td>
<td>Sills</td>
</tr>
</tbody>
</table>

**Formal Garden Scene #1:**

Figure A1.8: Š-formal garden of Qenamun with possible reconstruction by author. Drawing by author © 2020, after Plate XLVII in de Garis-Davies (1930).
Figure A1.9: Possible 3D reconstruction of the $S$-formal garden of Qenamun based on its 2D image. Drawing by author © 2019.
Description and Relevant Texts #1: See Chapter Two
Wall Narrative and Formal Garden Scene #2:
Fishing setting

Figure A1.10: Second š-formal garden of Qenamun. Drawing by author © 2020, after Plate XLVa in de Garis-Davies (1930).

Description and Relevant Texts #2: See Chapter Two
Wall Narrative and Formal Garden Scene #3: Inspecting setting

Figure A1.11: Third š-formal garden of Qenamun with possible reconstruction. Drawing by author © 2020, after Plate XLVb in de Garis-Davies (1930).
Description and Relevant Texts #3: See Chapter Two

Main Literature:


Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:

- 𓊪𓊫𓊱𓊟𓊡 𓊹𓊺 – *imy-r3 ḫw n ʾlmn-Rˁ* – Overseer of the Cattle of Amun-Ra

- 𓊪𓊭𓊡𓊢 𓊣 – *imy-r3 pr Prw-nfr* – Overseer of the Perunefer Palace

Relevant Family Titles: none
TT 63 (Sobekhotep)

Date: Thutmose IV

Location: Sheikh Abd el-Qurna

North – right side wall of passage

Wall Narrative: Theophanic setting

Formal Garden Scene:

![Formal Garden Scene Image]

Figure A1.12: Š-formal garden of Sobekhotep, damaged by evasive beehives and moisture. Drawing by author © 2020, after Tafel 13 in Dziobek and Abd el-Raziq (1990).

Description and Relevant Texts: See Chapter Two

Main Literature:


**Materials:** Gypsum plaster and polychrome pigment

**Technique:** Painting

**Relevant Owner Titles:**

- [glyph] – *imy-r3 ḫmr-ntr n Sbk Šdty* – Overseer of the Priests of Sobek Shedety (Fayyum)

- [glyph] – *imy-r3 ḫtw Sbk* – Overseer of the Treasury of Sobek

- [glyph] – ḥṣty-n ṣ rṣy ṣ n Sbk – Mayor of the Southern Lake and the Lake of Sobek (Fayyum)

- [glyph] – *imy-r3 ḫtw Sbk* – Overseer of the Treasury of Sobek

**Relevant Family Titles:** none
**TT E2 (Nebamun)**

*Date:* Thutmose IV to Amenhotep III  
*Location:* Dra`a Abu el-Naga (?)  
West – left side wall chapel

**Wall Narrative**: Theophanic setting

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebamun and wife seated? (L→R)</td>
<td>Tree-goddess (L→R)</td>
<td>Tree-goddess (L→R)</td>
</tr>
<tr>
<td></td>
<td>Tree avenue</td>
<td>Pool</td>
</tr>
<tr>
<td></td>
<td>Tree avenue</td>
<td>Tree avenue</td>
</tr>
<tr>
<td>Dado?</td>
<td></td>
<td></td>
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</tbody>
</table>

**Formal Garden Scene:**

Figure A1.13: Š-formal garden of Nebamun. Drawing by author © 2020, after Figure 102 (BM EA 37983) in Parkinson (2008).

---


446 This wall narrative is based on observations made in Parkinson, *The Painted Tomb-Chapel of Nebamun*, pp. 52, 134-137, figs. 63, 143; and the orientation of the text and tree-goddesses.
Description and Relevant Texts: See Chapter Two

Main Literature:

Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:
- Scribe and Grain Accountant of the Granary of the Divine Offerings of Amun
**TT 334 (Unknown)**

**Date:** Amenhotep III  
**Location:** Dra’a Abu el-Naga  
West – right front wall of transverse hall  

**Wall Narrative**\(^{447}\): Inspecting setting

<table>
<thead>
<tr>
<th>(left-to-right)</th>
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</thead>
<tbody>
<tr>
<td>&quot;Daughter, with others, offer to deceased and wife&quot;</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Large tree</th>
<th>House</th>
<th>Tomb-owner inspects formal garden's produce (L→R)</th>
<th>Formal garden's produce (damaged) (L←R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree avenue</td>
<td>Tree avenue</td>
<td>Allée</td>
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<td>Tree avenue</td>
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"[Garden produce] brought before deceased"  

**Formal Garden Scene:**

![Diagram of Formal Garden](image)

Figure A1.14: Formal garden of the unknown owner of TT 334. Drawing by author © 2020, after Figure 9 in de Garis-Davies (1929).

\(^{447}\) This wall narrative is based on “Four registers. I, Daughter with others, offers to deceased and wife. II, Deceased seated in front of house. III, Deceased seated in... garden. IV, Harvest brought before deceased,” in Porter and Moss, *Topographical Bibliography* I, p. 401; and de Garis-Davies, “The Town House in Ancient Egypt,” fig. 9.
Description and Relevant Text: See Chapter Three

Main Literature:


Relevant Owner Titles:

- [Hieroglyphic Sign] — ḫr y hwt [n Imn?] — Chief of the Herdsmen [of Amun?]

Relevant Family Titles: none
Part II
The Domain of Amun Formal Garden Scenes:
The Ḫnty-š, The ḳsmw-, The ṣ, The ṣ-nt-ḥt, and The ḫrt-š-Formal Gardens
TT 87 (Minnakht) – *ḥnty-š*-formal garden scene

**Date:** Thutmose III  
**Location:** Sheikh Abd el-Qurna  
Southwest – left rear wall of chapel  
**Wall Narrative:** Festival setting

Figure A1.15: Surrounding decorative schema of the TT 87 scene. Drawing by author © 2020, after Figure 1 in Geßler-Löhr (1991).
Formal Garden Scene:

Figure A1.16: Thutmose III's ḫnty-š-formal garden depicted in the TT 87 scene. Photograph courtesy of the Creative Commons (CC0 1.0) Universal Public Domain Dedication of The Metropolitan Museum of Art, New York: https://www.metmuseum.org/art/collection/search/544601.

Description and Relevant Text: See Chapter Three

Main Literature:


Relevant Owner Titles:
- ḥry mrwt n ‘Imn — Chief Servant of Amun
- īmy-ṛ3 šnwty — Overseer of the Double-granary
- īmy-ṛ3 šnwty n šmꜥw mḥw — Overseer of the Double-granary of Upper and Lower Egypt

Relevant Family Titles:
Menkheper (son):
- sš ḥtp nṯr n ‘Imn n Ḥnkt-ḥḥḥḥ — Scribe of the Divine Offerings of Amun in the Memorial Temple of Thutmos III
**TT 90 (Nebamun) – k3mw-formal garden scene**

**Date:** Thutmose IV to Amenhotep III  
**Location:** Sheikh Abd el-Qurna  
North – right rear wall of transverse hall

**Wall Narrative:** Festival setting

---

**Formal Garden Scene:**

![Image of Formal Garden Scene](https://commons.wikimedia.org/wiki/File:Nebamun_Supervising_Estate_Activities,_Tomb_of_Nebamun_MET_DT11772_detail-6.jpg)

![Image of Formal Garden Scene](https://commons.wikimedia.org/wiki/File:Nebamun_Supervising_Estate_Activities,_Tomb_of_Nebamun_MET_DT11772_detail-8.jpg)

Figure A1.17: The k3mw-formal garden depicted in the TT 90 scene. These two photographs of the details of the Charles W. Wilkinson facsimile were merged together by the author, and are courtesy of the Creative Commons (CC0 1.0) Universal Public Domain Dedication of The Metropolitan Museum of Art, New York:

[https://commons.wikimedia.org/wiki/File:Nebamun_Supervising_Estate_Activities,_Tomb_of_Nebamun_MET_DT11772_detail-6.jpg](https://commons.wikimedia.org/wiki/File:Nebamun_Supervising_Estate_Activities,_Tomb_of_Nebamun_MET_DT11772_detail-6.jpg) and  

**Description and Relevant Texts:** See Chapter Three  
**Main Literature:**  
Davies, Norman de Garis and Nina de Garis-Davies. Edited by Norman de Garis-Davies and Sir Alan Gardiner. *The Tombs of Two Officials of Tuthmosis the Fourth (nos. 75 and 90)*, pp. 30-33, pls. XXX, XXXI, and XXXIII. London: Egypt Exploration Society, 1923.


**Materials:** Gypsum plaster and polychrome pigment

**Technique:** Painting

**Relevant Owner Titles:**

- ἡγ. ἰδ. ἱππ. – ῶστυ ἱππ ἸΜν – Standard-bearer of the Beloved-of-Amun

**Bark**

**Relevant Family Titles:** none
**TT 39 (Puimra) – sš-formal garden scene**

*Date:* Hatshepsut-Thutmose III  
*Location:* El-Khokha  
North – left rear wall of transverse hall

**Wall Narrative**\(^{448}\): Inspecting setting

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</tr>
</tbody>
</table>

**Formal Garden Scene:**

![Formal Garden Scene Diagram](image)

Figure A1.18: Sš-formal garden of Puimra. Drawing by author © 2020, after Plate XII.2 in de Garis-Davies (1922).

\(^{448}\) Based on plate XVIII in de Garis-Davies and Saba, *The Tomb of Puymré at Thebes*, p. 55; and the wall description in Porter and Moss, *Topographical Bibliography* I, p. 71.
Description and Relevant Text: See Chapter Three

Main Literature:

Materials: Gypsum plaster and polychrome pigment

Technique: Painting

Relevant Owner Titles:
  o Second Priest of Amun
  o Architect449

Relevant Family Titles: none

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449 These titles come from a hieratic graffito on the Memorial Temple of Hatshepsut at Deir el-Bahari. See the above bibliography.
**TT 96 (Sennefer) – ʿt-ḥt-formal garden scene**

**Date:** Amenhotep II  
**Location:** Sheikh Abd el-Qurna  
  East – Left front wall of transverse hall  

**Wall Narrative:** Festival setting

---

**Formal Garden Scene:**


Description and Relevant Text: See Chapter Three

Main Literature:

Materials: Gypsum plaster and polychrome pigment
Technique: Painting
Relevant Owner Titles:
• ✁ – imy-r3 ħntyw-š n 'lmn – Overseer of the ħntyw-š-formal gardens of Amun

• ✁ – imy-r3 ' t-nt-ḥt nt 'lmn – Overseer of the ' t-nt-ḥt-formal garden(s) of Amun

• ✁ – mr pr n 'lmn – Steward of Amun

• ✁ – imy-r3 šnwy t n 'lmn – Overseer of the Double-granary of Amun

• ✁ – imy-r3 nfrt ilhm m 'lmn – Overseer of the Cattle of Amun

• ✁ – ḥstwy-ʾ n niwt rsyt – Mayor of the Southern City (Thebes)

Relevant Family Titles:
Ahmose called Humay (father; TT 224)

• ✁ – imy-r3 m pr n ḫmnt-ntr – Overseer of the Estate of the God’s Wife (Ahmose-Nefertary)

• Overseer of the Double-granary of the God’s Wife Ahmose-Nefertary⁴⁵⁰

• ✁ – imy-r3 ḥhw – Overseer of Cattle

TT 161 (Nakht) – hḥrt-š-formal garden scene

**Date:** Amenhotep III  
**Location:** Dra‘a Abu el-Naga  
West – left side wall of passage  

**Wall Narrative:** Festival setting

<table>
<thead>
<tr>
<th>Left rear wall</th>
<th>Left side wall</th>
</tr>
</thead>
</table>
| Nakht and his wife Tahmet offer to statues of Amun-Ra and Mut for the Beautiful Festival of the Valley  
(L←R) | |
| Four sons bring floral offerings from the formal garden (L←R)  
|  
| Four daughters bring floral offerings from the formal garden (L←R)  
|  
| Sons and daughters bring floral offerings and formal garden produce to their parents for the festival (L←R)  
|  
| Nakht and wife inspect formal garden's produce (L←R)  |
|  
| Two sons brought floral offerings (L←R)  
|  
| Two daughters brought floral offerings (L←R)  |
|  
| 10 male guests served festival food (L←R)  
|  
| 10 female guests served festival food (L←R)  
|  
| Musicans (L←R)  
|  
| Nakht and wife seated for meal (L←R)  |
|  
| Sons and daughters served festival food (L←R)  |
|  
| Three sons brought floral offerings (L←R)  
|  
| Two daughters brought floral offerings (L←R)  |
|  
| Bobbed gardener  
|  
| Bobbed gardener  
|  
| Bobbed gardener  |

**Formal Garden Scene:**

Figure A1.21: The Theban hḥrt-š formal garden depicted in the TT 161 scene. Colored facsimile of the scene at the Musée royaux d’art et d’histoire et du Cinquantenaire, Brussels. Photographs by David Seifkin, merged together by the author and courtesy of his Creative Commons Universal Public Domain Dedication: [https://commons.wikimedia.org/wiki/File:Gardens_of_Nakh_1.JPG](https://commons.wikimedia.org/wiki/File:Gardens_of_Nakh_1.JPG).

**Description and Relevant Text:** See Chapter Three  
**Main Literature:**


*Materials:* Gypsum plaster and polychrome pigment

*Technique:* Painting

*Relevant Owner Titles:*
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲕⲛ ⲧⲣⲏ Ⲥⲣⲏ Ⲍⲧⲡ ⲙⲕⲣⲏ ⲙⲧ ⲩⲣⲏ Ⲥⲧⲡ Ⲥⲣⲏ Ⲥⲟⲩⲧ – Gardener of the Divine Offerings of Amun
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Offering-bearer of the Floral Offerings of Amun
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲥⲟⲩⲧ – Gardener of Amun

*Relevant Family Titles:*

Gurer/Gurel (father)
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Gardener of the Divine Offerings (of Amun)

Huynfefer (son)
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Gardener of the Divine Offerings (of Amun)

Waser (son)
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Gardener of the Divine Offerings (of Amun)

Pareheny (son)
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Offering-bearer of the Floral Offerings of Amun

Kha (son)
- ⲝⲕ ⲡⲣⲏ ⲧⲣⲏ ⲍⲧⲱ ⱖⲣⲓ ⲙⲧ Ⲣⲟⲩⲧ Ⲥⲟⲩⲧ – Offering-bearer of the Floral Offerings of Amun
Appendix II:
Herbarium and Faunarium

Author’s Note
This appendix is organized alphabetically by common name while the scientific name is listed beside the entry head. Each species’ entry further includes photograph(s) for one to imagine how they might have appeared in the formal gardens in Thebes during this time. These images are the author’s own, kindly given permission of use by friends or colleagues, and/or from license-free websites, such as CreativeCommons, Unsplash, Shutterstock, Flickr, Pngkey, and Pinterest. The name of the appendix was inspired by the mediaeval term ‘herbarium,’ also commonly known as ‘an herbal,’ which was and still continues to this day, to denote a collection of botanical specimens that are collected, inventoried, and catalogued for scientific study and use. The term ‘faunarium’ derives from herbarium’s use, both meaning ‘a place of animals/plants’ in Latin.

Argun-Palm (Medemia argun Württemb. ex Mart.)
The argun-palm occurs in the š- and Domain of Amun formal garden scenes with its trunk and crown shown stylized like M54 (👀) or realistic with two pinnate ribs bent downwards. The argun-palm is a variety of the doum-palm native to Sudan, is evergreen, grows up to 10 meters (33 feet) tall, has large green fronds, and produces purple to yellow ovate fruit from winter to spring.451

Archaeobotanical evidence of argun-fruit as a Nubian (Sudanese) import exists from the Fifth Dynasty onwards.452 The palm’s presence in the formal garden scenes dating to the coregency of Hatshepsut and Thutmose III is historically significant because the rulers naturalized

452 Douglas Brewer, et al., Domestic Plants and Animals, p. 51; its fruit (FM 374) was found in Memphite and Elephantine contexts in the Fifth Dynasty. See de Vartavan, et al., Codex, p. 158; and also, Vivi Täckholm, et al., Flora of Egypt IIb, (Cairo: Cairo University Press, 1969), pp. 122, 299.
it into Egypt. Its naturalization was likely a result of the well-organized trade of exotic goods from Nubia to Egypt by their second and third Viceroy of Kush, Amenemenekhu (Years 2 to 18) and Inebny (Years 19-22). The fact that Ineni (TT 81) only has one argun-palm listed in his formal garden also suggests its recent introduction into horticulture during the Eighteenth Dynasty.

The argun-palm is represented and planted beside the pools or ponds in the formal gardens because of its funerary significance. For example, the fruit of the argun-palm is normally bland unless it is buried in the ground where after the fruit sweetens and tastes like a coconut. This transformation from tasteless (dead) to sweet (alive) was symbolic of Osiris’s resurrection. Baskets of argun-fruit have been found in tombs since the Old Kingdom.

Figure A2.1: Argun-palm and fruit clusters via Portable Graphics Network Key (Pngkey).

453 Täckholm, et al., Flora of Egypt IIb, p. 300.
456 Bernard Bruyère, Deir el Médineh II, (Cairo: IFAO, 1937), 108; Newton, « Le palme argoun (Medemia argun (Mart.) Württemb. ex Wendl), » pp. 143-147; de Vartavan, et al., Codex, p. 158.
**Atil-Tree (Mærua crassifolia Forssk.?)**

The atil-tree appears in Ineni’s list (TT 81). The deciduous umbrella-shaped shrub or tree that is native to Egypt, North Africa, and the Middle East, grows 2-6 meters (6.6-19 feet) in height, has elliptical green leaflets, and produces yellow to green flowers and circular green fruits from June to August during the African dry season. Moldenke and Baum identified the atil-tree with *imz* (𓊱𓊰𓊧) in Egyptian because of its edible leaves and branches mentioned in medicinal texts to treat external ailments. However, in her study on the medicinal use of *imz*, Germer advises the use of *Mærua crassifolia* Forssk. because she proved that *imz* was actually used for internal ailments. The atil-tree was significant in funerary religion, as it was associated with necropoleis and has been discovered in a Middle Kingdom tomb in Gebelein (BBM Schw. 195). The tree was associated with Osiris and Hathor and was one of the few species personified as a tree-goddess who nourished the dead. For example, in Pyramid Texts 437 the fruit of the atil-tree and Christ’s thorn are personified:

...The [atil-tree] serves you, the [Christ’s thorn tree] tilts its head towards you...

The tree is also depicted as a source of nourishment for private individuals on First Intermediate Period coffins and is mentioned in many funerary texts, such as Coffin Texts 164:

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459 Germer, *Handbuch*, p. 27.


Where will you be allowed to eat?
I will eat in a pavilion under the branches of the [atil-tree] of Hathor.
Where will you be allowed to eat?
In the pavilions, under the [atil-tree]...

As well as, Coffins Texts 225 (Book of the Dead Spell 68):

I dwell under the branches of the [atil-tree] of Hathor, who has command over the broad sun disk—she has betaken herself to Heliopolis, carrying the writings of the divine word, the books of Thoth.

Like the sycamore fig tree-goddess, the deceased further desired to be nourished by atil-tree- and Christ’s thorn-tree-goddesses in the hereafter. Atil-fruits, leaves or seeds have yet to be discovered in an Eighteenth Dynasty Theban tombs.

Figure A2.2: Atil-tree flower clusters and fruit. Photograph courtesy of Sahara-Nature for Feedipedia: Animal Feed Resources Information System with the FAOUN (2010): https://www.feedipedia.org/node/130.

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467 Assmann, Death and Salvation in Ancient Egypt, p. 129.
468 de Vartavan, et al., Codex, p. 156.
Blue Lotus and White Lotus (*Nymphaea caerulea* L. Savigny and *Nymphaea lotus* L.)

The blue and white lotus, also known as a waterlily, appear in many of the ṣ- and Domain of Amun formal garden scenes as well as in the offerings and bouquets of the surrounding scenes. The blue and white lotuses are shown stylized with hints of realism in their shape and form like Gardiner M228/228B (𓄿𓄲𓄼), M90/90A (𓄦𓄲𓄼), and M73/74 (𓄤𓄲𓄼). The lotus is a perennial aquatic species native to Egypt, Sub-Saharan Africa, Palestine, and Yemen, which grows deep thick rhizomes under water, and has large peltate lily pads with white, blue, or purplish flowers from summer to fall or sometimes even year-round in particularly warm climates.

The blue and white lotus were a symbol of the primaeval waters, of the solar and lunar cycles, and of rebirth and resurrection. The blue lotus, for example, is a heliotrope associated with Ra and Nefertem because its flowers emerge from under water in the early morning until midday (See Fig. A1.3). While, the white lotus is a selenotrope associated with Osiris, Thoth, and Khonsu because it emerges from under water to open its flowers in the evening until mid-morning (See Fig. A1.3). This duality is further evident from the Book of the Dead Spell 81A in the ‘Book of Transformations’:

> I am this pure lotus which went forth from the sunshine, which is at the nose of R[a]; I have descended that I may seek it for Horus, for I am the pure one who issued from the fen.

As well as, in Coffin Texts 62:

> ... You will cross the steppes with R[a], he will show you the places of enjoyment. You will find the wadis full of water and wash yourself to your refreshment. You will pluck papyrus and reeds, and lotus blooms with buds...

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469 The lily pads and their rhizomes were the inspiration for ḥꜣ (𓀿) or ‘one-thousand’ in Egyptian (Gardiner M12/12A/12B) since they sprout so numerous. Lily pads were even included in New Kingdom bouquets.


473 Assmann, *Death and Salvation in Ancient Egypt*, p. 271.
The presence of the blue and white lotus in the pools, ponds or lakes of the formal gardens and in funerary and festival bouquets clearly evokes the creation myths, solar and lunar cycles, and the rebirth and resurrection of the deceased. This interpretation is supported by the discovery of blue lotus remains on Ahmose I’s mummy in Deir el-Bahari (Schw.256 and 304), from Kha’s tomb (TT 08) in Deir el-Medina, dating to the reign of Amenhotep II to Amenhotep III, as well as from the petals and sepals (MMA 09.184.214) discovered in Tutankhamun’s tomb (KV 62).474

Figure A2.3: (Left) White lotuses open at mid-morning on Utrecht’s canals. Photograph courtesy of Martin Woortman via Unsplash (2020). (Right) A blue lotus opening its petals in the early morning in the Maldives. Photograph courtesy of Saffu via Unsplash (2017).

Carob Tree (*Ceratonia siliqua* L.)

The carob tree appears in the list of plants in Ineni (TT 81). Ineni indicates that he had 16 carob trees in his š-formal garden. Although the tree is not shown or mentioned in the other formal garden scenes, an image of the tree does exist in the private Eighteenth Dynasty tomb of Menna (TT 61) on the West Bank of Thebes.475 The evergreen tree of the pea family Fabaceae is known


The tree and its pods might easily be mistaken for those of the flame of the forest (*Delonix regia* L.) and golden shower (*Cassia fistula* L.) trees that are native to Madagascar and China and grow in the AUC gardens and El-Rehab City in New Cairo today.

since the Old Kingdom, is native to the eastern Mediterranean and the Sinai, grows 2-6 meters (6.6-20 feet) tall in harsh climates, has large paripinnate leaves, and produces brownish sweet chocolate-tasting pods and seeds in summer, which were used by the Egyptians in food, beer, medicine, perfumes, and unguents. Carob pods are mentioned under the fruit section of Pyramid Texts Recitations for the ‘Preparation of the Offering Table’ while actual carob pods were discovered in the eastern necropolis of Deir el-Medina:

**Pyramid Texts of Wenis (line 168):**
Osiris [Wenis]...2 bowls of carob beans...

**Pyramid Texts of Pepy II (line 182):**
...I have given to you 2 bowls of carob beans...

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Christ’s Thorn Tree (*Ziziphus spina Christi* L. Desf.)

There is no confirmed depiction of Christ’s thorn tree in any of the formal garden scenes. Although, Ineni (TT 81) lists that he had five in his š-formal garden. The Christ’s thorn fruit (jujube) occurs in the formal garden produce carried by gardeners/servants in the š- and the Domain of Amun garden scenes for the banquet and/or offering tables. The shrub or tree has been cultivated in the arid to warm regions of North Africa, the Nile Basin, and the Levant since the Predynastic Period. It is evergreen, grows 4-8 meters (13-26 feet) tall, has green serrated leaves that end with sharp thorns, and produces yellowish florets that grow into yellow berry-sized fruit from October to January, and was used in food, timber, and medicine production.

The presence of Christ’s thorn fruit in the offerings and inscriptions related to the formal garden scenes indicates its importance to the dead as a source of nourishment. Like the carob tree, Christ’s thorn is mentioned in the fruit section of Pyramid Texts Recitations for the ‘Preparation of the Offering Table’:

Pyramid Texts of Wenis (line 166):
Osiris [Wenis]...2 bowls of sidder fruit

Pyramid Texts of Pepy II (line 182):
...Horus has given to you 2 bowls of sidder fruit

The sweet tasting fruit remained sought-after for offering tables in the New Kingdom, as four instances of the fruit and seeds were discovered in Eighteenth Dynasty tombs in the Thebaid Region (MM 3710; BBM 17385). The use of Christ’s thorn wood in sarcophagi, 

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482 Sidder is another common name for Christ’s thorn jujube.


Tutankhamun’s wreaths (KG 11428), and in private individuals’ grave goods (BBM 15/70 and 29/70)\textsuperscript{486} further enforces its sanctity, as well as, its continued holiness in Christianity, Judaism, and Islam today.\textsuperscript{487}

Figure A2.5: Christ’s thorn jujube ripening in the AUC gardens. Photograph by author © 2019.

Cilantro/Coriander (*Coriandrum sativum* L.)

Cilantro/coriander appears in the Domain of Amun formal gardens, particularly in the hsp-plots of the Middle Kingdom to Late Hyksos Period *hrrt*-ś-formal garden of Palace F/I at Avaris later Perunefer (Tell el-Daba’a/Qantir).\textsuperscript{488} This plant species is known for the two herbs it produces: cilantro refers to its soap-tasting leaves while coriander refers to its small green seeds (3-5 mm or

\bibitem{486} de Vartavan, et al., *Codex*, pp. 256-257.
\bibitem{488} See p. 89 in Chapter Three.

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Figure A2.6: Coriander flowers in bloom, seeding will follow, as well as cilantro leaves below. Photograph courtesy of Garden Making via Pinterest (2019).

Cilantro/coriander is an annual member of the parsley family Apiaceae, is native to Southern Europe, North Africa, Southwest Asia, grows 50 cm (20 inches) tall, has asymmetrical white and pink flowers that are larger at the base and smaller at the top, which grow in umbels from spring to fall (See Fig. A1.6). The Latin name coriandrum derives from the ancient Minoan and Greek ὠκορίανδρον or ‘bedbug,’ as its seeds produce a foul scent during its blooming period. The plant was called 生产总 (σώζε ἡ λήμβος) in Egyptian. Coriander/cilantro is attested since the Predynastic Period via seeds found at Adaima. The herbaceous plant was imported from the Levant as early as the Middle Kingdom in Egypt during the reign of Amenemhat II. The herb’s

489 Germer, Handbuch, p. 237.
490 Germer, Handbuch, p. 237.
492 Germer, Handbuch, p. 124.
494 See the text about foreign flora in cargo onboard two Middle Kingdom expeditionary vessels outbound from Lebanon to Egypt on Fragment M from the Ptah Temple at Memphis on pp. 103-104 in Chapter Four of this work; Germer, Handbuch, p. 237.
oil, seeds, flowers, and leaves were used in medicine for stomach ailments, to cure poisons, cooking, as well as in bouquets. Archaeobotanical evidence of cilantro/coriander carpels (KG 364, 371, 451, 454, 476, 495, 518B, 573C) have been discovered in Tutankhamun’s tomb (KV 62) in the Valley of the Kings, as well as in Deir el-Medina.

**Common Fig (Ficus carica L.)**

The common fig and/or its fruit appear in the š- and Domain of Amun formal garden scenes and/or their relevant surrounding scenes. The tree is shown realistic like Gardiner M1B (olen) or stylized like Gardiner M1 (heli). The common fig was introduced into Egypt in the early Old Kingdom from Asia Minor and Mesopotamia and is a deciduous shrub or tree that grows up to 6 meters (19 feet), has broad green ovate leaves, and produces round milky figs biennially from June to September.

The common fig is placed beside the pools, lakes or ponds in the š-garden and Domain of Amun formal garden scenes. The Egyptians particularly loved its sweet figs, which were picked ripe in the summertime and candied and dried for the wintertime. Beginning in the reign of Ahmose I, festivalgoers ate common figs with honey and placed floral msr-hrw-wreaths on statues in temples and in tombs during the Festival of Thoth, recalling the ‘Incantation for msr-hrw-Wreaths’ (Spell 20) from the Book of the Dead. Remains of the fig were even discovered as offerings in the Eighteenth Dynasty strata of Deir el-Medina’s eastern necropolis. The fig’s

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funerary significance derives from the Pyramid Texts Recitation 778 ‘Meeting the Sun’ from the ‘Spells for the Spirit’s Rebirth’ in the Pyramid of Queen Neith dated to the Sixth Dynasty:

...to those whom the god desires, who eat of [common] figs, are censed with incense...and escort the great god. My ka escorts the great god and elevates me to the great god, for I am one of them.  

Figure A2.7: Ripening common fig and its florets beside the Rijksmuseum van Oudheden, Leiden. Photograph by author © 2019.

**Common Reed (Phragmites australis (Cav.) Trin. ex Steud.)**

The common reed appears in pools, such as the TT 93 #3 scene. This reed is an aquatic species that thrives in canals, dykes, pools, and along the banks of the Nile. Archaeobotanical evidence of its culms and leaves exists since the Late Palaeolithic Period, and it is depicted in art since the Old Kingdom. This particular species occurs throughout Egypt and the Eastern Mediterranean, grows 2-5 meters (6.6-16 feet) tall, and has long stiff stems that end in feathery brown flower

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504 Gardiner M17 (♀) is a stylized rendering of its flower clusters, and “its stems were used for pens and arrows,” see Wilkinson, *The garden in ancient Egypt*, p. 60.
clusters in late summer.\textsuperscript{505} If not properly tended, it can pose a nuisance to gardeners because it is an aggressive colonizer similar to curled pondweed.\textsuperscript{506} It seems to have been placed in bouquets as its culm has been discovered in Tutankhamun’s tomb (KV 62) and in two New Kingdom private Theban tombs (FM 1338),\textsuperscript{507} evoking the primaeval waters of Nun and the Field of Reeds (\textit{išrw}).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure_a2_8.jpg}
\caption{Very tall common reed growing on El-Rehab Square in New Cairo. Photographs by author © 2019.}
\end{figure}

\textbf{Cos-Lettuce (\textit{Lactuca sativa} L.)}

Cos-lettuce (UK) or romaine lettuce (US) appears in the δ- and the Domain of Amun formal garden scenes and/or their relevant surrounding scenes. The lettuce is shown realistic or stylized like Gardiner M1 (\textit{ 의해}), as it tends to grow comparatively tall and resembles a miniature tree (See Fig A2.9.). Cos-lettuce is an annual or biennial vegetable native to Egypt and many parts of the Mediterranean Basin, grows up to 1 meter (3 feet) tall, has large erect leaves, produces lactose-infused seeds in the spring, and long stemmed reddish to brown flower clusters that go to seed in

\begin{thebibliography}{99}
\end{thebibliography}
the late summer (See Fig. A2.9).\textsuperscript{508} The lettuce is planted in $hsp$-plots demarcated by low mud walls and/or pots, since the Fifth Dynasty,\textsuperscript{509} and is included in the formal produce and bouquets offered to the gods and glorified dead due to its association with Min of Koptos (Gebtu; Qift), as well as the syncretic gods Amun-Min and Amun-Kamutef worshiped in the Domain of Amun at Luxor Temple for their fecundity. This was because its seeds and stems excrete white lactose-infused fluid when crushed or cut and were considered an aphrodisiac and source of male potency. This is further evident from the word for cos-lettuce $\textit{bw}$ (\textsuperscript{5\textsuperscript{o}}) in Egyptian, which has the same verbal root as $\textit{b\emph{b}}$ (\textsuperscript{5\textsuperscript{o}}) or “to become excited.”\textsuperscript{510} In 2017, the Spanish-Egyptian Mission in the Tomb of Djehuty (TT 11) dated from Hatshepsut to Thutmose III, discovered evidence of a $hsp$-plot that might have had cos-lettuce planted in it\textsuperscript{511} (See Fig. A3.44 in Appendix III).

![Cos-lettuce growing in an arboreal shape and going to seed in late August in Buffalo, New York. Note how the long slender stems grow upwards with small florets. After harvesting the leaves or at the touch, the stems excrete white lactose. Photographs by author © 2020.](image)


\textsuperscript{509} Wilkinson, \textit{The garden in ancient Egypt}, p. 59; Germer, \textit{Handbuch}, p. 279.

\textsuperscript{510} Faulkner, \textit{A Concise Dictionary of Middle Egyptian}, p. 41.

\textsuperscript{511} Galán, “El jardín de Sinuhé,” pp. 56-65.
Curled pondweed (*Potamogeton crispus* L.)

Curled pondweed occurs in ṣ- and Domain of Amun formal garden scenes, growing around the pools. The freshwater aquatic seaweed-like species, depicted since the Old Kingdom, is native to many parts of Africa and Eurasia, has green serrated paripinnate leaves, pink flowers with fruitlets in springtime, and grows in stagnant canals, dykes, and pools along the banks of the Nile.\(^{512}\) There are no known examples of the pondweed in medicine, religion, or even floral bouquets. Ethnographically, in modern Egypt, curled pondweed is “regarded as a severe nuisance...because it blocks canals”\(^{513}\) and hinders boat navigation along the Nile.\(^{514}\)

![Curled pondweed in bloom beside white lotus in the Lower Lake of the Cassadaga Lakes in July. Photographs by author © 2020.](image)

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\(^{512}\) “The plant used to produce flowers and fruits more frequently than they do now, most probably due to the environmental stress to which aquatic habitats are subjected,” see Boulos, *Flora of Egypt* IVa, pp. 18-19; Beaux, *Le cabinet des curiosités de Thoutmosis III*, pp. 186-187; Wilkinson, *The garden in ancient Egypt*, p. 61.


**Date Palm (Phœnix dactylifera L.)**

The date palm and/or its fruit occur in ṣ- and Domain of Amun formal garden scenes and is shown realistic or stylized like Gardiner M55 (†). The date palm is evergreen, has pinnate fronds, grows 15-25 meters (50-66 feet) tall, and in September to October produces red oblong dates from its small white florets via pollination from the male leafage. 515 Date palms functioned as a botanical representation of the Delta marsh where Isis birthed Horus and was symbolic of the deceased’s eventual rebirth, 516 as well as, the “the sacred date palm groove” 517 in the Delta. The fruit clusters and fronds of the palm were used in various banquets, meals, and/or as (floral) offerings. This is

![Cluster of dates ripening in the AUC gardens](image)

*Figure A2.11: Clusters of dates ripening in the AUC gardens. Photograph by author © 2019.*

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516 Similar to the stone architecture of a temple’s mammisi. For more on the mammisi’s symbolism, see Wilkinson, The garden in ancient Egypt, pp. 62, 128-129.
517 Germer, „Die Pflanzen und ihre Nutzung: Sträucher und Bäume der heimischen Flora,“ p. 147.
further supported by 13 examples of ancient dates or leaf remains that were discovered in Eighteenth Dynasty royal and private Theban tombs. The dates would have also been made into wine. Date wine especially was known for its “healing properties.” The pinnate shape of a date palm’s ribs further represented time immemorial as multiples of \( rnp(w)t \) and were associated with Ma’at, Seshat, and Thoth who “[were] said to restore the members of the deceased in the afterlife.”

**Doum-Palm (Hyphæne thebaica L. Mart.)**

The *doum*-palm and/or its fronds and fruit occur in the ṣ- and Domain of Amun formal garden scenes and/or their relevant surrounding scenes. The palm is shown realistic or stylized on a bifurcate or trifurcate trunk like Gardiner M55. Both bifurcate and trifurcate types might occur in the same composition. The palm is native to Egypt, is evergreen, grows up to 15-20 meters (49-66 feet), has large green fanned fronds (7-8 centimeters long), and produces reddish to brown gingerbread-like oval fruit that grow in clusters of 40 or more on large erect branches from April to June once it is six to eight years old.

The *doum*-palm was associated with Thoth and Min and was depicted in avenues, rows, or groves in vicinity to the pools, ponds or lakes of the formal gardens because the Egyptians were aware that it was a hydrophile. In funerary religion, for example, it was symbolically a “source of water for the deceased...[since] the *doum*-nut contains fluids.” The Ramesside tomb-owner Irinefer (TT 290) further asks to be turned into a *doum*-palm so that he can drink the waters of the

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A prayer text on Papyrus Sallier I (pBM EA 10185.3) written by a priest of Thoth at Hermopolis in the Twenty-first Dynasty likewise details the importance of the doum-palm for the deceased’s transformation into a glorified spirit (šḥ):

You will assure my subsistence on bread and beer...May Thoth protect me...I leave triumphant...The doum-palm that is many cubits in height, which bears fruit (kwkw). There are seeds (ḥs-nnt) inside the fruit and a liquid (mw) inside the seeds, that captures the water (from) the distant place.  O come and save me! I, who am silent... This significance is further enforced by the presence of the doum-fruit and fronds in the bouquets offered to the deceased in surrounding scenes of TT 85 and TT 161 as well as by ten cases of doum-fruit, frond, and branch remains that were discovered in Eighteenth Dynasty royal and private Theban tombs.  Doum-fruit was likely collected by monkeys, who were associated with Thoth, and who are agile with tough foot padding. This was practical because the doum, unlike the date palm, has sharp serrated fronds. When its trunk grows long and tall, it would have been difficult for humans to collect the fruit without cutting themselves (See Fig. A1.12 and A1.13).

Figure A2.12: Doum-palm, its spiked ribs and fronds, and its fruit clusters ripening in the AUC gardens. Photographs by author © 2019.

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524 This must refer to the realm of the gods.
526 de Vartavan, *et al.*, *Codex*, p. 130.
Figure A2.13: A very tall *doum*-palm growing beside the right side of the Barbican Gate of Horemheb in front of the Second Pylon of Karnak before entering the Bubastite Portal of Shoshenq I. Note the many sharp, serrated fronds on the trunk. Photograph by author © 2020.
Figure A2.14: Serrated fronds on the trunk of a *doum*-palm that are sharp like knives to the touch growing by the El-Rehab Souq. Photograph by author © 2020.
Desert Date (*Balanites ægyptiaca* L. Delile)

The fruit of the desert date palm appears in the š-formal garden scenes. The particular amount that Ineni planted in his š-formal garden has been lost due to a lacuna in the text. The ‘palm’ is actually a deciduous tree that is native to Egypt, the Middle East, and Sub-Saharan Africa, grows 4-10 meters (13-33 feet) tall, has elliptical green leaves on thorny branches, and produces yellow to green flower clusters and large amounts of oval bittersweet yellow fruit in the spring. The *išd* was identified with *Balanites ægyptiaca* L. Delile by Brugsch, and Germer conclude similar results from her study of the desert date fruit in Egyptian medicine. In medicine, its seeds and

![Figure A2.15](image_url)

Figure A2.15: (Left) A very tall desert date with (right) many fruit clusters in springtime at the Howard Carter Resthouse on the West Bank of Luxor. Photographs by author (c) 2019.

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528 Brugsch, *Recueil de monuments égyptiens* I, p. 50, pl. 36; Baum, *arbres et arbustes*, p. 183.
leaves were used to treat stomach ailments. Desert dates have been discovered in Egypt from the Predynastic Period onwards, and in late Eighteenth Dynasty to Twentieth Dynasty Theban tombs as offerings (BBM 23983), as it had funerary and solar symbolism. In Book of the Dead Spell 17, for example, a tomcat (Ra) decapitates the chaos-serpent Apep (Apophis) beneath a desert date (išd). Thus, desert date played a role in Ra’s (and the deceased’s) triumph over chaos and eventual rebirth into the hereafter. The tree was not only sacred but also magical. It is known as the ‘tree of life’ or ‘family tree’ because in temple reliefs the king’s praenomen and regnal years were magically inscribed onto its leaves by the scribe-goddess Seshat in the presence of wisdom-god Thoth and elder-god Atum, so to be preserved for ‘tens of millions of years.’

**Egyptian Riverhemp Tree (Sesbania sesban L. Merrill?)**

The Egyptian riverhemp tree appears in Ineni’s plant list (TT 81): two were grown in his š-formal garden. The deciduous shrub or tree occurs from the Predynastic Period onwards, is native to East Africa, the Nile Basin, and Sudan, grows up to 8 meters (26 feet) tall, has long greenish paripinnate leaflets, and produces yellow flowers and pods year-round in warm climates. The riverhemp is shown realistic with its long erect branches and paripinnate leaves in the TT 81 scene on the right side of the pool. The religious significance of the tree is unknown, but its wood was used in magic (ḥḫs), especially as a smoking agent (pEb 856e). An Eighteenth Dynasty funerary bouquet with its flowers include in the arrangement was discovered on Ahmose I’s mummy.

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537 de Vartavan, *et al.*, *Codex*, p. 218; Georg A. Schweinfurth, « De la flore pharaonique, » *BIEg* 27. 3 (1882): p. 68.
Figure A2.16: An Egyptian riverhemp growing beside a canal. Photograph courtesy of Bùi Thụy Đào Nguyên for Feedipedia: Animal Feed Resources Information System with the FAOUN (2012).

Egyptian Walking Onion (*Allium × proliferum* (Moench) Schrad. ex Willd.) and/or Bulb Onion (*Allium cepa* L.)

Egyptian walking and/or bulb onion are present in the formal garden produce depicted in the surrounding scenes of the š- and Domain of Amun formal gardens scenes. These biennial or perennial vegetables are from the same family Liliaceae as garlic (*Allium sativum* L.) and are native to Egypt, Iran, Afghanistan, and Western Asia. Its nested roots and leaves under or near to the

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soil grow into a tunicated vegetable, eventually producing aerial, long, green, thin, and fleshy stems about 1 meter (3.2 feet) tall with additional clusters of bolting flowers and bulblets from spring to early fall (See Fig. A1.17).\textsuperscript{539} From tomb art, Egyptian walking onions were offered or arranged into bouquets with their long stems intact whereas bulb onion and garlic were harvested at the scape before the stem (See Fig. A1.17).\textsuperscript{540} These herbaceous plants are known in Egypt from the Predynastic Period onwards and their many layered onions were sacred to the regenerative-, chthonic-god Sokar-Osiris whose festival, known as Sharm el-Nessim (شَرْم النسيم) in the Coptic calendar today, included wreaths of fresh onions and lotuses to celebrate springtime and the reinstating of the otherworldly powers of the god against chaotic-beings, such as Apep (Apophis) and his denizens of chaotic daemon snakes in the Duat.\textsuperscript{541} Onions and garlic were both called $h\text{d}w$ (𓉀𓉂) in Egyptian,\textsuperscript{542} reflecting how the ancient Egyptians believed these vegetables could quench chaos ($\text{lsft}$) and restore order or balance ($m\text{zfr}$), as it comes from the same root as $h\text{dl}$ (𓉀𓉅) or “bright.”\textsuperscript{543} During the Festival of Bastet, as well, onions were harvested, collected, arranged into offerings, and presented to Sokar and Bastet in her form as the Burning Eye of Ra in order to assist them in ridding the earthly realm of chaotic snake daemons, as well as to aid Ra in his nightly triumph over Apep (Apophis) in the Duat.\textsuperscript{544} Thus, funerary bouquets placed upon or around many mummy wrappings included onion bulbs, which is attested from at least five examples from the Middle Kingdom, Kha’s tomb (TT 08) at Deir el-Medina, and the Tomb of


\textsuperscript{540} See esp. the figure atop the page from an Old Kingdom offering-bearer procession after Duell in Germer, \textit{Handbuch}, p. 188.


\textsuperscript{543} Erman and Grapow, \textit{WB} III, nos. 206.14-207.16.

Yuya and Thuya (KV 46; CM 3639), dating from the Thirteenth to Eighteenth Dynasties prior to the Amarna Period.\textsuperscript{545} Indeed, the ancient Egyptian medicinal usage of onions mirrors these rites and mythologies, as its leaves, enzymes, stems, oils, and juices have antibiotic, diuretic, and anti-inflammatory properties that were used to cure, remedy, or treat: boils, sepsis, dog, snake, or scorpion bites, eye sight, cataracts, streptococcus, menstruation, intestinal works, skin fungus, diarrhoea, and hardening arteries.\textsuperscript{546} Onion was a popular agent in ancient Egyptian cooking for flavoring meals and as a staple of an average person’s diet,\textsuperscript{547} thus being one of the foremost desired by the glorified dead (\textit{slḥ}) in tomb art and text from the Old Kingdom onwards.

Figure A2.17: (Left) Egyptian walking onion with its bolting flowers and bulblets growing and in bloom. Photograph courtesy of Stacy Shintani via Flickr and CreativeCommons (2011). (Right) Bulb onion harvested at its scape, just as in Egyptian tomb art. Photograph courtesy of Samur Isma via Unsplash (2020).

\textsuperscript{545} de Vartavan, \textit{et al.}, \textit{Codex}, p. 40; Lucas, \textit{Ancient Egyptian Materials and Industries}, p. 316; Bruyère, \textit{Deir el Medineh} II, p. 109; Mattirolo, “I vegetali scoperti nella tomba dell’architetto Kha e di sua moglie Mirit nella necropoli di Tebe, etc.,” p. 560; Quibell, “The tomb of Yuua and Thiuiu,” pl. 61.


\textsuperscript{547} Magdy I. Mehdawy and Amr Hussein, \textit{The Pharaoh’s Kitchen}, (Cairo: AUC Press, 2010), p. 87.
Egyptian Willow Tree (Salix mucronata Thunb. = Salix safsaf Forssk. = Salix subserrata Willd.)

The Egyptian willow tree occurs in Ineni’s plant list (TT 81): nine were planted in his š-formal garden. Indeed, two willows are depicted on the left side of the pool.548 The Egyptian willow is a deciduous bush or tree native to Egypt, Libya, Sudan, and Ethiopia, grows up to 8-10 meters (26-33 feet) tall, has green serrated ovate leaflets on long delicate branches, and produces flowers in winter to spring and brown oval fruits with hairy seeds.549 The willow is likewise a hydrophile that thrives in dykes, banks, and canals, referencing Atum and Nun.550 The willow was associated

Figure A2.18: Egyptian willows (?) near a pond by Gate Four in the AUC gardens in New Cairo. Photograph by author © 2018.

548 Compare to the Egyptian willow tree shown in Ipuy’s tomb (TT 217) in Deir el-Medina, dating to Ramesses II. 549 Vivi Täckholm, Students’ Flora of Egypt, (Beirut: CU and Cooperative Printing Co., 1974), pp. 51-54; Boulos, Flora of Egypt Ia, p. 13; Baum, Arbres et arbustes, p. 196; Germer, Handbuch, pp. 32-33, 333-334. 550 Baum, Arbres et arbustes, pp. 198-199.
with the creation myths and as symbol of rebirth and resurrection. According to creation mythology “Ra-Horakhty [bs], Osiris [body], and Horus as a phoenix reposed on a willow tree during the First Creation...and at the willow’s summit was the $bnw$-bird and the $ba$ of the god.”

The Egyptian willow was used in a variety of professions from medicine to furniture and house construction, boatbuilding, staff and stave crafting, and even by florists. Remains of the willow leaves and branches, for example, were used in the floral arrangements discovered in Tutankhamun’s tomb (KV 62).

**Grapevine (Vitis vinifera L.)**

The grapevine appears in the ś- and Domain of Amun formal garden scenes, as well as, in the formal garden produce for banquets or as offerings to the gods or glorified dead. The grapevine is depicted realistic and is one of the oldest cultivated species in Egypt while abundant archaeological, pictorial, and archaeobotanical evidence existing since the Early Dynastic Period. The vine a climbing species with winding branches, grows 1.5-2 meters (5-6.5 feet) tall, has medium green disk-like leaves, produces green flower clusters in summer that develop into sweet white to purple fruits with greenish seeds, which ripen from September to October, and were used in in food, viticulture, and medicine. In the ś- and Domain of Amun formal garden scenes, the grapevine is cultivated on arbors, pergolas, or in $hsp$-plots. According to scholars:

\[
\text{the grape harvest coincided with the Nile flood and the red colour of the Nile — caused by ferruginous sediments washed down from the Ethiopian mountains — during the inundation suggested the colour of wine.}\]

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552 Baum, *Arbres et arbustes*, p. 197.
The grapevines in the formal gardens were not only practical but referenced the deceased’s eventual rebirth and resurrection. Grape offerings referenced the Pyramid Texts Recitation 576 for ‘Becoming Osiris at Dusk’ in the Pyramid of Pepy I, which states the glorified dead “live on figs and drink wine.” Additionally, the fruits and seeds of the grapevine were discovered in Kha’s tomb (TT 08) in Deir el-Medina dated from Amenhotep II to Amenhotep III.

Figure A2.19: (Left) Concord grapes (*Vitis labrusca* L.) growing on a pergola and (right) on an arbor at Becker Farms and Vizcarra Vineyards. Photographs by author © 2020.

*iH*-Plant (?)

The *iH*-plant appears in Ineni’s plant list (TT 81): five were grown in his ṣ-formal garden. The plant is known from the First Intermediate Period onwards, and was used medicinally to cure burns, skin infections, and hair loss (pEb 485, 488, 772). Due to the paucity of evidence and images of the *iH*-plant, the plant must remain unidentified.

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Incense Trees (*Commiphora erythraea* var. *glabrescens* Engler and *Boswellia frereana* Birdw.)

Myrrh and/or frankincense trees occur in the Domain of Amun formal gardens. The term ‘nty (𓄙𓊪𓄚) was used for both aromata in Egyptian.\(^{559}\) In the garden scenes, the trees have stylized crowns like Gardiner M1 (𓇋) and gnarled trunks like Gardiner M1B (𓄞). Both species are native to Sudan, Ethiopia, Djibouti, Somalia, Oman, Yemen, and Saudi Arabia, and are grey thorny shrubs or trees that are low-spreading and grow 1-10 meters (3-33 feet) tall with green pinnate leaflets; however, frankincense is non-flowering while myrrh grows white and green flower clusters in the spring.\(^{560}\)

In the Domain of Amun formal garden scenes, the incense trees are depicted within two walled groves in ‘nt-ḥt-formal garden and as offerings from the formal gardens themselves in the surrounding scenes. The presence of the incense trees is religiously significant because their green bark produces reddish-brown gum and resin, which was gathered and rolled into balls and then burned in the daily rituals in temples and memorial cults to arouse the gods and/or glorified spirits.\(^{561}\) For example, the trees’ name in Egyptian has the same root as the adjective ‘n (𓄟𓊣) or “beautiful, pleasing.”\(^{562}\)

At Deir el-Bahari, Hatshepsut emphasizes the importance of the incense trees in her ḫnty-š-garden, which was an offering place and earthly abode for Amun:

...[incense] trees were taken up in the God’s Land, and set in the ground in Egypt...for the king of the gods...they were brought bearing incense therein...to establish for him a Punt...in his [ḥnty-š-formal garden], just as he commanded me for in Thebes...It is large for him. He walks...under them.\(^{563}\)

Thutmose III further requested that Puimra and Rekhmira bring back incense trees from the Land

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\(^{561}\) Incordino, “Foreign aromatic products in the cultural and religious identity of Ancient Egypt,” p. 152.

\(^{562}\) Faulkner, *A Concise Dictionary of Middle Egyptian*, p. 43.

\(^{563}\) Breasted, *Ancient Records of Egypt* III, p. 293.
Figure A2.20: (Left) Young and potted incense trees transported to Egypt from Punt in the reliefs of Hatshepsut’s memorial temple at Deir el-Bahari. (Right) Incense gum and resin rolled into balls for sale in the Nubian village market in Aswan. Photographs by author © 2019/2020.

of Punt (Ethiopia, most likely)\textsuperscript{564} and this is evident from inscriptions in the tomb of an unknown individual (TT 143) dated from Thutmose III to Amenhotep II that mentions “travelling to Thebes, starting on the high road...carrying thousands (?) of various products [from] Punt: myrrh...incense trees.”\textsuperscript{565} Indeed, the presence of these exotic trees in the formal garden scenes is due to the tombowners’ desire to have them as a “resting place for the[ir ba]”\textsuperscript{566} in the hereafter. This is evident from a limestone stela inscription (OI 8798) dated to the coregency of Hatshepsut and Thutmose III, which mimics the ‘Spells of Making Transformations’ in the Book of the Dead, and was commissioned by Senenu, the High Priest of Amun and Hathor in the Memorial Temple of Hatshepsut,\textsuperscript{567} who likely interacted with her ḫnty-š-formal garden with incense trees there:

If one is transformed...my [ba] shall follow Hathor. It will assume the form of a swallow [from the] God’s Land in order to [alight?] on the incense trees...\textsuperscript{568}

\textsuperscript{564} Wilkinson, \textit{The garden in ancient Egypt}, p. 84.
\textsuperscript{566} Wilkinson, \textit{The garden in ancient Egypt}, p. 87.
The limestone stela of Neferhotep (CG 34057) in the Egyptian Museum, Cairo dated from Thutmose III to Amenhotep II describes a similar desire by the deceased:

As surely as one is transfigured for having been akh-effective, my ba will follow Hathor and turn into a swallow of God’s Land so as to gather (seeds) under the myrrh trees, and transform into a living ba so as to gaze upon R[a] in his morning.\(^{569}\)

**Ksbt-Tree (?)**

The *ksbt*-tree occurs in Ineni’s plant list (TT 81): eight were in his š-formal garden. The shrub or tree is known from the Old Kingdom onwards, was the sacred tree of Hierakonpolis (Nekhen), and its wood (*ḥt n ksbt*) was used for private statuary as per reliefs in the mastaba-tombs of Nyheteptah (GT G 2430) in Giza and Ankhma’ahor in Saqqara.\(^{570}\) Yet, neither its fruit nor yield appear in the formal garden offering lists\(^{571}\) in the Eighteenth Dynasty private Theban tombs nor is its religious significance ever indicated. Baum attempted to identify the *ksbt*-tree as the umbrella thorn acacia (*Acacia tortillis* Forssk.),\(^{572}\) but Germer disproved this theory through her study of the *ksbt*-tree’s practical use, which concluded that it did not match the medicinal use of the umbrella thorn acacia, and that the correct taxon must be one with an “effective worm termite as wood and charcoal were often made from it.”\(^{573}\)

**Low Cornflower (*Centaurea depressa* Bieb.)**

The low cornflower appears in the š- and the Domain of Amun formal garden scenes and in the bouquets of the relevant surrounding scenes. The low cornflower is shown stylized with its star-thistles. The annual or biennial weed is native to Syro-Palestine, Iran, Armenia, Afghanistan, and Pakistan, grows 40 centimeters (1.3 feet) tall, and has greyish green leaves that produce scentless

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\(^{569}\) Lacau, *Stèles du Nouvel Empire*, pp. 102-103; and the translation in Assmann, *Death and Salvation in Ancient Egypt*, p. 224.


\(^{571}\) Baum, *arbustes*, p. 155.

\(^{572}\) Baum, *arbustes*, p. 156.

Figure A2.21: Low cornflower in bloom beside the Lower Lake of the Cassadaga Lakes. Note how its crown appears similar to the palaeography of an (𒀭) in Old Akkadian/Babylonian. Photographs by author © 2020.

blue to purple star-thistles in springtime. The low cornflower must have been introduced by Thutmose III during his tour of the empire in Syro-Palestine in his Year 25, as the first attestation in Egypt is from the ‘botanical garden’ reliefs at Karnak. It is often placed in Eighteenth Dynasty floral bouquets, wreaths, and garlands, apparent from their images in TT 63, TT 85, and TT 161. In addition to the archaeobotanical evidence discovered around Kha’s statue (TT 08), the mummies of Ahapy, foster-mother of Queen Ahmose-Nefertary and an unknown woman found in the Deir el-Bahari cachette (CG 61053), and Tutankhamun’s Anubis statue (MM 09.184.214).

574 Marina Heilmeyer, „Die Natur und die Götter,“ p. 84; Wilkinson, The garden in ancient Egypt, p. 53; Frank N. Hepper, Pharaoh’s Flowers, p. 14; Beaux, Le cabinet des curiosités de Thoutmosis III, p. 92.
575 Beaux, Le cabinet des curiosités de Thoutmosis III, p. 92.
The low cornflower was called *dadāmu*\(^{577}\) or literally ‘thorn crown/flower’ in Old Akkadian/Babylonian. Its etymology is related to the Old Akkadian/Babylonian nouns *dala/dalû* (𒄮𒀀) or “thorn, pin, needle,”\(^{578}\) *an* (𒀀) or “sky, heaven, upper, crown (of a tree),”\(^{579}\) as well as the Old Akkadian verb *dada/dasz-dasz* (𒄺𒆠; 𒄷𒆠) or “to be fierce, to be hostile, to be difficult,”\(^{580}\) alluding to its thorns. The name of low cornflower in Egyptian remains unknown, although, it might derive from the Old Akkadian/Babylonian.\(^{581}\) For example, the medicinal use of low cornflower in Egypt, like the mandrake, can be deduced from Mesopotamian medicine. A Mesopotamian cure for the urinal ailment strangury was low cornflower mixed with mandrake.\(^{582}\) Its religious significance is not particularly clear but its inclusion in funerary and festival bouquets implies rebirth and resurrection symbolism.

**Mallow Bindweed and Lesser Bindweed (*Convolvulus althæoides* L. and *C. arvensis* L.)**

Mallow and lesser bindweed occur in the relevant surrounding scenes of TT 87 and TT 161. Bindweed is a species of morning glory and is a creeping herbaceous species native to the Mediterranean Basin, grows 20-80 centimeters (8 inches to 3 feet) long, and has green sagittate leaflets on thin branches that produce white, blue, or pink trumpeted florets in the spring and summer months.\(^{583}\) In temple and tomb art, the plant is shown realistically.\(^{584}\) Archaeobotanical evidence of bindweed has yet to be found, but a possible painted depiction occurs on the coffin of

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\(^{581}\) For example, see how the Egyptian word for mandrake derives from Akkadian on p. 190.


\(^{583}\) Boulos, *Flora of Egypt* IVa, pp. 249-251, pl. 62.

\(^{584}\) Compare to the Hatshepsut and Thutmose III reliefs at Deir el-Bahari and Karnak.
Isis (JE 27309), daughter-in-law of Sennedjem of Deir el-Medina, dated to Sethy I to Ramesses II.

Figure A2.22: Bindweed (morning glory) spp. in bloom in Buffalo, New York. Photographs by author © 2016/2020.

**Mandrake (Mandragora autumnalis Bertol. = Mandragora officinarum L.)**

The mandrake occurs in the Ḡ-garden and the Domain of Amun garden scenes as well as in the formal garden produce and bouquets prepared for banquets or offered to the gods and/or glorified dead in the relevant surrounding scenes. The plant is shown realistic, is a perennial plant with deep thick roots (up to 80 centimeters (2.6 feet) long) that is native to Syro-Palestine and Israel, grows 30-60 centimeters (1-2 feet) tall, produces purple florets with yellow seeds in the fall that develop into clusters of sweet-smelling ovate yellow fruits with a blackened calyx by springtime. The mandrake must have been was one of the foreign flora species that Thutmose III brought back to Egypt for Amun’s ‘botanical gardens’ at Karnak during his tour of the empire.

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The earliest pictorial evidence of the mandrake in ancient Egypt occurs in Thutmose III’s ‘botanical garden’ reliefs at the \textit{sh-mnw}-temple\footnote{The relief of the mandrake was overlooked in her study; however, it is depicted. See Beaux, \textit{Le cabinet des curiosités de Thoutmosis III}, plss. XXV-XXVI.} and in tomb art (See the bouquets depicted in TT 109 surrounding scenes). The Egyptian name of mandrake or \textit{rrmt} (𓀛𓁹) derives from its Akkadian name \textit{samtar} (𒈗𒇿) or literally “egg-plant.”\footnote{Tinney and Jones, \textit{s.v.} “billum, pilû,” in ePSD, (accessed August 1, 2020), \url{http://psd.museum.upenn.edu/nepsd-frame.html}; Thompson, \textit{A dictionary of Assyrian botany}, pp. 217-218.} In the ancient Near East, the mandrake was associated with Ereškigal, the queen and goddess of the underworld and Namtar, the chthonic-god of death, plague, and disease.\footnote{Thompson, \textit{A dictionary of Assyrian botany}, pp. 217-218; Jeremy A. Black, \textit{et al.}, \textit{Gods, Demons and Symbols of Ancient Mesopotamia}, (London: BM Press, 1992), pp. 77, 134; Manniche, \textit{An Ancient Egyptian Herbal}, p. 124.} The word \textit{namtar} (𒈹𒍿) was also Old Babylonian for “sickness, fate, destiny, or daemons.”\footnote{Tinney and Jones, \textit{s.v.} “namtar,” in ePSD, (accessed August 1, 2020), \url{http://psd.museum.upenn.edu/nepsd-frame.html}.}

The use of mandrake roots by the
ancient Egyptians as a narcotic to induce sleep and treat disease is not unexpected because hyoscyamine and scopolamine naturally occur in its roots, which was used for gastrointestinal and gynaecological complications, such as: ulcers, strangury, vomiting, and nausea.\textsuperscript{591} Mandrake fruit was further included in floral arrangements, one of which was discovered in a bouquet from Tutankhamun’s tomb (KV 62).\textsuperscript{592}

**Mediterranean Cypress (\textit{Cupressus sempervirens} L.)**

Mediterranean cypress is evergreen that is native to Asia Minor, Cyrenaica (Eastern Libya), Greece, Rhodes, Turkey, and the Levant, grows 20 to 30 meters (65 to 100 feet) tall, and has a thick, warped trunk with small, fresh-smelling, waxy, coniferous leaves, scentless flowers, and female fruit that develop into ovoid or oblong brownish cones in spring\textsuperscript{593} (Fig. A2.24). The wild form of Mediterranean cypress grows outwardly while its cultivated form grows like columns (Fig. A2.24).\textsuperscript{594} When one thinks of the Mediterranean cypress, it is more often associated with Graeco-Roman funerary customs, as it was an ornamental tree placed beside crossroads associated with the magic-goddess Hekate and the time, transitions-god Janus, as well as tombs, mausolea and grave stelae due to the story of Apollo and Cyparissus (Kyparissos\textsuperscript{595}) by the Roman poet Ovid. In this tale, Apollo transforms his lover, Cyparissus, into a cypress when the youth is struck by suicidal grief, following the accidental slaughter of his beloved stag during a hunting excursion:

\begin{quote}
Amongst the arboreal thong was...the cone-shaped cypress, now a tree, but a boy in the past, and the darling of Phoebus Apollo...This is the story...Cyparissus adored a stag
\end{quote}


\textsuperscript{594} Hepper, \textit{Pharaoh’s Flowers}, p. 46.

\textsuperscript{595} His Latin name derives directly from the ancient Greek for a cypress tree or η κυπάρισσος.
which was sacred to all the nymphs who haunted the Carthaéan plains...Resting his weary limbs on the grassy earth, the stag was quietly enjoying the cool beneath the shade of a tree, when a sharp spear pierced him, unthinkingly thrown by the young Cyparissus. Seeing the creature he loved was cruelly wounded and dying, the boy was determined to die himself. Though Apollo consoled him...Cyparissus kept sobbing away and asked as a final gift from the gods to mourn till the end of time. He wept and he wailed till his blood drained out and the whole of his body started to turn the colour green. The hair that was hanging over his creamy forehead was changed into a shaggy profusion, which stiffened and rose to the starry sky in a slender point. The god sighed deeply and sadly explained: ‘You’ll be mourned by me, you will mourn for others and always be there when they mourn for their loved ones.’

Although Ovid’s interpretation is a masterwork, the ancient Egyptians were actually the forerunners for planting Mediterranean cypress in necropoleis from the Old Kingdom onwards. The Mediterranean cypress was called ⲟⲕⲧⲓ (𓊨𓅱𓅱) in Egyptian and is known in ancient Egypt since the Predynastic Period via wood discovered in Hierakonpolis (Nekhen). Cypress wood was further used to fabricate Old Kingdom to New Kingdom statues, boxes, and coffins, such as those found in the Pyramids of Djoser and Sneferu, Lahun, and Tutankhamun’s tomb (KG 253). Cypresses would have been imported from the Levant and then naturalized, as they were among the flora planted in the formal garden of the Bent Pyramid at Dahshur dated to the reign of Sneferu of the Fourth Dynasty (Fig A3.21.). Cypresses were likely planted in hnty-ỉ-formal garden of the Memorial Temple of Amenhotep III at Kom el-Hettan on Thebes-West, as they were grown in the pharaoh’s counterpart memorial temple at Memphis. Some of the Mediterranean cypresses that grew in Amenhotep III’s Memphite hnty-ỉ-formal garden were felled to construct temple

600 See the text from the scribal statue of the private individual Amenhotep who supervised the construction of the Memphite memorial temple of Amenhotep III, on pp. 70-71 in Chapter Three.
doors. This is not unexpected, as the reddish, semi-resinous wood of this cypress is sweet-smelling, extremely durable, water-resistant, fireproof, insect-resistant, and easily polishable.

Cypresses in the context of these formal gardens evoked the cenotaph tomb mound of Osiris, also known as the Pkr-tomb, which was located at the end of the ‘Terrace of the Great God’ at Abydos and featured in the Khoiak Festival of Osiris. Images of the Pkr-tomb show cypresses and tamarisk growing atop it (See Figure A2.23). Osiris was called the ‘Lord of Eternity’ (hk3 ḏl) and ‘of the West’ (ḥnty imnnt) and the planting of cypresses on his Abydene cenotaph tomb mound would have evoked eternity, immorality, and rebirth, as the conifer is an evergreen and is able to live for thousands of years. For example, the oldest cypress in the world at Sarv-e-Abarkouh in Iran is currently 4000-years-old and is said to have been planted by the Prophet Zoroaster who founded Zoroastrianism, the state religion of the Persian Achaemenid Empire. Accordingly, Islamic-Persian ‘Andalusian paradise gardens’ or al-andalus (الأندلس), such as the Hada’iq al-Andalus Garden built by Said Pasha Zulfugar in 1929 for his wife in Zamalek (Gezira) in downtown Cairo, further included them in their groves. The cones and leaves of this cypress have yet to be found in ancient Egyptian bouquets. In ancient Egyptian medicine, cypress wood (ḥt), its sandarac resin (ḥps) and oil (ḏl) was used in the recipes to treat swelling of the body, and joint

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601 See the text from the scribal statue of the private individual Amenhotep on pp. 70-71 in Chapter Three.

Figure A2.25: Examples of the $Pkr$-tomb (cenotaph tomb mound) of Osiris at Abydos with Tamarisk spp. (left, middle) and cypress (right) from artifacts dated from the Ramesside Period to the Late Period. Drawings by Rachel M. Reichart © 2020, after Figures 185, 187, and 189 in Hugonot (1989).
aches, headaches, burns, shoulder pain, and mucilage. In today’s pharmacies, cypress is also used for its wound-healing, anti-rash, anti-parasitic, anti-bacterial, anti-fungal, anti-viral, and astringent properties. In modern Egypt, its oil is used as a treatment for diabetes and rheumatism.

\textbf{Mnw-Plant (?)}

The \textit{mnw}-plant is mentioned as growing in the \textit{ksmw}-formal garden of the ‘Splendor-of-Aten’ Palace (Malkata) built by Amenhotep III beside the Birket Habu at Thebes-West during the mid-late Eighteenth Dynasty. Unfortunately, not much else is known about this plant currently. Some scholars believe that is an aromatic herbaceous species. Perhaps the species was associated with the fertility-god Min of Koptos (Gebtu; Qift), as his name is \textit{Mnw} (\textit{\textsc{m}}\textit{nw}) in Egyptian.

\textbf{Mnwh-Plant (?)}

The \textit{mnwh}-plant is mentioned in Ineni’s plant list (TT 81 scene): three were planted in his \textit{s}-formal garden. Baum did not attempt to identify the species due to the paucity of evidence while Dawson suggested fenugreek (\textit{Trigonella fænum græcum} L.). Germer recently disproved Dawson’s theory through her study of the medicinal use of the \textit{mnwh}-plant as a cathartic and for the stomach region in medicine, which “does not match the pharmaceutical effects of fenugreek.” Therefore, the plant’s identification and religious significance remains a mystery.

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610 See the text of wine jar label (no. 60) from the Malkata Palace in Chapter Three on pp. 85-86.
611 Erman and Grapow, \textit{WB} II, no. 71.17.
612 Erman and Grapow, \textit{WB} II, no. 72.11.
613 Baum, \textit{Arbres et arbustes}, p. 128.
Perhaps it is a grassy species or a low-growing shrub because its fruit/seeds were known as Šnil-t3 (šnīt3) or literally the “hair of the earth.”

**Moringa Tree (Moringa peregrina (Forssk.) Fiori)**

The moringa tree is mentioned in Ineni’s plant list (TT 81 scene). The moringa is native to Northwest Africa, Sudan, and Ethiopia. Ineni had two planted in his Š-formal garden, and for good reason: the deciduous tree grows 4-10 meters tall (32-49 feet), thrives in arid desert climates, has broad willow-like branches with slender leaflets that provide ample shade, and produces pinkish to white-yellow flowers and bittersweet pods in spring that the Egyptians squeezed into moringa oil (bḥn) for cosmetics, medicine, and unguents.

Figure A2.26: (Right) The willow-like branches and leaves for the moringa tree. (Left) Its scented flowers. Photographs by Wikimedia Israel (WM-IL) and the Israel Internet Association (ISOC-IL), Public Domain (2016).

As such, the tree was associated with Hathor and Ptah of Memphis, especially in his form as Ptah-under-his-moringa-tree (Ptḥ ḫry-bšk.f) since the late Old Kingdom. Moringa oil was not one of

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the seven sacred oils used in Opening of the Mouth Ritual; however, it is apparent from a *http-di-niswt*-stela in the Tomb of Pahery (T 03) in El-Kab, dating to Thutmose III, that oils in general were included in Eighteenth Dynasty daily cult offerings:

...May pure oil be poured out for you...you being equipped with the rank of a foremost of the praised ones...

The remains of moringa seeds were discovered in the Tutankhamun’s tomb (KV 62) in the Valley of the Kings.

**Muskmelons (Cucumis melo L. spp.)**

Muskmelons appear in the ś- and the Domain of Amun formal garden scenes as well as in their produce prepared for festivals or banquets or as offerings to the gods and glorified dead in the surrounding scenes. These melons are shown realistic, with a stripped bent oblong rind similar to the snake melon (*Cucumis melo* L. var. *flexuous*) and ovate Egyptian chate melon (*Cucumis melo* L. var. *chate* (L.) Naud. ex Boiss.). Muskmelons are annual or perennial subshrubs, native to Egypt, Sudan, and other parts of tropical Africa, grow near watercourses and in fields, prefer warm to dry environments, and develop from root clusters and tendrils that form into florets and eventually into 3-6 sweet-tasting fleshy green melons from April to July. The sweet-tasting melons occurs in Egypt from Predynastic Period onwards and were grown in formal gardens because the Egyptians frequently ate them and used them in medicine for snake bites, heart ailments, and eye infections (pEb 220). When the melons are sliced, they mimic the sun-disk,

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620 Assmann, *Death and Salvation in Ancient Egypt*, p. 256.
and sweet provisions, like muskmelons, were desired by the gods and glorified dead, which is indirectly evident from Pyramid Texts Recitation 424 for ‘Invoking the Spirit as Osiris’ in the Pyramid of Pepy I:

Ho, Pep[y]! Know that you receive for yourself this god’s-offering of yours and become content through it every day: ...a thousand of everything sweet.625

And in the Liturgy B related to embalming and offerings, which was spoken on the night before a funeral:

May the goddess of the valley give you bread from the grave goods of her father Osiris. When R[a] bites into something sweet, he will give it to you.626

Clearly, muskmelons were a favored fruit on the offering tables of the gods and the glorified dead, as they are often depicted upon them since the Old Kingdom. Although Eighteenth Dynasty archaeobotanical evidence of muskmelon rinds in private Theban tombs have yet to be discovered, Twentieth Dynasty seeds have been unearthed in the eastern cemetery of Deir el-Medina.627

Figure A2.27: (Left) Snake melon for sale in the El-Rehab Souq in the summertime. (Right) Chate melon for sale in the Nubian village market in Aswan. Photographs by author © 2020.

625 Allen, The ancient Egyptian pyramid texts, p. 106.
626 Assmann in Death and Salvation in Ancient Egypt, p. 294.
627 These seeds do not have a catalogue number in the Cairo Agriculture Museum. See de Vartavan, et al., Codex, p. 90; Ludwig Keimer, « Plusieurs antiquités récemment trouvées, » BIE 28 (1947): p. 122.
Opium Poppy (*Papaver somniferum* L.)

The opium poppy, also known as breadseed poppy, appears in ∆- and Domain of Amun formal garden scenes. The poppy is shown stylized with red triangular petals and black dots, is an annual, grows 30 centimeters (1 foot) high, has serrated green ovate leaves with large scarlet to orange white flowers and black seeds in springtime, and is native to the Eastern Mediterranean – possibly Crete and/or Cyprus. The flower was likely introduced via trade with Crete and Cyprus by the Thutmosides, as its first pictorial depiction in Egypt occurs in Thutmose III’s ‘botanical garden’ reliefs in the *sh-mnw*-temple at Karnak. The poppy was associated with the love-, fertility-, love-, fertility-

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Figure A2.28: Orange, white, and red poppies in bloom in the Jardin des Plantes in Paris during the spring. Their black seeds have been blown away by the wind. Photograph by author © 2015.

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and motherhood-goddess Hathor and was grown in water gardens planted beside pools due to its use in Egyptian medicine, perfumes and unguents. The term špn/špnn (𓊄𓏏𓊙, 𓊖𓏏𓊙) has been considered for the name of the poppy in Egyptian, although some scholars remain unconvinced. It is the author’s opinion that špn/špnn should remain a possibility since it was used to induce sleep in a child (pEb 782), as well as the fact that its name in ancient Greek, which would have been used by Aegean merchants, was ἡ μῆκων, meaning “the black excrement of a newborn child, poppy juice, and opium.” For example, the poppy has narcotic properties, which when burned with aromata, induces euphoria, aphrodisia, and sleep. The flower was arranged into bouquets likely as a potent symbol of fertility and resurrection. Eighteenth Dynasty poppy capsules have been discovered in a tomb in the eastern cemetery of Deir el-Medina.

**Papyrus (Cyperus papyrus L.)**

Papyrus is found in both the ś- and Domain of Amun formal garden scenes and in the bouquets of the relevant surrounding scenes. The plant is shown stylized in the garden scenes like Gardiner M15 (𓊁𓊂), M215 (𓊄𓊙𓊙), M82 and 83 (𓊂𓊙𓊙), and M13 (𓊐�). Papyrus is a perennial aquatic species that was once native to Egypt – but now only grows in Sudan and Sub-Saharan Africa. Papyrus

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634 Manniche, *An Ancient Egyptian Herbal*, p. 139.
635 Its scientific name *Papaver somniferum* L. literally means ‘the poppy that makes sleep’ in Latin.
636 The capsules are housed in the Cairo Agriculture Museum, but they do not have an inventory number; thus, a proper context cannot be surmised. See Bruyère, *Deir el Médineh* II, pp. 108, 157; Germer, *Handbuch*, p. 310.
637 The inverted papyrus umbels of Gardiner M15 and M215 are actually more than a stylistic feature, as the stalks naturally crack and bend downwards following their death and decay (See Fig. A2.29 on the following page).
638 The last known sighting of papyrus in Egypt was in 1820. It has in recent times been reintroduced into Egypt on Jacob’s Island in Cairo by Dr. Hassan Ragab. See Brewer, *et al.*, *Domestic Plants and Animals*, p. 41; Germer, „Die Pflanzen und ihre Nutzung: Stäucher und Bäume der heimischen Flora,“ p. 124.
Figure A2.29: (Left) Papyrus (C. papyrus L.) in a water garden beside our pond in Buffalo, New York. (Middle) Papyrus umbels going to seed in late summer. (Right) Dead, inverted umbels in mid fall similar to those on Gardiner M15 (𓊝) and M215 (𓊝). Photographs by author © 2020.

Papyrus grows deep thick rhizomes under water and produces large erect fan-like clusters with greenish yellow florets in late summer.⁶³⁹ Papyrus was one of the most important plants in ancient Egypt and was called 𓊝𓊝 (𓊝)⁶⁴⁰ which plays on terms, such as: 𓊝𓊝 (𓊝) “to flourish, to prosper, to become green”; 𓊝 (𓊝) “to be blessed”; and 𓊝𓊝 (𓊝𓊝) “to have spiritual power, to become glorified.”⁶⁴²  This is evident from Pyramid Texts Recitations 554 for ‘Joining the Sun’ and 637 and 662A for the ‘Invocation of the Sun and the Spirit’ in the Pyramids of Pepy I and Pepy II:

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⁶³⁹ Boulos, Flora of Egypt Ia, pp. 375-376.
⁶⁴⁰ Erman and Grapow, WB
⁶⁴¹ The Egyptians must have been aware of the plant’s rapid grow as “papyrus has been shown to be among the most productive plants in terms of biomass per year,” see Brewer, et al., Domestic Plants and Animals, p. 40; and Germer, „Die Pflanzen und ihre Nutzung: Sträucher und Bäume der heimischen Flora,“ p. 124.
⁶⁴² “The Egyptian word 𓊝𓊝𓊝 is the causative form of the root 𓊝, which means something along the lines of “to have spirit power.” The causative formation of the designation of this text genre itself indicates that these are effective
Pyramid Texts Recitation 554 in Pepy I:

...My papyrus baton⁶⁴³ is in my hand, and I strike and direct in accordance with my state (as one) of the possessors of honor. I belong to those who surround the Sun, who are around the morning god. I cannot become bad, nor can my name on earth become bad.⁶⁴⁴

Pyramid Texts Recitation 662 in Pepy II:

...O you of the papyrus plant, you have emerged in me, I have emerged in you.⁶⁴⁵

And from Pyramid Texts Recitation 774 in the Pyramid of Queen Ankhennespepy II:

...Receive this your papyrus scepter (w3ªt). You go as Horus and return as the Sun’s...⁶⁴⁶

As well as, Book of the Dead Spells 159-160 that are meant to be recited over a papyrus-shaped amulet during a funeral:

To me belongs a papyrus-column of green feldspar which is not imperfect...Welcome, O Elder of Heliopolis, greatest of Pe...He has taken his place opposite the Great God, and Atum is satisfied with Eye, so that my members will not be damaged.⁶⁴⁷

Evidently, the papyrus had a close relationship with the Osiris myth, fertility, Ra, Hathor,⁶⁴⁸ and the deceased’s transformation into an šh (glorified spirit). Papyrus stems, bundles, culms, stalks, and umbels⁶⁴⁹ have been discovered in Eighteenth Dynasty royal and private Theban tombs, such as: Queen Ahmosemeretamun (TT 358), a wife of Amenhotep I; Kha (TT 08); Yuya and Thuya (KV 46); Maiherperi (KV 36), and Tutankhamun (KV 62).⁶⁵⁰

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⁶⁴³ Such papyrus bouquets are used in the Beautiful Festival of the Valley rites too. See the TT 100 and TT 87 scenes.
⁶⁴⁵ Allen, The ancient Egyptian pyramid texts, p. 268.
⁶⁴⁸ Sistra or ss(s)št (𓇓𓏏𓊃) in Egyptian were used in the Hathor cult because they imitated the sound of the papyrus rushes and pacified the goddess. See Germer, „Die Pflanzen und ihre Nutzung: Sträucher und Bäume der heimischen Flora,” p. 124; Erman and Grapow, WB III, nos. 486.16-487.6-8.
⁶⁴⁹ See CM 910-11, 1261, 1263, 3627, 3614-15, and 3820 in de Vartavan, et al., Codex, pp. 96-97.
Persea Tree (*Mimusops laurifolia* (Forssk.) Friis = *Mimusops schimperi* Hochst.)

The persea tree and/or its fruit are present in the š- and Domain of Amun formal garden scenes and/or their relevant surrounding scenes. In the formal garden scenes, persea is shown realistic like Gardiner M1B (ȝ) or stylized like Gardiner M1 (ȝ). Persea is native to the Ethiopian Highlands, Eritrea, and Somalia, is evergreen, grows 15-30 meters (49-98 feet) tall with green to yellow oval leaves, and produces “sweet and luscious” cordate fruit from late winter to early spring. Persea was called ṣwsb (ȝȝ) in Egyptian and occurs in groves and avenues beside the pools of the š- and Domain of Amun formal garden scenes for banquets, meals, and/or bouquets. Its heart-shaped fruit and tongue-like leaves recall the Heliopolitan creation myth, as “creation was an act of will represented by the heart [and] effected through the utterance of the world (tongue),” and was sacred to Hathor and Isis, according to Plutarch:

> Of the plants found in Egypt they say that the persea [περσεαν] is especially sacred to the goddess (Isis) because its fruit is like a heart and its leaf like a tongue. For of the qualities which man possesses, none is more divine than that reason [λογοῦ]...

This is the reason two rows of persea were planted in the ḫnty-š-formal garden of the Memorial Temple of Hatshepsut at Deir el-Bahari — but the tree was not introduced to Egypt from Sub-Saharan Africa by the queen-pharaoh herself. Old Kingdom depictions of persea exist, such as in Sahura’s pyramid temple reliefs dated to the Fifth Dynasty while archaebotanical evidence of

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654 Brewer, *et al.*, *Domestic Plants and Animals*, p. 64.
656 Winlock, *Excavations at Deir el-Bahari 1911-1931*, figs. 12, 213.
its fruit and leaflets have been discovered in the royal and private tombs in Memphis and Thebes prior to the Eighteenth Dynasty.\textsuperscript{658}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure.png}
\caption{Persea leaves and fruit. Drawing by Rachel M. Reichart © 2020, after Figure 1 in Friis (1980).}
\end{figure}

\textsuperscript{658} Third to Twelfth Dynasty persea remains exist. See Friis, “The Taxonomy and Distribution of \textit{Mimusops laurifolia} (Sapotaceae),” p. 790; de Vartavan, \textit{et al.}, \textit{Codex}, pp. 161-162.
**Pomegranate Tree (Punica granatum L.)**

The pomegranate and/or its fruit occur in the š-garden and Domain of Amun formal garden scenes as well as in their produce and bouquets in the surrounding scenes. The tree is shown stylized like Gardiner M1 (⊙) with its oblique green leaves and crimson-yellow oval fruit and sepals. Pomegranate is a deciduous shrub or tree that is native to Asia Minor and the Bosporus Region, grows up to 8 meters (26 feet) tall, has red fragrant florets in spring, and fruit with juicy edible seeds that mature from late summer to mid fall. Historically, various scholars have speculated that Thutmose III brought pomegranate trees to Egypt for Amun’s ‘botanical gardens’ at Karnak during his tour of Syro-Palestine in his Year 25. The pomegranate is depicted in the ‘botanical garden’ reliefs; however, the tree is not native to the Middle East. The tree was likely naturalized in Egypt during the Middle Kingdom due to the pomegranate-headed staff that was discovered in the Memorial Temple of Montuhotep II at Deir el-Bahari, as well as the existence of Twelfth Dynasty pomegranate remains from Dra’a Abu el-Naga in the Egyptian Museum, Cairo. Pomegranate trees were grown beside pools, ponds, lakes, or canals and quays in the š- and Domain of Amun formal gardens or among the food preparations, bouquets, and/or offerings for dinner guests, the gods, and/or the glorified dead due to its fragrance and sweet-tasting, arousing juice and seeds associated with Hathor. Eighteenth Dynasty pomegranate remains (BBM 6998), which were likely placed as offerings, were discovered in the eastern necropolis of Deir el-Medina. Pomegranate trees were said to flank the entrance to the hereafter in Book of the Dead.

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Spell 45. The growth of the fruit from a small red floret into a crimson ball mimics the solar cycle and hints at the deceased’s eventual rebirth in the hereafter. It is no wonder why the pomegranate flowers and leaves were included in a wreath (KG 225a) placed in the Tomb of Tutankhamun (KV 62) in the Valley of the Kings.

Scented Mayweed (*Anthemis* or *Matricaria* spp.)

Scented mayweed occurs in the ṣ- and Domain of Amun formal gardens. Mayweed species were grown in the water or *ḥsp*-plots and were shown stylized like Gardiner M86 and M86A (𓊁𓊂) in art. Scented mayweed is an annual that is known in Egypt from the Predynastic Period onwards, grows 30 centimeters (1 foot) tall in sandy and fertile soil, has green pinnate leaves on erect branches, and produces white stellate flowers with yellow seeds from summer to fall. Anthemis

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and Matricaria spp. are suggested because both have very similar physiognomies in color, shape, and form. The flower must have been associated with the sun because of its color and its shape.

**Sycamore Fig (Ficus sycomorus L.)**

The sycamore fig and/or its fruit occur in the ă- and Domain of Amun formal garden scenes and/or their relevant surrounding scenes. The sycamore is shown realistic like Gardiner M1B (𓄖) or stylized like Gardiner M1 (𓄑) while its ovate green leaves and red cylindrical fruit are accurately portrayed. Sycamore fig is evergreen in warm subtropical regions like Egypt and “live to a great age and become massive in size,” while its small green florets bloom into clusters of reddish orange fruits along its trunk and branches from spring to fall. Sycamore figs were called nḥ(ḏ)t(ḏ) (𓊊𓊋) in Egyptian and were symbolic of Hathor’s role as ‘Lady of the West and Southern Syc-

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668 Hepper, Pharaoh’s Flowers, pp. 58-59.
669 See the plant list of the TT 81 scene, the text of the TT E2 and TT 63 scenes; as well as Germer, Handbuch, p. 265.
-amore’ and ‘Mistress of the Necropolis.’ For example, according to Book of the Dead Spell 109 ‘For Knowing the Souls of the Easterners,’ a pair of sycamores stood at the site of the morning rise of Ra-Kheperi and symbolized the deceased’s journey to the western horizon to become a glorified spirit (šḥ):

I know those two [sycamore] trees of turquoise between which R[a] goes forth, which have grown up at the Supports of Shu at that gate of the Lord of the East from which R[a] goes forth.670

The juices and leaves of the sycamore fig were used by embalmers who would mix them with “frankincense, myrrh, wax, and honey”671 to wash out and perfume mummies while premature sycamore figs were strung into collars and wreaths or its branches and leaves were offered in private Theban Eighteenth Dynasty and Deir el-Medina tombs.672 The premature fertilized

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672 de Vartavan, *et al.*, *Codex*, p. 112.
sycamore fig collars would have continued to ripen and symbolized the deceased’s rebirth and resurrection in the hereafter just like fertilized Osirian barley beds. In terms of the š- and Domain of Amun formal garden scenes, Book of the Dead Spell 52 relates how the deceased was meant to feast under sycamores in the hereafter:

... “Where are you allowed to eat?” say they, the gods, to me. “I eat under that sycamore of Hathor, my mistress, and I give the rest of it to her dancing girls... “Where is it, where do you eat?” say the primeval gods to him. “I eat under the sycamore that I know, the beautiful one, verdant and many-leaved!”

The sycamore figs color, shape, and growth are reminiscent of the sun whereas its milky juice was associated with the cow-goddess Hathor and the sycamore fig tree-goddesses. When the fruit is cut in two, for example, the shape of the flesh and seeds mimic the sun-disk. Moreover, wasps pollinate a sycamore fig’s florets by climbing into the tiny hole at the fruit’s end to mate and lay their eggs. This in turn makes the fruit “ripen at the same time as the young hatch” and recalls solar theology and the deceased’s eventual rebirth and resurrection in the hereafter; similarly, to how dung beetles produce cylindrical faeces from which their young hatch.

**Tamarisk (Tamarix spp.)**

Ineni lists that he had ten in his š-formal garden, and at least one is shown like Gardiner M1B (𓇤) beside his pool. Tamarisk spp., also known as salt cedar, are deciduous shrubs or trees, and nine are native to Egypt and parts of North Africa and the Levant:

1. *Amap*-tamarisk (*T. passerinoides* Del. ex Desv.)
2. Arabian tamarisk (*T. arabica* (Ehrenb.) Bunge)
3. *Athel*-tamarisk (*T. aphylla* L. Karst.)
4. *Farash*-tamarisk (*T. articulata* Vahl)
5. Four-stamen tamarisk (*T. tetragyna* Ehrenb.)

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673 Assmann, *Death and Salvation in Ancient Egypt*, pp. 129-130.
674 The ancient Egyptians were well-aware of how wasps and honey bees climb into the fruit from their apiculture production. See Hepper, *Pharaoh’s Flowers*, pp. 58-59; and Germer, „Die Pflanzen und ihre Nutzung: Sträucher und Bäume der heimischen Flora,“ p. 151.
6) Fronded tamarisk (T. arborea (Sieb. ex Ehrenb.) Bunge)
7) Manna yielding tamarisk (T. mannifera (Ehrenb.) Bunge)
8) Nile tamarisk (T. nilotica (Ehrenb.) Bunge = T. gallica var. macrocarpa Ehrenb.)
9) Tarfa-tamarisk (T. amplexicaulis Ehrenb.)

The Egyptians did not differentiate between the species in art,\textsuperscript{676} so it is impossible to prove which species are represented in the TT 81 scene. These species grow from 3-10 meters (10-33 feet) tall in the Nile Basin, wadis, deserts, and maritime coasts, have many feather-like branches with sheathing green leaflets, and produce ovate to triangular pink, red, or white flowers throughout the summer.\textsuperscript{677} Tamarisk wood (isrt) in Egypt is known from the Predynastic Period\textsuperscript{678} while archaeological and iconographical evidence has been discovered from Old Kingdom onwards in tomb and temple art, as a medium for statuary, sarcophagi, furniture, weaponry, and even in medicine (pEb 96).\textsuperscript{679} Tamarisks were called isr (𓊃𓈖𓊃) in Egyptian.\textsuperscript{680} Tamarisks were planted in the ḫntyw-š-formal gardens of the Memorial Temple of Montuhotep II and of Hatshepsut at Deir el-Bahari\textsuperscript{681} due to their association with the sun and Osiris as a symbol of creation, rebirth and resurrection. This is clear from the Pyramid Texts Recitation 669 that is part of the ‘Resurrection Rituals’ of the Pyramid of Pepy II:

I [have been given birth] by my mother Begetter in a rebirth in the nest [of] Thoth inside the Tamarisk Field (sḥt isr), the gods’ source...\textsuperscript{682}

Also, in the ‘Reponses to the Offering Ritual: Spells for Power of Nourishment’ in Pyramid Texts Recitation 210 in the Pyramid of Wenis:

\textsuperscript{676} Baum, Arbres et arbustes, p. 200.
\textsuperscript{677} Boulos, Flora of Egypt Ila, pp. 126-130; Hepper, Pharaoh’s Flowers, p. 48; Germer, Handbuch, p. 347; Baum, Arbres et arbustes, p. 200; Gamal, Trees and Flowers of Egypt, pp. 316-318.
\textsuperscript{678} de Vartavan, et al., Codex, pp. 224-228.
\textsuperscript{679} Baum, Arbres et arbustes, p. 202.
\textsuperscript{680} Germer, Flora des pharaonischen Ägypten, p. 125.
\textsuperscript{681} Alan J. Rowe, New Light on Ägypto-Cyrean Relations: Two Ptolemaic Statues Found in Tolmeita, (Cairo: ASAE, 1948): p. 304; Arnold, Deir el-Bahari I, p. 6, Tafelen 1, 42D; Tamarisk remains were also discovered around the Nineteenth Dynasty Osirion in Abydos built by Sethy I, see Henri Frankfort, “Preliminary report of the expedition to Abydos 1925-1926,” JEA 12 (1926): p. 159; Baum, Arbres et arbustes, pp. 202-205.
\textsuperscript{682} Allen, The ancient Egyptian pyramid texts, p. 262.
...Before the Great Heron that comes from the garden, Paths-Parter [Wepwawet\textsuperscript{683}] who comes from the tamarisk... Sun and Thoth, take me with you... I may grow powerful from what you grow powerful from, that I may sail in what you sail in...I circumnavigate the sky like the Sun, I course the sky like Thoth.\textsuperscript{684}

Tamarisks planted in formal gardens evoked the Tamarisk Field where Isis birthed Horus, the solar \textit{bnbn}-mound of creation, the \textit{Pkr}-tomb of Osiris at Abydos (See Fig. A1.25), as well as the jackal-god Wepwawet who piloted the departed to the hereafter.\textsuperscript{685} The divine tribunal who judged those wishing to enter the hereafter were even called ‘Those-of-the-Tamarisk’ (\textit{isrtyw}).\textsuperscript{686} Evidence has yet to be discovered in Eighteenth Dynasty Theban tombs; though, its wood was magically imbued with the ideology discussed above, and used to fashion tomb goods, such as: a stave (LM E 14470) dated to Thutmose III and two sticks dated from the Middle to New Kingdom (BBM 17830).\textsuperscript{687}

Figure A2.34: (Left) Tamarisk spp. and oleander (\textit{Nerium oleander} L.) growing beside the ram-headed sphinx avenue in front of Karnak’s Western Entrance, which had \textit{j}-formal garden in antiquity. (Right) Growing beside the Ramesseum. Photographs by author © 2019.

\textbf{True Cardamom (\textit{Elettaria cadamomum} L. Maton)}

The earliest attestation of true cardamon in Egypt comes from the \textit{hsp}-plots of the Middle Kingdom to Late Hyksos Period \textit{hrrt}-\textit{j}-formal garden of Palace F/I at Avaris later Perunefer (See Fig.

\textsuperscript{683} Allen, \textit{The ancient Egyptian pyramid texts}, p. 369.
\textsuperscript{684} Allen, \textit{The ancient Egyptian pyramid texts}, p. 33.
\textsuperscript{685} Allen, \textit{The ancient Egyptian pyramid texts}, p. 366.
\textsuperscript{687} de Vartavan, \textit{et al.}, \textit{Codex}, p. 227.
True cardamom, also known as green cardamom or hal (حَب الْهَال) in Arabic, is a member of the ginger family Zingiberaceae, is native to Mesopotamia, Sri Lanka, India, China, Indonesia, and Myanmar, has green heart-shaped leaves and white, yellow, red, pink, and/or lilac orchid-like flowers in spring and black, white or reddish ovular pods that grow from late summer to mid fall.  

Figure A2.35: (Left) True cardamom flowers growing in India. Photograph courtesy of Santanu Maity via Shutterstock (2019). (Right) True cardamom pods are sold in stalls in India just like in Egypt. Photograph by Mousum De via Unsplash (2018).

True cardamom’s earliest attestation in the ancient world comes from bread and soup recipes recorded on a Sumerian clay tablet discovered in the city-state of Nippur dated to 2000 B.C. Perhaps it is the Early Old Babylonian/Akkadian word: zí(ž)batum (𒈇𒈏𒇃; ᵀሱባṱ) or “an aromatic seed; a garden plant.” The pods are crushed in many cultures and cuisines for their black seeds that are used in cooking and medicine.  

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688 See the discussion of this formal garden on pp. 88-89 in Chapter Three.
Nubian-Sudanese dishes today that date back to pharaonic times, such as the flava bean dish *ful medames* (فول ممس) often eaten for breakfast and an okra and beef dinner dish paired with boiled cardamom with cloves. The ancient Egyptians chewed cardamom to clean and freshen their mouth and teeth, for digestion, as well as in mummy embalming.

*Twn*-Plant (‡)

The *twn*-plant is mentioned in Ineni’s plant list (the TT 81 scene): five were planted in his ḫ-formal garden. A proper identification of the plant has been sought, but with difficulty, as *twn* is written with both Gardiner M1 (𓀧) and M2 (𓀩). Ebbell identified the *twn* with *Acacia* spp. whereas Loret and Täckholm identified the plant as one of the *Ceruana* spp. (*Ceruana pratensis* Forssk.) from the daisy family Asteraceae, which is native to the Egypt, Ethiopia, the Sahel-Saharan interior, and Upper and Lower Egypt watercourses. Archaeobotanical evidence of *Ceruana* spp. as been discovered in an Eighteenth Dynasty private Theban tomb (TT 294). Germer does not deny this interpretation, but her study of the *twn*-plant’s medicinal use is suggestive of one that induces “antibacterial and anti-inflammatory action.” Perhaps the *twn*-plant is an herbaceous species that was further eaten by cattle, as four out of its 11 palaeographies include Gardiner E1 (𓀨𓀩𓀪).

Waterfowl, Fish, and Insects in the Formal Gardens

The waterfowl in the formal garden scenes and/or surrounding scenes, were meant to nourish those depicted in both life and death. Breeding in the spring and maturing to juvenile or adult by the fall

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or winter, the waterfowl in the formal garden scenes do not represent the enemies of Horus in marsh hunting scenes, or flee from the tomb-owner’s arrows, spears or throw sticks, but float or graze calmly among the lotus and papyri in the pools/pond/lakes and water gardens. Waterfowl’s close connection to water features is enforced by the Egyptian word to describe one filled with fish and fowl: $s\$ (𓊴𓊱𓊭𓊊), as seen in the TT 39 scene. Their funerary symbolism in the formal gardens is demonstrated by Book of the Dead Spell 109 ‘For Knowing the Souls of the Easterners’:

I know the northern gate of the sky; its south is in the Lake of Waterfowl, its north is in the Waters of the Geese, the place in which Ra navigates by wind or by rowing.

As well as, from Coffin Texts Spell 62 spoken during the deceased’s wake:

I shall cause that you transform yourself in the company of the Dwj.t-bird, and cause that you fare over the ptr.wj-waters and over the lake...You shall rule the streams in the company of the phoenix, with no one opposing you on the bank.

The waterfowl’s funerary role in the formal gardens, as divine intermediaries between heaven and earth, and in the deceased’s transformation into a glorified spirit ($\$h$) is emphasized in this section.

**Egyptian Turtle Dove** (*Streptopelia turtur rufescens Brehm*)

*Double click on the icon to listen to their call here*:

The Egyptian turtle dove was propagated in Egypt since the Old Kingdom and in $s\$-formal gardens from the Middle Kingdom onwards in aviaries (*ht-\$s*) alongside the *ht\$s*-duck. This turtle dove is a member of the dove and pigeon family Columbidae, is native to the Dakhla and Kharga Oases, the Fayyum Region and Northern Sudan, breeds in North Africa, and winters in the Sub-Saharan

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699 For more information on its etymology, see Chapter Three: Extant Evidence of $\$s-$Formal Gardens.
701 This “describe[s] movement toward water. Typical is the connection of the theme of transformation with that of freedom to move and to cross. The deceased assumes the form of a bird so as to cross the body of water that separates him and the realm of death from Elysium,” Assmann, *Death and Salvation in Ancient Egypt*, pp. 271, 273.
Figure A2.36: An Egyptian turtle dove. Color drawing by author © 2020, after the Bree and Fawcett sketch in A history of the birds of Europe, not observed in the British Isles (1859).

Egyptian turtle doves are smaller than other Columbidae, have a black bill with red rims around the eyes, brown to black feathers, black and white neck stripes that develop after the juvenile stage, and a wedged tail with white ends. These turtle doves are loving and

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affectionate, and are known for their love of open spaces, nesting, trees, shrubbery, orchards, and expansive gardens where they can easily graze for food.\(^{706}\) This type of dove was called ꞌꜣꜣꜣ (ʼꜣꜣꜣ) in Egyptian\(^{707}\) and their Latin name turtur is an onomatopoeia of the purring sound they make, which is often transcribed: turr-turr, turr-turr.\(^{708}\) The Egyptian name must refer to their many flocks in pharaonic Egypt, as ꞌꜣꜣꜣ (ʼꜣꜣꜣ) denotes “many/quantity/multitude,”\(^{709}\) in addition to their talkative friendly nature, which is related to the verb ꞌꜣꜣ-ꜣ (ʼꜣꜣ-ʼ) “to be talkative (or lit. to be manifold in utterance)”\(^{710}\) and the adjective ꞌꜣꜣ-ꜣꜣ (ʼꜣꜣ-ʼʼ) or “talkative.”\(^{711}\) The ancient Egyptians prepared dove and pigeons spp. into savory broths with goose fat for funerary banquets while the Nubian-Sudanese tradition of boiling, grilling, frying, and/or stuffing them with wheat and onions might derive from pharaonic times as well.\(^{712}\)

**Pintail and Mallard Duck (Anas acuta L. and Anas platyrhynchos L.)**

Double click on the icon to listen to their calls here\(^{713}\): (1)  

The pintail and mallard duck are staples in Egyptian funerary art since the Second Dynasty at Saqqara.\(^{714}\) The pintail and mallard are depicted in the formal garden scenes, as well as in their produce shown in relevant surrounding tomb scenes. These birds and their ducklings are shown realistic like Gardiner G39 (ʼꜣꜣꜣ), G49 (ʼꜣꜣꜣ), and G169 (ʼꜣꜣʼ). The pintail and mallard duck have green to brown squarish heads, triangular beaks with short thin necks, and large oval bodies with

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\(^{711}\) Erman and Grapow, *WB* I, no. 228.18; *WB* II, no. 228.9.

\(^{712}\) Mehdawy and Hussein, *The Pharaoh’s Kitchen*, pp. 65, 71.


\(^{714}\) Houlihan and Goodman, *The birds of ancient Egypt*, p. 72.
distinctly colored feathers in grey, white, brown, black, and blue. The wild ducks prefer to breed in Eurasia and spend the winter in both Upper and Lower Egypt along the Nile Basin, in oases, the Fayyum Region, and in other parts of North Africa, such as: Tunisia, Morocco, and Asia Minor.\textsuperscript{715} The ducks that were raised in the actual formal gardens were likely domesticated and not wild – as in the marsh hunting scenes – since “ancient Egyptian aviculturists [knew that] pintails soon became tame and in time...readily breed.”\textsuperscript{716} In the relevant surrounding scenes, the ducks are shown in offering bundles; and for good reason, as they were a good source of nourishment due to their meat and fat.\textsuperscript{717} As “guarant[ors of] sexual vigor,”\textsuperscript{718} they were associated with Hathor and rebirth, evident from the presence of ducklings (TT 93 #1 and TT E2 scenes) and eventual egg laying or \textit{st ms} (𓊞𓊗) once the tomb paintings were magically imbued. They were further related

\textsuperscript{715} Houlihan and Goodman, \textit{The birds of ancient Egypt}, pp. 71-72; Natalie Baum, \textit{Arbres et arbustes}, p. 252.
\textsuperscript{716} Houlihan and Goodman, \textit{The birds of ancient Egypt}, p. 72.
to the transformative passage across water to become a glorified spirit (ṣḥ). This is evident from Pyramid Texts Recitation 521 from ‘Summoning the Ferryman’ in the Pyramids of Pepy I and Menenra I:

Is it a grey goose (speaking)?” (asks the ferryman). Fetch him! “Is it a pintail duck?” Fetch her! “Is it a steer?” Fetch him! You scud as a heron, father, your form like a ‘youngsters’-father’ (heron). So... you go to your fathers who are at the fore of Spread-Lake.  

As well as, in Pyramid Texts Recitation 270 ‘For Crossing the Akhet’ in the Pyramid of Wenis:

...There is no accusation of a duck against me...So, should you not transport me, I will jump up and put myself on a wing of Thoth, and he is the one who will transport me to yonder side.  

Red-Breasted Goose (Branta ruficollis Pallas)

Double click on the icon to listen to their call here:  

Domesticated red-breasted geese are depicted realistic like Gardiner M38 (𓊰𓊱𓊦) swimming in the pool, pond, or lake of the formal gardens. The goose is shown in tomb art from the Old Kingdom onwards. The wild red-breasted goose breeds in Siberia, winters in North Africa, Eurasia, and Asia Minor, and has a small bill, head with black and white plumage, an arched bronze neck, and an average sized body with black and white wings. The goose was associated with Geb, the Amun goose, and the deceased’s rebirth and resurrection, which is evident from Pyramid Texts Recitation 302 for ‘Ascending Towards the Sky’ in the Pyramid of Wenis:

...People hide, the gods fly away, for Sothis has flown me to the sky amidst my brothers the gods...My seat is with you, Sun, and I do not give it to any other. So, I go up to the sky by you, Sun, my face as that of falcons, my wings as those of birds, my nails as the talons of He of Atfet. Paths-Parter has flown me to the sky among my brothers the gods. I have acquired arms as a Nile goose, I have beaten wing as a kite. A flier flies, people: I fly away

720 Allen, The ancient Egyptian pyramid texts, 53.  
723 Houlihan and Goodman, The birds of ancient Egypt, pp. 61-62.
As well as, from the goose’s role in the transformative passage of the deceased across water to be reborn from Pyramid Texts Recitation 522 in ‘Summoning the Ferry’ in the Pyramid of Menenra I dated to the Sixth Dynasty:

O, Hapi, Imseti, Duamutef, and Qebehsenuef! Fetch for me that Khnum-made boat that is in that Canal of the Goose. Swaller open the path for me?  

The goose’s presence in the funeral offerings for the deceased’s kꜣ and bꜣ and the transcendence to heaven is described in Pyramid Texts Recitation 711 for ‘Sending the Spirit to the Sun’ in the Pyramid of Pepy II:

...You serve yourself a Nile goose...Ascender, ascend! [Go up to your house, as a star] atop your house, and save your children [from] mourning. Your offering stand has made firm those on earth for the course of eternity.

In Coffin Texts 190:

I fly up as a swallow, I gabble as a goose. I swoop down on the sycamore that nourishes the one who endows it in the midst of the flood. I have been granted an alighting on the leaves of the hes-neferet-tree on the isle of the flood. I have been granted an alighting on the beautiful sycamore on the hill of the two sycamores of the two floods.

And from Coffins Texts 205:

I have risen to the place where maat is, I have flown up as a swallow, like Thoth, I have cried out to them as a goose, like Shesemu, I have flown up as a gebga-goose on that great shore. I stand on it, I appear as a god. The one they espy, he does not “land.”

The red-breasted goose as a source of rebirth and resurrection in the formal gardens is supported by the ancient Egyptians’ observations of their “erotic...vociferous and ecstatic behaviour...during mating season.” The quacking of the geese was associated with Geb’s solar form as the ‘Great

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727 Assmann, *Death and Salvation in Ancient Egypt*, p. 348
728 Assmann, *Death and Salvation in Ancient Egypt*, p. 348.
Cackler’ because when he gave birth or $st\ms$ (𓊐𓅓𓊐𓇌) to the cosmic egg on the primaeval mound, he quacked and the sun-god Ra hatched forth in the form of the $bnw$-bird (or solar phoenix).\textsuperscript{730} Geb’s association with the geese in the formal gardens is likewise apparent from the Egyptian word for goose: $gb$ (𓊐𓅓𓊐𓇌) and from his iconography with a goose upon his head. Although the red-breasted goose can be aggressive in the wild, propagating them in the formal gardens was likely not as difficult, as they quickly become docile following domestication.\textsuperscript{731}

\textit{Ḥtš'-Duck (?)}

This type of ‘duck’ is either “a specific edible bird”\textsuperscript{732} and/or denotes “poultry in general”\textsuperscript{733} in Egyptian. The $ḥtš'$-duck (𓊑𓅓𓊐𓇌) is attested from the Old Kingdom onwards and appears alongside

\textsuperscript{730} Scalf, “Birds in Creation Myths,” p. 132.
\textsuperscript{731} Houlihan and Goodman, \textit{The birds of ancient Egypt}, p. 72.
\textsuperscript{732} Erman and Grapow, \textit{WB} III, no. 342.1.
\textsuperscript{733} Erman and Grapow, \textit{WB} III, no. 342.1.
the Egyptian turtle dove as a bird that was propagated in aviaries and 𝕤 thận-formal gardens. It is interesting that this unknown editable duck species has the same name as a certain type of aviary called a ḥt-š (𓊎).735

**Fish in the Formal Gardens**

Fish, like waterfowl, were a source of nourishment for the ancient Egyptians from the Predynastic Period onwards. Spawning in the spring and growing to juvenile or adult by the summer, the Eighteenth Dynasty Egyptian’s love of fish translated over into the š- and Domain of Amun formal gardens, which feature those that were commonly eaten. Remains of Catfish and Tilapia spp., for example, have been discovered in the kitchens of the priests’ residences in the Amun cult at Karnak.736 Fish were not only a source of nutrition, but a magical means to maintain the formal gardens for the deceased, as well as assisted in their transformation into an Osiris and a glorified spirit (šḥḥ), evident from an offering inscription in Rekhmira (TT 100):

> You will cross the river and traverse the Great Green, a shank of beef in your mouth. The goddess of the fields (comes to you) with her fish, and the mistress of fishing with her geese...737

**Boueza- or Egyptian trunkfish (Mormyrus niloticus Bloch & Schneider)**

Egyptian trunkfish, also known as the boueza-fish in the Egyptian Arabic vernacular, appears in the ḥrḥt-š-formal garden of the Domain of Amun in the TT 161 scene. The fish is shown realistic like Gardiner K4 (𓊎) from the Fifth Dynasty onwards and swims in pools with carp, tilapia, catfish, and white lotus. The Egyptian trunkfish is a freshwater member of the Mormyridae family, also known as elephantfish, which are native to the Nile Basin, the White Nile, and especially Lake

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734 See the text from the Ptah Temple at Memphis in Chapter Three on p. 78 of this work.
735 See the discussion about this type of aviary in Chapter Three on pp. 78-79, esp. footnote 304 of this work.
736 Angela von den Driesch, “Some Archaeozoological Remarks on Fishes in Ancient Egypt,” in Animals and Archaeology II, by Caroline Grigson and Juliet Clutton-Brock, (Oxford: BAR Series, 1983), Table 2; Brewer and Friedman, Fish and Fishing in Ancient Egypt, p. 16.
737 Assmann, Death and Salvation in Ancient Egypt, pp. 276-277.
Figure A2.39: *Tilapia* spp., *Labo* spp., *Syndontis* spp., and Egyptian trunkfish floating and eating at white lotus in the pool of the Theban *hrrt*-š-formal garden of Amun depicted in the TT 161 scene. Photograph of the Brussels’s facsimile by author © 2014.

Albert in the Eastern Delta.\(^738\) Trunkfish spp. are most recognizable from their elongated snout, tiny eyes, and small silver pectoral fins and long dorsal fins.\(^739\) The trunkfish was not only a source of nourishment in the formal gardens, but like the white lotus, was associated with the moon – the night time Osirian aspect of Ra – as trunkfish are “very active at night and spends the day quietly at the bottom of [a pool/pond/lake].”\(^740\) This is evident from the shepherd’s songs (*Hirtenliedes*) in the mastaba-tombs of Ti, Mereruka, and Sekhemankhptah dated from Fifth to Sixth Dynasty:

> ...The shepherd is in the water among the fishes, so he talks to the Mormyrus: “Oh, our shepherd, Oh Westerner!” He talks to the catfish: “West! Where is the shepherd? The shepherd went west.”\(^741\)

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\(^738\) Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 51.
\(^739\) Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 51.
\(^740\) Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 51.
Here, the Egyptian trunkfish and catfish aid in the deceased’s rebirth and resurrection as pilots to the West.

**Catfish (Synodontis spp.)**

Catfish spp. are depicted realistically like Gardiner K4A (𓊆) in the pools, ponds, or lakes of the ś- and the Domain of Amun formal garden scenes. Thirteen freshwater species of the catfish family Mochokidae are native to Egypt, the Nile Basin, and tropical Africa, varying in size from small to large (5-120 cm or 2-47 inches). 742 The Wahrindi (Synodontis schall Bloch & Schneider) was called whr(w) (𓊆𓊫) in Egyptian,743 which is interestingly similar to the verb whr (𓊆𓊫𓊫𓊫𓊫) or “to fish and fowl,”744 whr(w) (𓊆𓊫𓊫) or “fishers and fowlers,”745 and whr (𓊆𓊫) or “a fisherman’s boat.”746 These types of catfish have medium-sized eyes, strong cephalon-nuchal bumps, serrated spines, spotted brownish, black or silver scales, and cat-like barbels around their mouths.747 While, nfr (𓊆𓍑); sAr(y) denote air-breathing catfish of the *Heterobranchus* spp.748 Catfish were perfect for water features because, like carp, they are bottom feeders who love to burrow into shallow muddy ponds, lakes, and pools and eat insect larvae, small fish, algae, and detritus.749 *Synodontis schall* Bloch & Schneider remains were even discovered in the pool of the ś-formal garden of the Memorial Temple of


743 Gamer-Wallert, *Fische und Fischkulte im alten Ägypten*, p. 32.


749 Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 67; Sahrhage, *Fischfang und Fischkult im alten Ägypten*, p. 70; Ikram, *Choice cuts*, p. 10. The Egyptians were aware of the catfish’s predilection for this habitat, evident from the Late Period sarcophagus of the dwarf Djedher (CG 29302), which says: “O catfish whose secret forms are within the earth,” see Colleen Manassa, *The Late Period Underworld: Sarcophagi and Related Texts from the Nectanebid Period*, (Wiesbaden, Harrassowitz, 2007), p. 50.
Amenhotep, Son of Hapu. Catfish, like the Egyptian trunkfish, was related to the moon – the night aspect of Ra-Osiris and assisted in the deceased’s rebirth and resurrection as a journeyman to the West in Old Kingdom shepherd’s songs. This is evident from the Book of Caverns where 11 catfish daemons guarded the entrance to the horizon so that Ra could make his morning rise and guide the b3w of the dead into the West:

...O Catfish, lords of provisions, manifesting ones, who become/come from Osiris! O those who exist as Mekhentyenirty gods who become/come from Horus, lords of the provisions in the forepart of the Duat, powerful upon their corpses. O those in the following of the one foremost of the Duat, Catfish, great of provisions! O these great gods within their sarcophagi, Behold, I call to you, with the result that your bas might be powerful in the west...  

Their protective power in formal gardens is further evident from their function in Coffin Texts 312 in which the deceased condemns Seth (isft or chaos):

...To be recited over a waxen representation of an enemy, inscribed with the name of that enemy on its breast, with the bone of a whf-fish (Synodontis spp.); put it in the earth at the place of Osiris:...Behold that enemy of mine among men, in the netherworld, and among all creatures, he has allied himself with Seth... May you ruin him and bring him to collapse...

The notion of dualism – moon and sun, light and dark, creator and destroyer, aggressor and pacifier – is evident for the catfish. They were fierce guardians of Ra, Osiris, and the deceased but were also known to be friendly and gentle. This is according to classical sources that speak of the catfish in the sacred lake of the Temple of Bastet in the Eastern Delta:

In Bubastis, Egypt, there is an artificial pool with many tamed catfish; wherein they throw pieces of bread and they competitively leap for them as nourishment...

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752 Gamer-Wallert, Fische und Fischkulte im alten Ägypten, p. 118.
753 Manassa, The Late Period Underworld: Sarcophagi and Related Texts from the Nectanebid Period, p. 334.
754 Assmann, Death and Salvation in Ancient Egypt, p. 159.
Figure A2.40: *Lotus* spp., red-breasted geese, *Tilapia* spp., likely *T. zillii*, Catfish spp., and Elephantfish spp. floating and eating the vegetation in the pool of Qenamun’s ṣ-formal garden (TT 93 #2 scene). Drawing by author © 2020, after Plate XLVII in de Garis-Davies (1930).

The catfish in formal gardens were likewise associated with Bastet due to their appearance and behavior: their barbels look like whiskers and catfish are squeakers, which means they make sounds with their fins reminiscent of cat hissing.\(^756\)

**Carp (*Labeo* spp.)**

Carp spp. occur in the water features of ṣ- and Domain of Amun formal gardens and are realistically depicted in art from the Fifth Dynasty onwards. Four species of freshwater carp are native to Egypt and widespread throughout the Nile Basin:

1) African carp (*L. coubie* L.)
2) Assuan labeo (*L. horie* Herkel)
3) Nile carp (*L. niloticus* L.)
4) Niilinhuulibari or Nile lip barbie (*L. forskali* Rüppell)

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Carp spp. grows up to 50 centimeters (20 inches) long, have large lips\textsuperscript{757} with barbels, medium sized eyes, large caudal fins, small dorsal and pelvic fins, and silver to grey scalloped scales.\textsuperscript{758} Carp love calm inshore waters and are “herbivorous bottom feeders – known to swallow great quantities of mud from which they digest the diatoms – leaves, grasses, algae, detritus, and insects.”\textsuperscript{759} The religious symbolism of the carp is not known, but it is not surprising why the Egyptians included them in their formal gardens, as they would have naturally keep the water features clean and pest free.

**Elephantfish (Petrocephalus/Marcusenius spp.)**

Elephantfish spp. appears in the š-formal garden scenes and are shown realistic like Gardiner K2 (\textsuperscript{\textcopyright} and K3 (\textsuperscript{\textcircled{}}). There are 14 species of elephantfish native to the Nile Basin, which range in size from 15 centimeters to 1 meter (6 inches to 3.3 feet), have elephant-like nostrils, small inferior mouths and eyes, and are easily distinguishable from their identical dorsal and anal fins\textsuperscript{760} (See Fig. A2.62). Elephantfish were also journeyman of the dead to the West like catfish and carp, and were protectors of Ra-Osiris, evident from Coffin Texts 35 (variation B2L):

> The fish that are in the water protected me (from the...people who are in the watercourses), the fish that are in the watercourses cleanse me...\textsuperscript{761}

**Tilapia (Tilapia spp.) and Redbelly Tilapia (T. zillii Gervais = Coptodon zillii Gervais)**

Tilapia spp. occur in the š- and the Domain of Amun formal garden scenes, as well as in their produce in the relevant surrounding scenes. More than 70 species of tilapia exist in the Nile Basin, which range in size from small to large; they love shallow inshore waters, have triangular mouths,

\textsuperscript{757} This species’ family name *Labeo* literally means ‘the one who has large lips’ in Latin.
\textsuperscript{758} Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, pp. 57-58.
\textsuperscript{759} Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 58.
\textsuperscript{760} Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, p. 48; Gamer-Wallert, *Fische und Fischkulte im alten Ägypten*, p. 122; Salima Ikram, *Choice cuts*, p. 36.
\textsuperscript{761} Gamer-Wallert, *Fische und Fischkulte im alten Ägypten*, p. 123.
small eyes, and distinct elongated silver blue dorsal fins that nearly reach their squarish caudal fins. Tilapia are shown realistic like Gardiner K1 (.Drawable); however, its specific taxon might not always recognizable in Egyptian art. The redbelly tilapia (\( T. \) \( zillii \) Gervais = \( Coptodon zillii \) Gervais) is sometimes apparent due to its distinct red belly, especially in the TT E2 scene. Tilapia have been a preference in water features for centuries because they keep them clean and love algae and rooted aquatic flora unlike the Nile tilapia (\( T. nilotica \) L.) or the mango tilapia (\( T. galilae \) L.). Tilapia were protectors of the solar bark on its journey to the morning horizon, evident from a ‘Hymn to the Sun’ in Book of the Dead Spell 15:

You see the tilapia in its [true] form at the turquoise pool, and I behold the tilapia in its [true] nature guiding the speedy boat in its waters.

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762 Gamer-Wallert, *Fische und Fischkulte im alten Ägypten*, pp. 13-14; Brewer and Friedman, *Fish and Fishing in Ancient Egypt*, pp. 77, 79.


764 Robins, *Women in ancient Egypt*, p. 188.
The Egyptians equated Tilapia spp. with the sun instead of the moon, Hathor’s motherly aspect, and rebirth cycle because they are mouthbrooders. When their eggs hatch, the female will place them into the back her mouth in order to nurture them, only releasing the babies once they have hatched. This is further clear from the name of Tilapia spp. in Egyptian: \( w\aleph \delta \) (\( \overset{\text{o}}{\aleph} \)), which like the papyrus in water features of the formal gardens, played on the verb \( w\aleph \delta \) (\( \overset{\text{n}}{\aleph} \)) or “to flourish, to be green (fertile).”

**Insects in the Formal Gardens**

**Egyptian Honey Bee (\textit{Apis mellifera lamarckii} Cockerell)**

Egyptian honey bees are considered because of their indirect presence via the New Kingdom triangular honey pots (called \textit{mnt-} or \textit{mdkt-} jars\textsuperscript{768}) shown among the formal garden produce in the relevant surrounding scenes. Egyptian honey bees are native to Egypt and Sudan\textsuperscript{769} and shown stylized like Gardiner L2 (\( \overset{\text{m}}{\aleph} \)). An Egyptian honey bee was called \textit{\'fi-n-bit} (\( \overset{\text{n}}{\aleph} \overset{\text{m}}{\aleph} \overset{\text{\textdagger}}{\aleph} \)) or \textit{\'fi} (\( \overset{\text{\textdagger}}{\aleph} \overset{\text{m}}{\aleph} \)), coming from the same root as \textit{\'fi} (\( \overset{\text{\textdagger}}{\aleph} \overset{\text{\textdagger}}{\aleph} \)) or “to squeeze out.”\textsuperscript{770} In reality, this type of honey bee has six legs, a small ovate black and yellow abdomen, a hairy thorax, two forewings and hindwings, and two compound eyes with antennae. Egyptian honey bees are low in honey yield and collect nectar and pollen during their honeyflow season from January to June, producing their actual honey from April to June.\textsuperscript{771}

Apiculture in Egypt is known from the Predynastic Period onwards and most famously from Niwoserra Any’s sun-temple in the so-called \textit{Weltskammer} or ‘Room of Seasons,’ dating to

\textsuperscript{765} Brewer and Friedman, \textit{Fish and Fishing in Ancient Egypt}, p. 79.
\textsuperscript{766} Erman and Grapow, \textit{WB} I, nos. 268, 399.7-8; Gamer-Wallert, \textit{Fische und Fischkulte im alten Ägypten}, pp. 25-26.
\textsuperscript{767} Erman and Grapow, \textit{WB} I, nos. 264.12-266.9.
\textsuperscript{768} Differently shaped honey pots were used in the Old Kingdom. See Kritsky, \textit{Tears of Re: Beekeeping in ancient Egypt}, p. 85.
\textsuperscript{769} Soliman K. Kamel, \textit{et al.}, “A scientific note on hygienic behavior in \textit{Apis mellifera lamarckii} and \textit{A. m. carnica} in Egypt.” \textit{Apidologie} 34 (2003): p. 189.
\textsuperscript{770} Erman and Grapow, \textit{WB} I, nos. 41.3.-4, 182.1-11.
the Sixth Dynasty. \footnote{Kritsky, \textit{The Tears of Re: Beekeeping in Ancient Egypt}, pp. 9-10.} Apiaries \footnote{See the discussion of the possible term in Egyptian for an ‘apiary’ in Chapter Two, p. 33, footnote 144.} were likely placed in the (formal) gardens of the elite and in temple domains, as the ancient Egyptians were well-aware of the bee’s symbiotic relationship with plants, evident from Salt Papyrus 825 dated to the end of the Late Period (c. 300 B.C.):

As soon as all the bees had been fashioned, [their] work in the flowers of all the fields came into existence. \footnote{See the updated translation in Colleen Manassa, “Sounds of the netherworld,” in \textit{Mythos and Ritual, Festschrift für Jan Assmann zum 70}, ed. by Benedikt Rothöhler, \textit{et al.}, (Münster: Lit Verlag, 2008), p. 115; and also Frank F. Leek, “Some evidence of bees and honey in ancient Egypt,” \textit{Bee World} 56.4 (1975): pp. 141-148; or Kritsky, \textit{The Tears of Re: Beekeeping in Ancient Egypt}, p. 10.}

Honey could be raised in formal gardens because of its importance in food and medicine. There are more than 500 medicinal cures that include honey and it was used as a rub on meats, in desserts,
and as a sweetener for wine and beer.\textsuperscript{775} Honey was associated with the sun and had funerary and fertility symbolism. According to Salt Papyrus 825, bees and their honey were considered acts of solar creation by the sun-god due to their color, shape, and sweetness, which were referred to as the tears of Ra:

\begin{quote}
The god R[a] wept and the tears from his eyes fell on the ground and turned into a bee. The bee made (his honeycomb) and busied himself with the flowers of every plant; and so wax was made and also honey out of the tears of R[a].\textsuperscript{776}
\end{quote}

In funerary religion, honey was considered magical and aided in the deceased’s rebirth as a glorified spirit (\textit{slh}), as it preserves indefinitely unless it is exposed to high temperatures\textsuperscript{777} and evident from Pyramid Texts Recitations 429-30 for ‘Invoking the Spirit and Nut’ in the Pyramid of Pepy I:

\begin{quote}
Nut, as you became effective and took control in your mother Tefnut’s belly before you were born, may you join Pep[y], and he will not die. You are the daughter who took control in her mother, having appeared as a bee. May you \textit{slh}-ify this Pep[y] inside you, and he will not die.\textsuperscript{778}
\end{quote}

As well as, in Pyramid Texts Recitation 444 for ‘Joining Nut as a Star’:

\begin{quote}
Nut, you have appeared as a bee, for you control the gods and their kas as well, and their inheritance as well, and their nourishment as well, and all their things as well. Nut, whenever you make me revive, I live. Nut, as you live, I live.\textsuperscript{779}
\end{quote}

Honey’s use as an ‘\textit{slh}-ifying’ and protective agent is one reason that beeswax was collected from apiaries and further used in mummification, as it was believed to symbolically destroy both the enemies of Horus and Ra (Salt Papyrus 825).


\textsuperscript{777} Kritsky, \textit{The Tears of Re: Beekeeping in Ancient Egypt}, p. 106.

\textsuperscript{778} Allen, \textit{The ancient Egyptian pyramid texts}, p. 108.

\textsuperscript{779} Allen, \textit{The ancient Egyptian pyramid texts}, p. 112.
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Figure A3.46: One of the granite kneeling statues of Hatsheput in the White Crown (MMA 30.3.1) called ‘Ma’atkara-who-Offers-Fresh-Produce-to-Amun’ from her memorial temple at Deir el-Bahari. Photograph courtesy of the Creative Commons (CC.01) Public Domain Distribution of The Metropolitan Museum of Art, New York: https://www.metmuseum.org/art/collection/search/544448.
Figure A3.47: One of the granite kneeling statues of Hattshesput in the *nemes*-headdress (MMA 30.2.1) from her memorial temple at Deir el-Bahari. Photograph courtesy of the Creative Commons (CC.01) Public Domain Distribution of The Metropolitan Museum of Art, New York: https://www.metmuseum.org/art/collection/search/544449.
Figure A3.48: A granite striding statue of Thutmose III called ‘Menkheperra-who-Offers-Fresh-Produce-to-Amun-from-Karnak’ (JE 42056) found in proximity to Hatsheput’s obelisk at the Karnak Temple Complex. Photograph courtesy of the Egyptian Ministry of Antiquities from Plate XXXII in Legrain (1906).
Figure A3.49: Detail of the tripartite shrine in the ‘t-nt-ht’-formal garden of Amun depicted in TT 96 scene. Note how the style and form of the two preserved statues of Amenhotep II in the painting evoke those of the ‘NN-who-Offers-Fresh- Produce-to-Amun’ type known from Hatsheput (MMA 30.3.1) and Thutmose III (JE 42056). Drawing by author © 2020, after the Lasinio facsimile in Rosellini (1834).
Figure A3.50: A wall relief of Puntite luxuries being weighted and collected by workmen, as well as enumerated by the scribal- and architecture-goddess Seshat and her consort, the writing- and moon-god Thoth from the Second Terrace of the Memorial Temple of Hatshepsut. Puimra (TT 39), who has st-f-formal garden scene, was a ‘Second Priest of Amun’ during the coregency of Hatshepsut and Thutmose III and one of his duties was to oversee the weighing of incense gum and resin in all of the Theban temples of the Domain of Amun based on an inscription in his tomb. Photograph of Plate 8 in Mariette (1877), courtesy of the Creative Commons Public Domain of the Universität Heidelberg: https://digi.ub.uni-heidelberg.de/diglit/mariette1877.
Figure A3.51: A wall relief of Egyptian expeditionary vessels in Punt being loaded with luxury items from the Middle Colonnade of the Memorial Temple of Hatshepsut at Deir el-Bahari. Note the young and potted incense trees being carried in the top register and those being carried aboard the ship, as well as those already placed on board in cargo. Photograph of Plate LXXIV in Naville (1898), courtesy of the Creative Commons Public Domain of the Universität Heidelberg: https://digi.ub.uni-heidelberg.de/diglit/naville1898bd3.
Figure A3.52: A wall relief of Egyptian expeditionary vessels outbound from Punt to Egypt from the Middle Colonnade of the Memorial Temple of Hatshepsut at Deir el-Bahari. Note the potted incense trees in the ship’s cargo beside the rowers and below the mast. Photograph of Plate LXXV in Naville (1898) and courtesy of the Creative Commons Public Domain of the Universität Heidelberg: https://digi.ub.uni-heidelberg.de/diglit/naville1898bd3.
Figure A3.53: Facsimile (MMA 30.4.152) by Nina de Garis-Davies of Nubians carrying a small, young, and potted incense tree from Punt in Rekhmira’s tomb (TT 100). Photograph courtesy of the Creative Commons (CC.01) Public Domain Distribution of The Metropolitan Museum of Art, New York: https://www.metmuseum.org/art/collection/search/544606.
Figure A3.54: A wall relief from the Second Terrace of the Memorial Temple of Hatshepsut in kingly regalia, performing a ritual on the incense trees planted in her ħnty-š-formal garden at Deir el-Bahari, which were imported from Punt as a gift to Amun. Photograph of Plate 7 in Mariette (1877), courtesy of the Creative Commons Public Domain of the Universität Heidelberg: https://digi.ub.uni- heidelberg.de/diglit/mariette1877.
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