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Articles

Mission

ATINER is an Athens-based World Association of Academics and Researchers based in Athens. ATINER is an independent and non-profit **Association** with a **Mission** to become a forum where Academics and Researchers from all over the world can meet in Athens, exchange ideas on their research and discuss future developments in their disciplines, **as well as engage with professionals from other fields**. Athens was chosen because of its long history of academic gatherings, which go back thousands of years to *Plato's Academy* and *Aristotle's Lyceum.* Both these historic places are within walking distance from ATINER's downtown offices. Since antiquity, Athens was an open city. In the words of Pericles, **Athens**"*... is open to the world, we never expel a foreigner from learning or seeing".* (*"Pericles' Funeral Oration", in Thucydides, *The History of the Peloponnesian War).* It is ATINER's **mission** to revive the glory of Ancient Athens by inviting the World Academic Community to the city, to learn from each other in an environment of freedom and respect for other people's opinions and beliefs. After all, the free expression of one's opinion formed the basis for the development of democracy, and Athens was its cradle. As it turned out, the Golden Age of Athens was in fact, the Golden Age of the Western Civilization. *Education* and *(Re)searching* for the 'truth' are the pillars of any free (democratic) society. This is the reason why *Education* and *Research* are the two core words in ATINER's name.

President's Message

All ATINER's publications including its e-journals are open access without any costs (submission, processing, publishing, open access paid by authors, open access paid by readers etc.) and is independent of presentations at any of the many small events (conferences, symposiums, forums, colloquiums, courses, roundtable discussions) organized by ATINER throughout the year and entail significant costs of participating. The intellectual property rights of the submitting papers remain with the author. Before you submit, please make sure your paper meets the basic academic standards, which includes proper English. Some articles will be selected from the numerous papers that have been presented at the various annual international academic conferences organized by the different divisions and units of the Athens Institute for Education and Research. The plethora of papers presented every year will enable the editorial board of each journal to select the best, and in so doing produce a top-quality academic journal. In addition to papers presented, ATINER will encourage the independent submission of papers to be evaluated for publication.

The current issue is the fourth of the sixth volume of the *Athens Journal of Mediterranean Studies (AJMS)*, published by the Athens Institute for Education and Research.

Gregory T. Papanikos
President

ATINER

14th Annual International Conference on Mediterranean Studies
29-31 March & 1April 2021, Athens, Greece

The **Center for European & Mediterranean Affairs** organizes the **14th Annual International Conference on Mediterranean Studies, 29-31 March & 1 April 2021, Athens, Greece** sponsored by the Athens Journal of Mediterranean Studies. The aim of the conference is to bring together academics and researchers from all areas of Mediterranean Studies, such as history, arts, archaeology, philosophy, culture, sociology, politics, international relations, economics, business, sports, environment and ecology, etc.You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2021/FORM-MDT.doc).

Academic Members Responsible for the Conference

- **Dr. Gregory T. Papanikos**, President, ATINER & Honorary Professor, University of Stirling, U.K.
- **Dr. Steven Oberhelman,** Professor of Classics, Holder of the George Sumey Jr Endowed Professorship of Liberal Arts, and Associate Dean, Texas A&M University, USA, Vice President of International Programs, ATINER and Editor of the Athens Journal of History.
- **Dr. Nicholas Pappas**, Vice President of Academic Membership, ATINER & Professor of History, Sam Houston University, USA.
- **Dr. David Philip Wick**, Director, Arts, Humanities and Education Division, ATINER & Professor of History, Gordon College, USA.
- **Dr. Yannis Stivachtis**, Director, Center for European & Mediterranean Affairs and Associate Professor, Jean Monnet Chair & Director of International Studies Program, Virginia Tech – Virginia Polytechnic Institute & State University, USA.

Important Dates

- Abstract Submission: **30 November 2020**
- Submission of Paper: **1 March 2021**

Social and Educational Program

The Social Program Emphasizes the Educational Aspect of the Academic Meetings of Atiner.

- Greek Night Entertainment (This is the official dinner of the conference)
- Athens Sightseeing: Old and New-An Educational Urban Walk
- Social Dinner
- Mycenae Visit
- Exploration of the Aegean Islands
- Delphi Visit
- Ancient Corinth and Cape Sounion

Conference Fees

Conference fees vary from 400€ to 2000€
Details can be found at: https://www.atiner.gr/2019fees

Athens Institute for Education and Research
A World Association of Academics and Researchers

19th Annual International Conference on Politics
14-17 June 2021, Athens, Greece

The Politics & International Affairs Unit of the ATINER will hold its **19th Annual International Conference on Politics, 14-17 June 2021, Athens, Greece** sponsored by the Athens Journal of Social Sciences. The aim of the conference is to bring together academics, researchers and professionals in private and public organizations and governments of Politics and International Affairs and other related disciplines. You may participate as stream leader, presenter of one paper, chair of a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2021/FORM-POL.doc).

Important Dates
- Abstract Submission: **16 November 2020**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **17 May 2021**

Academic Member Responsible for the Conference

- **Dr. Yannis Stivachtis**, Director, Center for European & Mediterranean Affairs and Associate Professor, Jean Monnet Chair & Director of International Studies Program, Virginia Tech – Virginia Polytechnic Institute & State University, USA.

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What are you holding?
Scenes from the New Kingdom Private Tombs at Saqqara

By Heba Mahran[*]

Saqqara is the famous necropolis of the Old Kingdom capital Memphis. It continued to be important even during the New Kingdom when a group of high officials built their tombs at Saqqara though the official capital at that time; Thebes had a vast well- known necropolis. The owners of the New Kingdom private tombs at Saqqara were represented in different manners: seated, standing, worshiping gods, receiving offerings or practicing various activities and ceremonies. They were represented either alone or accompanied by their wives or children. In some of these scenes the owners held in their hands objects of different kinds. This paper examines such objects. The scenes will be analyzed to determine the reason for holding a specific object; is it a reference of a certain post or position of the tomb owner? Or is it related to the nature of the scene itself? Or does it symbolize a certain concept? The paper aims as well to build an inventory of objects based on the corpus of the studied scenes. A reference will be made to the objects held by tomb owners at Thebes; were they of different or of the same nature as those of Saqqara?

Keywords: *Saqqara, New Kingdom, objects, tomb owners*

Introduction

On mentioning New Kingdom tombs, the image formed in the mind is always that of the Theban tombs both the royal and the private ones. They are mostly intact supplying a lot of information on art, architecture, history and both religious and social life.

What really contributed in the preservation and thus the extensive study of these tombs, was the nature of Thebes itself far in the south, away from the interest of invaders and a center for vast New Kingdom building projects and tombs. On the other hand; though an administrative center in the New Kingdom; Memphis – the capital of the Old Kingdom- and follows its cemetery at Saqqara, suffered from both quarrying activities during the establishment of Cairo in AD 969 and the sale of a large number of objects (Martin 1991). A number of New Kingdom tombs remained intact in Saqqara including the tombs of Hormoheb, Maya, Thutmosis, Amenemone, Paser, Meryneith, Roy and Maia. But most of the remains are blocks or stelae fragments and small artifacts scattered in world museums (Martin 1991, Staring 2015).

The tombs and the reliefs of the New Kingdom Saqqara are as much important as those of Thebes; though harder to track down. The reliefs and the blocks from

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these tombs provide a rich source of information on the life and death of its owners, in addition to information on the historical period that they lived through.

One of many things that may attract the attention in the Saqqara reliefs is the objects that the owners hold in their hands while making various activities. The variety of objects gives a chance of variety of symbols and indicators.

The study aims to achieve the following objectives:

1. Examining a group of scenes from the New Kingdom private tombs at Saqqara where the owners are holding objects in their hands.
2. Classifying these objects depending on its appearance, using, and importance during this period.
3. Clarifying the reasons for holding these objects by the owners of the tombs and their wives.
4. Determining if these objects are referring to a certain position or job of the tomb owner; related to the nature of the scene itself; or symbolizing a certain concept.
5. Making an inventory of these objects through the corpus of the studied scenes.

Literature Review

Many scholars have long searched the New Kingdom tombs of Saqqara or as expressed "the lost tombs" or "the hidden tombs". All of their works assisted the present study tremendously. Some of these works are recorded in the followings.

Martin (1987) recorded a number of reliefs, blocks and other materials discovered by the 19th century archeologists at Saqqara and were submitted to museums everywhere including the Cairo Museum. These findings though were not properly dated or recorded attracted the attention to Memphite New Kingdom and its necropolis at Saqqara; the study of Martin. The study also provided a catalogue of reliefs.

Martin (1991) again showed interest in New Kingdom Saqqara when he described some of the found tombs at Saqqara and how they revealed the style of life during the New Kingdom at this area. Reliefs from different museums originating from these tombs were emphasized as a source of important information about the Memphite New Kingdom.

Staring (2015) in his PhD thesis on the New Kingdom tombs at Saqqara detailed the early discoveries, biographical information about tomb owners, particularly during the early 19th Dynasty. The study also supports a database of 448 Memphite tombs with tomb numbers, titles of owners and bibliography of finds.

Methodology

The present study aims at examining a group of scenes from the Saqqara New Kingdom tombs where the owners are holding objects in their hands, whether seated or standing. Description of various scenes' context will be also provided, in addition to the indications of the held objects. Because of the scope of the study only few references will be made to similar objects held by tomb owners in Thebes.

In order to achieve the aims of the study an analytical descriptive approach is employed. It is used to classify the objects held by the tomb owners and analyze their symbolism and indications.

Discussion and Results

In the ancient Egyptian art and since an early period there were some themes that were traditionally repeated and considered to be iconic. These themes are common through all the ancient Egyptian periods. This included representing the deceased either seated in front of an offering table or standing to supervise or watch activities (Müller 2015, Smith 1949, Vandier 1964, Woods 2015). On practicing these actions; tomb owners held certain objects in their hands; either in one hand or in both.

Tracking down 120 scenes of 47 owners revealed some objects; each of which had certain role or symbol (Table 1). These objects included: the Kherep scepter, the so-called salad scepter, the short scepter Nehbet, the long staff, the folded cloth, flower bouquets and plants, vessels and censers, in addition to some objects that had few appearances.

Table 1. *A Corpus of Studied Reliefs from the New Kingdom Saqqara Tomb*

Cat.	The Tomb	Titles	Dynasty	Objects	Context
1.	Ptahemwia	The Royal Butler	18	a. Salad Scepter. b. Long staff.	a. Seated in front of an offering table. b. Standing in inspection.
2.	Mahu	The Head of the Department of the Treasury of Lower Egypt in Memphis.	18	a. Flower bouquet. b. Long staff and a lettuce.	a. Seated being offered to. b. Standing with his wife.
3.	Thutmosis (BUB.I.19)	Chief of the Outline Draughtsmen in the Place of Truth.	18	a. Long Staff and a scribal palette. b. Small folded cloth c. Salad Scepter (his son).	a.Standing being libated and fumed. b. Seated in front of an offering table (his brother Kenna). c. Seated in front of an offering table.
4.	Apuia (S2730)	Chief of the Goldsmiths of the Lord of the Two Lands.	Late 18	a. Long Staff and a Nehbet Scepter. b. Kherep Scepter.	a. a relief of a standing statue being offered to. b. Seated in front of an offering Table.
5.	Ya	Not Known	Probably late 18	a. Bowl of water. b. Probably a folded cloth.	a. Seated in a banquet. b. Seated in front of an offering (damaged).
6.	Ipy	Chief Steward in Memphis and the Fan bearer on the Right of the King	Late 18	a. Khu fan and a folded cloth b. Khu fan with a round object and a folded cloth.	a. Seated in front of an offering Table. b. Seated in front of an offering Table.
7.	Iniuia	Chief Steward of Memphis	Late 18	a. A folded cloth. b. Salad scepter. c. Long Staff. d. Two plants with a folded cloth. e. Long staff and a Salad scepter with a folded cloth. f. Long Staff with a folded cloth..	a. Seated in front of an offering table. b. Seated in front of an offering table. c. seated receiving flower bouquet. d. Seated in front of an offering table. e. Standing with his wife. f. Supervising workers.
8.	Amenemone (Loret No.2)	Overseer of Craftsmen and Chief Goldsmith	Late 18	a. Two bunches of papyrus and lotus flowers. b. Nehbet Scepter with a Folded cloth and a long staff. c. Flower Bouquet and a Folded Cloth.	a. Standing offering to Sekhmet. b. Seated in front of an offering Table. c. Seated being offered flowers.
9.	Ameneminet	General of the lord of the Two Lands and Royal Scribe.	Late 18	a.Flower Bouquet b.Khu-fan. c. Long staff and a nehbet scepter.	a. Standing (damaged). b. Standing (damaged). c. Seated receiving offerings.

				d. Long Staff. e. Salad Scepter. f. Salad Scepter. g. Salad Scepter.	d. Standing (damaged) e. Probably Seated in front of an offering Table (damaged) f. Standing (damaged). g. Seated (damaged).
10.	Paatenemheb		Late 18	a. Two staffs (probably was scepter and long staff).	Standing with his wife in front of servants.
11.	Pay and Raia (LS 28 Lepsuis)	Overseer of the Harim at Memphis.	Late 18	a. Salad Scepter. b. Salad Scepter with a folded cloth. c. Salad Scepter. d. Salad Scepter. e. Salad Scepter with a folded cloth. f. Double staffs (Was scepter and long staff) and a salad scepter with a folded cloth. g. Salad Scepter. h. Two staffs (twin scene). i. Two staffs (opposite scenes). j. A folded cloth.	a. Seated in front of an offering table. b. Standing (damaged). c. Seated in front of an offering table. d. Seated in front of an offering table. e. Standing (damaged). f. Standing (damaged). g. Standing (damaged). h. Standing (damaged). i. Standing (damaged). j. Seated being offered to.
12.	Maia (BUB. I.20)	The wet-nurse of Tutankhamun and the great one of the Harem.	Late 18	-Flower bouquet.	-Seated receiving flower offerings.
13.	Maya and Meryt (LS 27)	Overseer of the treasury	Late 18	a. Kherep Scepter (Twin scene). b. Kherep Scepter together with a folded cloth. c. Kherep Scepter. d. Double staffs (Was scepter and long staff) and a kherep scepter. e. Two long staffs and a kherep scepter. f. Flower bouquet and long staff (twin scene). g. Double staffs (Was scepter and long staff). h. Double staffs (Was scepter and long staff) and Kherep Scepter with folded cloth i. Flower Bouquet and folded cloth. j. Kherep Scepter with folded cloth and a long staff. k. Long staff and Kherep Scepter. l. A folded cloth. m. Salad Scepter.	a. Seated in front of an offering table. b. Seated in front of an offering table. c. Offering table. d. Seated (damaged). e. Seated (damaged). f. Standing offering to his wife. g. Standing being censed. h. Standing with his wife being censed. i. Seated in front of an offering table. j. Seated being offered to. k. Standing in inspection. l. Seated in front of an offering table. m. Seated in front of an offering Table.

14.	Meryneith (H9)	Steward of the Temple of Aten.	Late 18	a. Kherep Scepter.(stela). b. Long staff. c. Long staff. d. Kherep Scepter. e. Nehbet scepter. f. Long staff and a folded cloth. g. Double staffs (Was scepter and long staff) and a folded cloth. i. Bouquet of papyrus umbels.(stela) j. Kherep Scepter.	a. Seated in front of an offering table. b. Entering the tomb. c. Inspecting workers. d. Seated in front of an offering table. e. Inspection of granaries. f. Standing statue receiving the opening of the mouth ceremony. g. Standing statue with his wife. i. Standing offering to Ra-horakhty. j. Seated in front of an offering table (Hatiay).
15.	Mery-Sekhmet (BUB I.5)	Overseer of the Double Granary of the Lord of the Two Lands.	Late 18	Double staffs (Was scepter and ong staff) and a Kherep Scepter with a folded cloth.	Standing receiving offerings.
16.	Hormoheb	the commander in chief	Late 18	a. Kherep-Scepter with a small knot of cloth. b. long staff. c. long staff. d. Double staffs (Was scepter and long staff) and kherep scepter. e. A lotus flower and a folded cloth.	a. Seated in front of an offering table. b. Standing rewarding an official. c. Standing receiving the submission of Egypt's rivals. d. Seated in front of an offering table. f. Seated while being purified.
17.	Suty (tomb of Pay and Raya)	The Troop Commander of the Lord of the Two Lands	Late 18	Salad Scepter	Seated receiving flower offering.
18.	NN (tomb of Pay and Raya)	……..	Late 18	Folded Cloth.	Seated receiving offerings.
19.	Nehy (tomb of Pay and Raya)	Chief Guardian of the Harim	Late 18-Early 19	Folded Cloth	Seated in front of an offering table.
20.	Roy	Chief of bowmen and Overseer of Horses.	Late 18-Early 19	a. Flower Bouquets. b. Kherep Scepter and a folded cloth	a. Standing offering to Ra. b. Seated in front of an offering Table.
21.	Smn	………	Late 18-Early 19	Salad Scepter.	Damaged
22.	NN	Royal Scribe	Late 18-Early 19	Double staffs (Was scepter and long staff) and probably two plants	Receiving flower offerings.
23.	NN	……….	Late 18-Early 19	A plant and a folded Cloth.	Seated in front of an offering Table.
24.	Amenemone	Royal Scribe and Overseer of the	19	a. Khu Fan and a flower bouquet.	a. Seated in front of an offering Table.

	(ST101)	Treasury of the Two Lands and the Fan bearer on the Rght of the King.		b. Kherep Scepter (twin scene).	b. Seated in front of an offering Table.
25.	Amenemwia	……..	19	Probably Two Plants.	Seated in front of an offering Table.
26.	Amenwahsu	Scribe of the Altar of the Lord of the Two Lands.	19	Hsi-vase and an incense burner.	Censing and libating in front of Seti I and prince Ramses.
27.	Iyiry	High Priest of Ptah	19	a. Flower bouquet and a long staff. b. Kherep Scepter. c.Heka scepter, khu fan and a folded cloth.	a. Standing with his wife. b. Seated in front of an offering table. c. Kneeling
28.	Wenefdjedsen	Royal Buttler	19	a.Hsi-vase and flower bouquet. b.Hmst-vase and incense burner.	a. Purification of offerings in front of Ptah. b. Purification of offerings in front of Ptah-Sokar.
29.	Paser	Royal scribe and Overseer of builders of the lord of the two land.	19	a Kherep Scepter (BM 165). b.Kherep Scepter.	a. Seated in front of an offering table. b. Damaged.
30.	Ptahmose	Mayor of Memphis	19	a. Double staffs (Was scepter and long Staff) and Kherep Scepter with a folded cloth. b. Kherep Scepter with a folded cloth.	a. Standing (damaged0. b. Seated in front of an offering Table.
31.	Ptahnefer	Scribe of the Treasury.	19	Salad Scepter	Seated in front of an offering Table.
32.	Huynefer (S 217)	The Fortress Commander, royal scribe.	19	a.Kherep Scepter.(twin scene) b.flower bouquet.(twin scene)	a-Huynefere seated receiving offerings. Nebnefer being censed. b-Nebnefer seated in front of an offering table.
33.	Mahu (S218)	Royal scribe, Chief Steward of Ptah and Overseer of the civil administration of the Delta.	19	Kherep scepter.	Seated in front of an offering table.
34.	Mose (Loret No/5)	Scribe of the treasury of Ptah	19	a. Salad Scepter. b. anx and a kherep scepter. c. Nehbet Scepter with a folded cloth.	a. Seated in front of an offering table. b. Standing (damaged). c. Standing.
35.	Mery-Ra (LS8)	Head of the Custodians	19	Kherep Scepter and Long Staff.	Standing
36.	Neferenpet	High Priest of Ptah.	19	Libation Vase and an incense- burner.	Purification of offerings in front of Anubis.

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37.	Khemwaset	High Priest of Ptah.	19	Hsi-vase.	Purification of offerings (damaged).
38.	Ramsesnakht	General	19	Double staffs (Was scepter and long staff).	Standing (destroyed)
39.	Raia	Chief of singers of Ptah lord of Truth in the city of Memphis.	19	a. Salad Scepter b. Salad Scepter	a. Seated in front of an offering Table. b. Seated in front of an offering Table.
40.	Ramsesemperre	Fan bearer on the right of the king and Chief Royal Butler.	19	Khu- fan and a folded cloth.	Kneeling before Hathor.
41.	Tatia	Wab-Priest of the front of Ptah and Chief of Goldsmiths	19	a. Kherep Scepter. b. Flower Bouquet and Salad Scepter.	a. Seated in front of an offering Table. b. Seated in front of an offering Table.
42.	Tia and Tia	Royal scribe, Overseer of treasury and the fan bearer on the right of the king.	19	a. Kherep Scepter. b. A tray with the seven sacred oils. c. Incense burner and nmst jar. d. Flower bouquet. e. Khu Fan, folded cloth and heka scepter. f. Flower bouquet. g. Salad Scepter. h. flower bouquet. i. flower bouquet.	a. Seated in front of an offering table. b. Standing offering to Osiris c. Standing offering to Horus. d. Standing offering to deities. e. In adoration to Osiris. f. Standing (damaged). g. Seated in front of an offering table. h. Walking from the chapel (damaged). i. Honoring Seti I and prince Ramses.
43.	NN	Steward of his lord (?)	19	Probably double staffs (Was scepter and long staff) and kherep scepter.	Seated (damaged)
44.	NN	The Vizier	19	Double staffs (Was scepter and long staff)	Seated in front of an offering table (damaged).
45.	Hekamaatre-neheh	First Royal Buttler of the Lord of the Two Lands.	20	Khu- fan	Standing in front of a god (damaged)
46.	Penrennut	Chief of Police (Medjay)	Ramesside	A Long Staff.	Standing (damaged).
47.	Merymaat	Scribe and Controller of the God's Offerings.	Ramesside	Salad Scepter.	Seated in front of an offering Table.

The Kherep Scepter

In general, scepters were insignia derived from tools. In funerary contexts; scepters became very important to be held by the deceased referring sometimes to his post. They were held by men more than women (Graham 2001, Kaplony 1986).

The form of the scepter was used as a determinative (S42) in a number of words (Gardiner, 1973). These words were all going within the same cycle; abA "command" (Erman and Grapow 1926, Faulkner 1981), sxm "powerful" (Erman and Grapow 1930, Faulkner 1981), and xrp "govern, control, administer". Meanwhile, these words were used in the texts as a reference of "sceptre" (Faulkner 1981). The word abA was used in the pyramid texts and object friezes of the Middle Kingdom to designate this type of scepters, while the words sxm and xrp were used during the New Kingdom and after (Jéquier 1921). The scepter was also sacred to Anubis and Osiris (Wilkinson 2003, Graham 2001). In the Thinite period this form of scepters appeared as a hieroglyphic sign while later on it appeared held by kings and high officials in various forms and decorations (Jéquier 1921). During the Old and Middle Kingdoms the high officials appeared traditionally holding the xrp (kherep) sceptre either alone or together with other objects; standing or seated in front of offering tables (Harpur 1987, Swinton 2003, Kanawati and Woods 2009, New Berry 1893). Besides being a symbol of power and authority; the scepter was used in consecration of offerings as kings appeared during the New Kingdom moving the scepter on top of offerings (Jéquier 1921).

In New Kingdom Saqqara reliefs, the scepter is held in the hands of the tomb owners either seated or standing, alone or accompanied by other objects either in the same hand or in the other hand. This appears in the reliefs of Aupia (Cat.4,b) (Quibell and Hayter 1927, Staring 2015). The tomb of Maya and Meryt houses 13 scenes with objects held by the owner, 8 of them represented the kherep scepter either alone (Figure 1) or together with other objects (Cat.13.a,b,c,d,e,h,j,k) (Staring 2015, Martin et al. 2012, Quibell 1912). Three scenes of the kherep scepter being carried solely came from the tomb of Meryneith, two belongs to Meryneith (Cat.14.a,d) (Raven and Van Walsem 2014), while the third belongs to Hatiay, a member of his family (Cat.14.j) (Raven and Van Walsem 2014). All representing the deceased in the same context seated in front of the offering table while the offerings are being purified.

Figure 1. *A Twin Scene of Maya Holding a Kherep Scepter, Late 18ᵗʰ Dynasty*
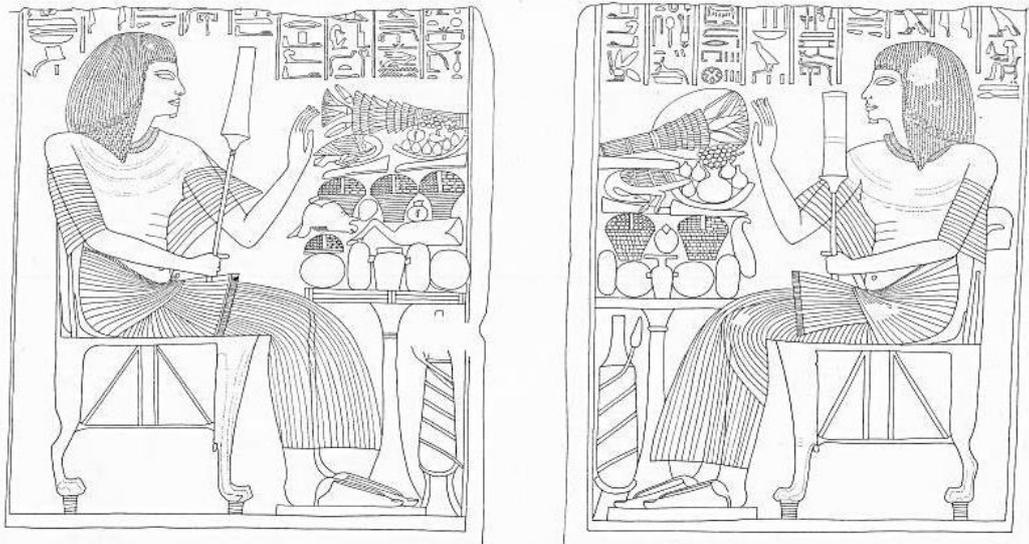
Source: Martin et al. 2012. The Tomb of Maya and Meryt I, Pl.8 (1, 2)

A number of other scenes represent the kherep with other objects as those of Mery-Sekhmet (Cat.15) (Zivie 2000, Staring 2014), Hormoheb (Cat.16.a,d) (Martin 1991), Roy (Cat.20.b) (Figure 2) (Martin 1987, 1991), Ptahmose (Cat.30.a,b) (Staring 2014). Mose of the 19ᵗʰ Dynasty holds a kherep scepter in one hand and a anx sign in the other (Cat.34.b) (Oeters 2017, Orsenigo 2013). anx means life. It refers to existence, thus associated with gods. It is often represented given by the gods into the nostrils of kings; a symbol of granting the breath of life. It was included among the symbolism of the Egyptian church due to its cruciform shape (Lurker 1980). Mery –Ra appears with long staff in his right hand and the kherep scepter on the left (Cat.35) (Zivie 2000, Martin, 1991).

Figure 2. *Roy with a Kherep Scepter and a Folded Cloth, Late 18ᵗʰ- Early 19ᵗʰ Dynasty*
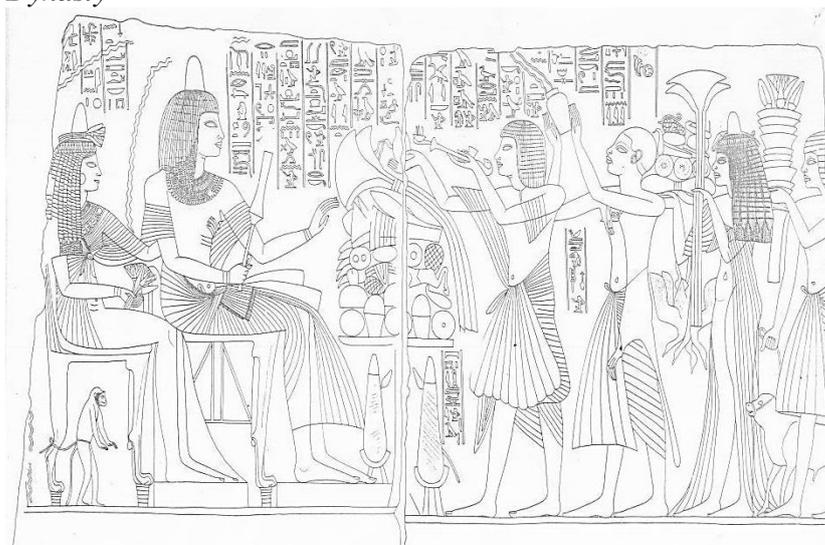
Source: Martin, Corpus of Reliefs of the New Kingdom Necropolis and Lower Egypt, Pl. 15 (42)

Many officials of the 19th Dynasty appeared holding the kherep scepter alone in front of offering tables like: Amenemone with his sister in a twin scene (Cat.24.b) (Gohary 1991), Iyiry, the high priest of Memphis (Cat.27.b) (Anthes 1965, Staring 2015), Paser (Cat.29.a,b) (Martin et al. 1985), Huynefer (Cat.32.a) (Gohary 2010), Mahu (Cat.33) (Gohary 2009, Staring 2015) and Tatia (Cat.41.a) (Oeters 2017).

The So-Called Salad Scepter

A different type of scepters appears in the Saqqara scenes held by high officials. Many scholars described it as a "Salad scepter" without more clarification justifying this appellation (Schneider 2012). Describing this type of scepters as a salad scepter is considering several objects combined together in one entity. The scepter seems to be not a one entity but two things of different sizes held together in one hand. In one case the object accompanying the kherep scepter is described as "an unidentified broad oblong object" (Schneider 2012).

In some scenes the object besides the kherep scepter appears with round shape as in the scenes of: Thutmosis (Cat.3.c) (Zivie 2013), Iniuia (Cat.7.d) (Schneider 2012), Amenememinet (Cat.8.d,e,f) (Koefoed-Petersen 1956, Moskau 2000, Martin 1991), Pay (Cat.11.a,b,c,d,e,f, g) (Raven 2005), Smn (Cat.21) (Martin 1987), Raia (Cat. 39. a,b) (Figure 3) (Martin et al. 1985, Martin 1991), and in others with pointed sides like a plant (Gaballa 1977, Martin et al. 2012, Gohary 2010, Hofmann 2004, Schneider 2012, Raven 2005). Ptahemwia (Cat.1.a) (Raven et al. 2006-2007). Iniuia (Cat. 7. b) (Figure 4) (Schneider 2012), Maya (Cat.13.m) (Martin et al. 2012), Suty (Cat. 17) (Raven, 2005), Ptahnefer (Cat.31) (Hofmann, 2004), Mose (Cat. 34. a) (Oeters 2017, Orsenigo 2013), Tatia (Cat.41) (Oeters 2017), Tia (Cat.42.f) (Martin 1997), Merymaat (Cat.47) (Raven et al. 2011).

Figure 3. *Raia Holding a Round Salad Scepter, 19th Dynasty*
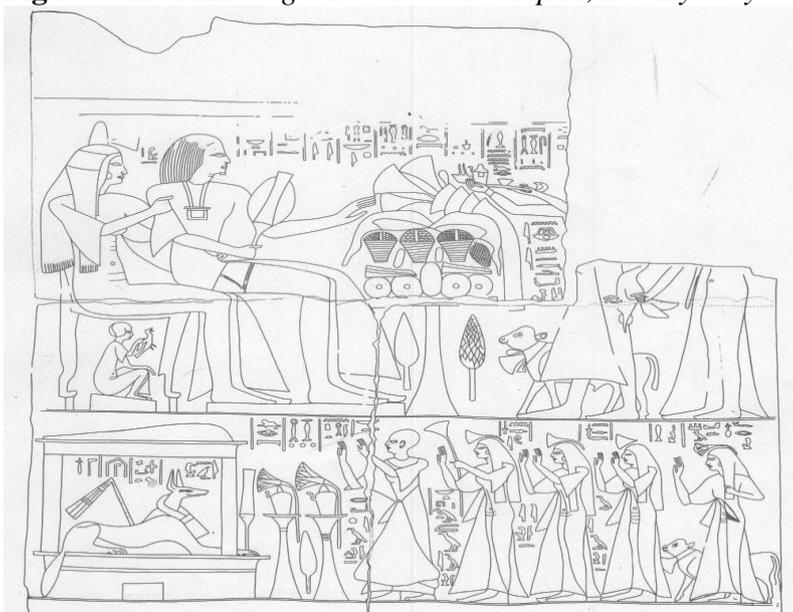
Source: Martin et al. 1985. *The Tomb-Chapel of Paser and Raia at Saqqara*, Pl. 24

Figure 4. *Iniuia with a Pointed Side Salad Scepter, Late 18ᵗʰ Dynasty*
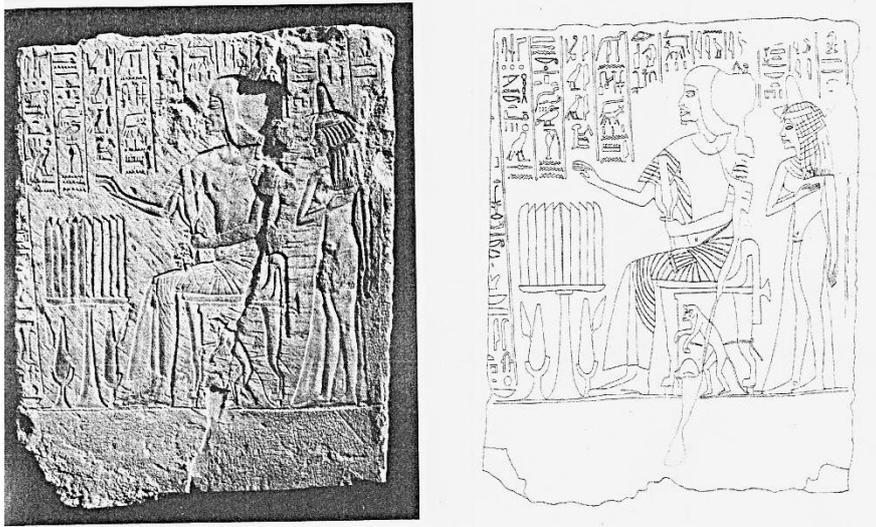
Source: Schneider 2012. *The Tomb of Iniuia*, 87, Fig.III.38. Scene 20

On examining the scenes of the salad scepter which has the round sides it is possible to assume that the salad scepter is nothing but a kherep scepter with a round fan held together in one hand. This assumption takes into consideration the similarity between the round or oblong object appearing behind the scepter and the shapes of the known round fans (Thompson 1992, El Hadidi and Hamdy 2011). The fan bearer Ipy holds the same round object together with the ostrich feather fan. Thus; two fans one for his post and the other for his convenience (Cat.6.b) (Pasquali and Gessler-Löhr 2011).

Fans were used in ancient Egypt for both ceremonial and practical purposes. Real examples appeared in both royal and non-royal tombs. The usual shape of fans was that of the round or semicircular one similar to lotus leafs. Fans were used to cool down people and content of jars. Sometimes fans were used to scare away insects and as fire fans. They were made of papyrus reeds, palm leafs, feathers especially ostriches' (Fischer 1977, Thompson 1992, El Hadidi and Hamdy 2011).

As for the salad scepter with pointed sides; it is very possible to represent two plants on both sides of the scepter particularly that flowers and plants were presented as offerings and flower bouquets were held in scenes by both men and women (Davies and Davies 1933, Vandier 1964)

In the salad scepters especially those of Iniuia, Mose, Tatia (Cat.7.b,34.a and 41) (Oeters 2017); the pointed objects on both sides are very much similar to the two plants held in some Saqqara New Kingdom scenes as NN, the royal scribe (Cat. 22) (Martin 1987). Iniuia himself holds two pointed plants with a folded cloth similar to the ones held by him with the Kherep scepter (Cat.7.e) (Schneider 2012) (Figure 5).

Figure 5. *Iniuia Holding Two Pointed Plants with a Folded Cloth, Late 18th Dynasty*

Source: Schineder 2012. *The Tomb of Iniuia*, 80, Fig.III.30. Scene 15

Similar pointed plants were held by a lady in the Theban tomb of Amenemop (TT148) (Ockinga 2009). Another scene from a 20th Dynsty tomb at El Mashayikh represents a bouquet of flowers being represented with the same form of pointed plants on both sides of the bouquet (Woods 2015). It is noticeable as well in the scenes of Mose and Tatia (Cat.34.a and 41), that they are picking up plants from the offering table in front of them.

The two salad scepters in the tomb of Iniuia, the one with the round shape object (Cat.7.d) and the other with the pointed sides (Cat.7.b) are a proof that the salad scepter is not a one entity but two as detailed. It is logic if one entity to be similarly represented.

The Nehbet Scepter

This short scepter is considered to be one of the symbols of power and commandment. It appeared in scenes since an early date and was one of the objects represented on Middle Kingdom Sarcophagi. But it was not popular during the New Kingdom. The scepter is wide from the top and goes narrow until the handle, similar to a tree (Jéquier 1921). It is known in the texts as nHbt, which was translated as the "Lotus Bud Scepter". In texts, the lotus bud is known as nHb (Erman and Grapow 1928, Faulkner 1981).

Figure 6. *Meryneith Inspecting Granaries while Holding Nehbet Scepter, Late 18th Dynasty*
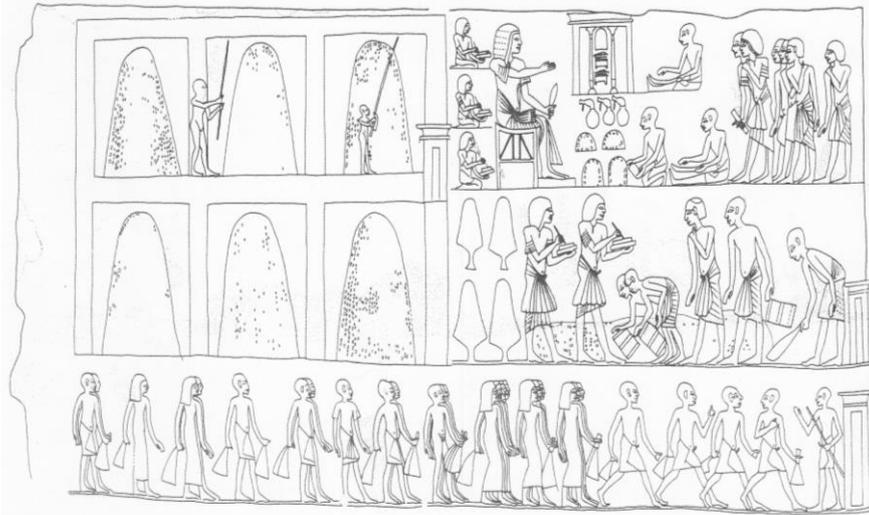
Source: Raven and Van Walsem 2014. *The Tomb of Meryneith at Saqqara*, 102 (17)

Few scenes from Memphis represented high officials holding the Nehbet scepter in various contexts, either alone or with other objects: Apuia (Cat.4a). The sceptre was described as a dagger. It is mostly the sceptre as a dagger doesn't fit in a funerary scene (Quibell and Hayter 1927). Amenemone (Cat.8.b) (Ockinga 2004), Ameneminet (Cat.9.c) (Moscau 2000). Meryneith (Cat.4.e) (Figure 6) (Raven and Van Walsem 2014). Mose (Cat.34.c) (Gaballa 1977). Probably Schneider related the two plants held by Iniuia (Cat.7.e) (Figure 5) to the Nehbet sceptre when he described them as "double scepter, resembling the salad sceptre without kherep" (Schneider 2012).

The Long Staff

The type of the long staff held by officials as a symbol of authority and status is generally called mdw (Erman and Grapow 1928, Fischer 1979). It appeared held by officials in various postures; standing, seated or leaning on it (Harpur 1987). The manufacture of the staff is well attested in scenes and there were real examples found deposited in the tombs (Fischer 1986). Holding the long staff was not restricted to high official as one might think, it was a royal posture known since early dynastic period when king Wedymuw appeared standing on an ivory piece holding a long staff in his right hand while on the left he held a mace. King Senefru and Khufu of the 4th Dynasty as well appeared seated holding a long staff (Smith 1949). Even during the New Kingdom King Seti was represented holding the long staff in one hand and in the other he held a folded cloth (Wilkinson 2003). In the studied scenes the long staff appeared either held alone or with other objects. The majority of the scenes show the tomb owner standing in inspection and this gives more space to show the full length of the staff (Figure 7) while in the seated scenes the staff appears to be little shorter (Figure 8). The staff is grabbed from the middle or held by its top.

The staff appeared alone in the scenes of: Ptahemwia (Cat.1b) (Raven et al. 2006–2007), Iniuia (Cat.7.c) who holds the staff from its top (Schneider 2012), Ameneminet (Cat.9.d) (Martin 1987, Moscau 2000), Meryneith (Cat.13.b) where the staff is not touching the ground (Raven et al. 2001–2002, Raven and Van Walsem 2014), Hormoheb (Cat.16.b,c) (Martin 1991), Penrennut, the chief of the Medjay, who appeared holding the long staff with a papyri-form top similar to the wAD scepter (Cat.46) (Quibell 1912, Kaplony 1986, Graham 2001) instead of holding a policing stick which is normally shorter (Fischer 1979).

Figure 7. *Maya Holding the Long Staff in Two Different Ways while Standing, Late 18th Dynasty*
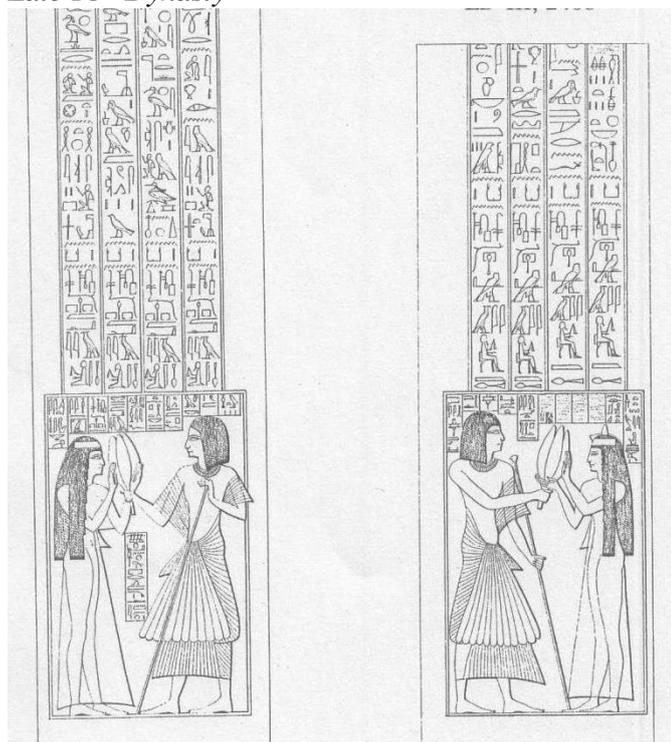
Source: Martin et al. 2012. *The Tomb of Maya and Meryt* I, Pl.23 (24, 26)

Though holding the long staff together with the kherep scepter was a traditional posture of high officials since the 3rd Dynasty panels of Hesira (Smith 1949), the theme only appeared once in the studied scenes in the tomb of Maya (Cat.13.j,k) (Quibell 1912, Martin et al. 2012, Martin 1991). When the long staff was accompanied by the kherep scepter; the staff was usually held in the right hand while the scepter was on the left hidding behind the deceased (Fischer 1986, Loeb and Nunn 1997, Smith 1949, Kanawati and Woods 2008, Swinton 2003) though the sign A22 in Gardiner's list shows a full view of the scepter (Gardiner 1973). Here the scenes of Maya are showing the staff held on the left while the kherep is on the right; thus appearing fully.

Figure 8. *Maya Holding the Long Staff while Seated, Late 18th Dynasty*
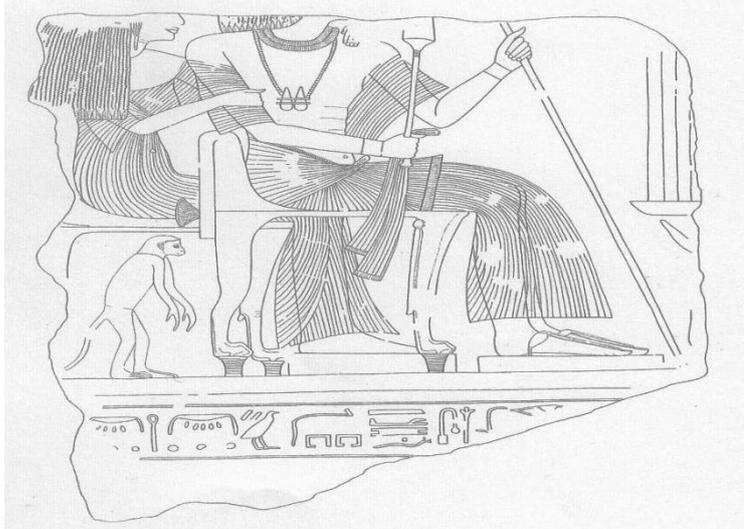
Source: Martin et al. 2012. *The Tomb of Maya and Meryt* I, Pl.38 (37)

Besides the kherep scepter, the mdw long staff was held accompanied by other objects. This is attested in the scenes of Mahu (Cat 2.b) (Gressler-Löhr 2007) and Iniuia (Cat.7.e, f) (Schneider 2012). Amenemone is having a papyri-form top staff resting on his arm and chest while a nehbet scepter is on the left with a folded cloth (Cat.8.b) (Ockinga 2004). A similar staff is held by Maya as well (Cat.13.f) (Martin et al. 2012) and Penennnut (Cat.46). Amenemminet as well as Aupia (Cat.4.a) (Quibell and Hayter 1927) held the staff in one hand and the nehbet scepter on the other (Cat.9.d) (Moscau 2000). Thutmosis had the long staff with a knob in the right hand while on the left he had a scribal palette, the symbol of his office as a head of draughtsman (Cat.3.a) (Figure 9) (Zivie 2013). A reminder of one of the wooden panels of Hesire, where he had the kherep scepter on the right hand and the mdw staff together with his scribal equipment (Smith 1949). Iyiry held a very long staff in his left hand resting on his shoulder while in the other hand he holds a flower bouquet (Cat.27.a) (Anthes 1965).

There are some scenes that represent the deceased holding two staffs (Staring 2014). In some cases two mdw long staff as in the scenes Maya (Cat.13.a) and of Pay (Cat.11.h,j) (Figure 10). The scenes are damaged from the top but the rest of folded cloths appear, but he could also hold kherep scepters together with the folded cloth (Raven 2005).

Figure 9. *Thutmosis Standing with a Long Staff and a Scribal Palette, 18th Dynasty*
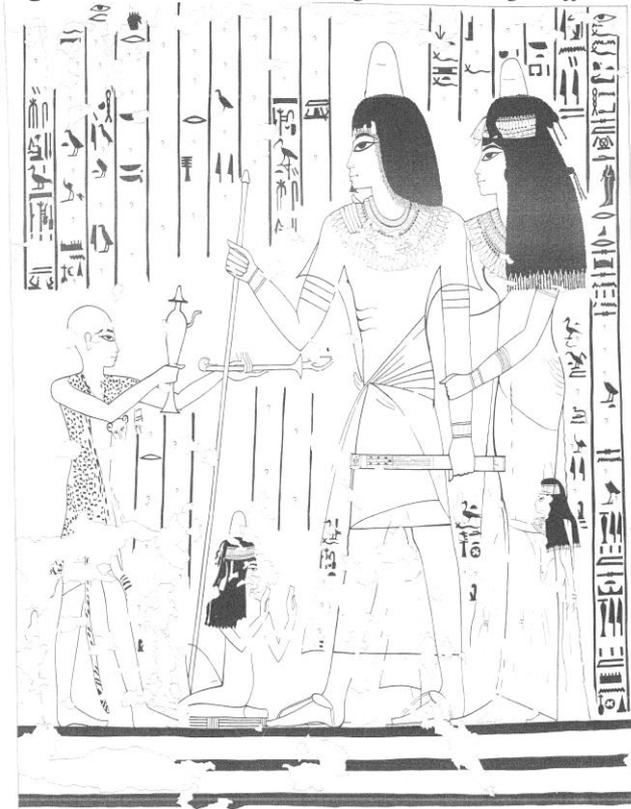
Source: Zivie 2013. *La Tombe de Thoutmes, Directeur des Peintres dans la Place de Maat*, Pl.15

Some scenes represent both the wAs scepter (Erman and Grapow 1926, Faulkner 1981) and the mdw long staff. The wAs scepter is a well attested scepter that is frequently held by both gods and kings. It is a tall staff with a head similar to the animal sacred to Seth. It has a forked end probably to kill evil creatures especially snakes as long as it is held by the gods. The wAs scepter was also considered to be a supporter of heavens (Hassan 1976, Kaplony 1986, Graham 2001). It is probably carried for being divine and something related to the gods to accompany the deceased in his afterlife journey. It is noticeable that it is held together with the long staff. A number of this combination appeared in the scenes of Paatenemheb (Cat. 10) (Staring 2014), Pay (Cat.11.f) (Raven et al. 2015), Maya (Cat.13.d,g,h) (Graefe 1975, Martin et al. 2012), Meryneith (Cat.14.g) (Raven et al. 2001-2002, Raven and Van Walsem 2014), Hormoheb (Cat.16.d) (Martin 1991), Merysekhmet (Cat.15) (Zivie 2000), NN (Cat.22) (Figure 11) (Martin 1987), Ptahmose (Cat.30 a) and Ramsesnakht (Ca.38) (Berlandini-Grenier 1979). Other three unknown officials held both objects (Cat.22,43,44) (Martin 1987). This practice is also known in New Kingdom Theban tombs and later on (Staring 2014, Martin 1987).

Figure 10. *Remains of a Relief of Pay Holding Two Staffs, Late 18th Dynasty*

Source: Raven et al. 2005. *The Tomb of Pay and Raia at Saqqara*, Pl.53 (Scene 57)

Figure 11. *Unknown Royal Scribe Holding Double Staffs and Two Plants, Late 18th-Early 19th Dynasty*
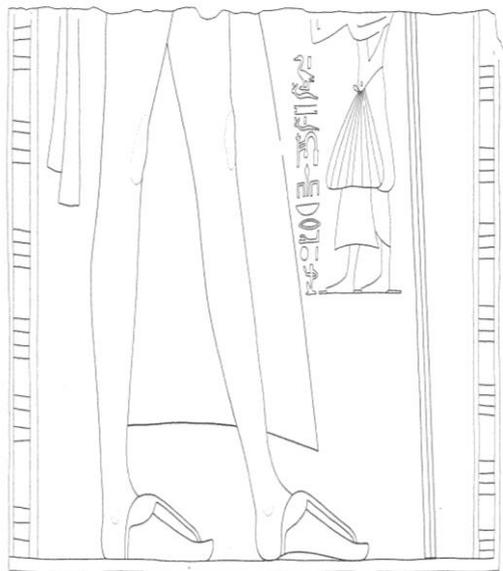
Source: Martin, *Corpus of Reliefs of the New Kingdom Necropolis and Lower Egypt*, Pl.13

The Folded Cloth

It seems that the folded cloth, handkerchief or napkin was very popular. It was held by high officials either alone or accompanied by other objects since the Old

Kingdom. It started at that time as a short ribbon made like a knot, giving it an appearance of a cord (Kanawati and Woods 2008, Brovarski 2000). Since the time of Amenhotep III, the cord became longer and sometimes pleated or fringed at one end like a folded cloth (Pasquali and Gessler-Löhr 2011). But the traditional form of the napkin continued to be used in both New Kingdom Saqqara tombs and Theban tombs (Davies 1941, Davies 1943).

From Saqqara the folded cloth appeared alone in the scenes of Kenna (Cat.3.b), a small cord like the traditional form of the Old Kingdom (Figure 12) (Zivie 2013), Ya (Cat.5.b) (Quibell 2012), Maya(Cat.13.l) (Martin et al. 2012), Iniuia (Cat.7.a) (Schneider 2012), NN (Cat.18), Nehy (Cat.19) (Raven 2005). All were long and not pleated.

The folded cloth appeared more frequently in scenes with other objects either within the same hand or in a separate hand as in the scenes of Ipy (Cat.6.a,b) (Pasquali and Gessler-Löhr 2011) and Iniuia (Cat.7.e,f) (Schneider 2012), where the cloth was long not pleated. As well in the scenes of Amenemone (Cat.8.b,c.) (Ockinga 1998, Ockinga 2004) and Amenemint (Cat.9.d) (Koefoed-Petersen 1956). The tomb of Maya housed four scenes (Cat.13.b,h,i,j) (Graefe 1975, Martin et al. 2012). The cloth was pleated in two scenes and not pleated in other two. The folded cloth as well appeared in the hands of Merysehhmet (Cat.15) (Staring 2014), Hormoheb (Cat.16.a,e) (Martin 1991, Martin 1977), Roy (Cat.20.b) (Figure 2) (Martin 1991), NN (Cat.23) (Martin 1987) and Ptahmose (Cat.30a,b) (Staring 2014). Both Iyry (Cat.27.c) and Ramsesempere (Cat.40) (Figure 13) held a very tall cloth that is hanged on their right arms, noticeably both with a Khu fan in the same hand (Anthes 1965, Martin 1991). All the others held the cloth by its top leaving its end lying down on their laps. All the napkins were not pleated (Figure 2) except in the two scenes of Maya (Cat.13.b,j) (Figure 8) and that of Iyry (Cat.27,c). Examples are known from New Kingdom Theban Tombs of non-pleated forms (Ockinga 2009).

Figure 12. *Kenna Holding a Small Knot of Cloth, 18ᵗʰDynasty*

Source: Zivie 2013. *La Tombe de Thutmes, Directeur des Peintres dans la Place de Maat*, Pl.15

Figure 13. *Ramsesempere Hanging a Folded Cloth on his Arm, 19th Dynasty*
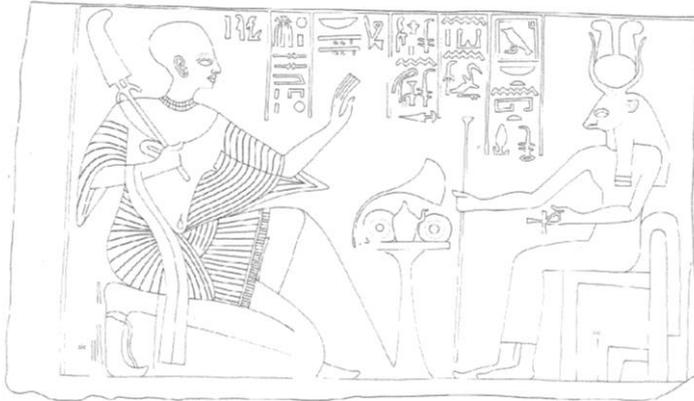
Source: Martin 1991, The Hidden Tombs of Memphis, Fig.123

Flowers and Plants

It is not strange in an agricultural land like ancient Egypt to meet such an interest in plants and flowers. Generally, the ancient Egyptian viewed plants and flowers as a symbol of rejuvenation when they are only seeds at their beginning like a child, then flourish and take their course of life and eventually die (Zaki 2013, Mostafa 1994).

This idea is confirmed by the rising of the sun from the primeval lotus flower during the creation of the world (Mostafa 1994). Flowers were represented in the tombs since the Old Kingdom and later on in different manners: sniffed by the deceased, held by both males and females, presented as offerings, decorating offering tables, decorating the heads and jewelry of tomb owners (Harpur 1987). Flower bouquets in different types and sizes appeared during the New Kingdom comprising mainly lilies, lotus and papyrus flowers; bell shaped flower bouquets staff or column bouquets, or fresh flowers bouquets appeared while bunches of the same or different types of flowers were known as well (Zaki 2013).

Flower bouquets were presented as offerings to the gods as in the examples of Amenemone (Cat.8.a) (Figure 14) when he offered two bunches of flowers in both hands to the goddess Sekhmet, the bunch in his right hand is consisting of papyrus plants while the one in his left are lotus flowers with a knot (Ockinga 2004, Ockinga 1998, Davies 1941, 1943).

Figure 14. *Ameemone Offering Flowers to Sekhmet, Late 18th Dynasty*
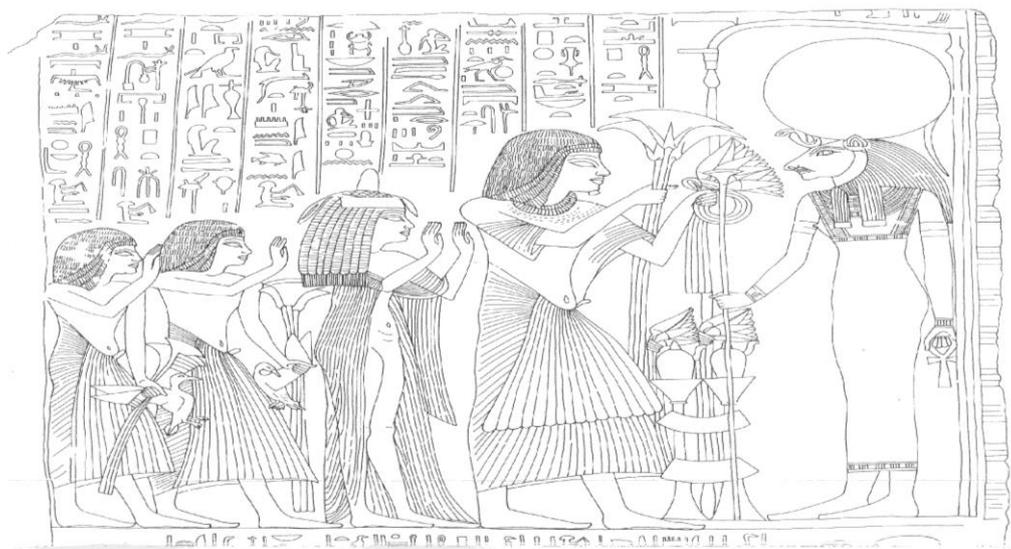
Source: Ockinga 2004. *Amenemone the Chief Goldsmith*, PL.56

Meryneith as well offers a bunch of papyrus umbels to Ra-Horakhty (Cat.14.i) (Raven and Van Walsem 2014). Roy is also offering a bunch of tall papyrus plants to the god Ra (Cat.19.a) (Hofman 2004) offers an extensive column bouquet to Ptah while purifying the offerings with water (Cat.28.a) (Martin 1987). Tia also offers a column flower bouquet to a group of gods (Cat.42.d). He also appears with a composite flower bouquet held horizontally while standing (Cat.42.f, h). The fourth scene is representing Tia accompanying his father honoring King Seti I and prince Ramses (the future Ramses II). He holds a column bouquet different in form from the one presented to the gods (Cat.42.i) (Martin et al. 1997, Martin 1991). The column or staff bouquet was known as ms, it consists of successive flower units. It is considered to be a formal type of bouquets as it was offered to the gods in the temples and in festivals (Zaki 2013).

Bouquets were merely held in hands as Amenminet who holds a tall bunch of both lotus and papyrus flowers while standing (Cat.9.a) (Moscau 2000), Nebnefer in the tomb of his son Huynefer holds a flower bouquet while seated in front of an offering table (Cat.32.b) (Gohary 2010), while lady Maia holds a small flower bouquet to the chest (Cat.12) Figure 15 (Zivie 2010).

Figure 15. *Lady Maia Holding a Flower Bouquet, Late 18ᵗʰ Dynasty*
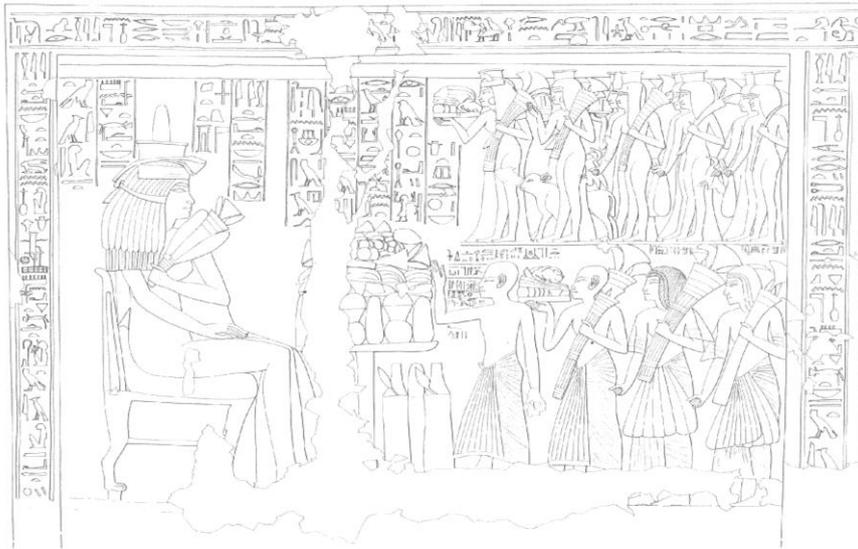
Source: Zivie 2010. *La Tombe de Maia, Mére Nouriciére du Roi Toutânkhamon et Grande du Harim,* Pl.28

Flower bouquets rarely appear with other objects either within the same hand or in a separate hand: Amenemone (Cat.8.c) holds a formal bouquet where the stems of the flowers are lined (Ockinga 2004, Assem 2006). It was the same form of bouquets with another Amenemone (Cat.24.a) (Gohary 1991). Maya preferred a bell shaped bouquet (Cat.12, d) (Martin et al. 2012), the same as Iyiry who seems to be presenting it to his wife as a symbol of love (Cat.27.a) (Anthes 1965). Maya made the same gesture to his wife but with a different form (Cat.13,f) (Figure 7) (Graefe 1975) Hormoheb is represented sniffing a lotus flower (Cat.16.e) (Martin 1977).

Plants other than flowers made few appearances in the scenes of Iniuia (Cat.7.d) (Figure 5) (Schneider 2012), NN (Cat.22), NN (Cat.23), Amenemwia (Cat.25) (Martin 1987). The two plants of Amenemwia are similar to the ones of (Cat.22) (Figure 11). A lettuce is held horizontally like a scepter by Mahu (Cat.2.b) (Gressler-Löhr 2007). The plant was associated to Min, the god of fertility, perhaps because it is the only plant producing milky juice when squeezed. It was offered by kings to the god as an assistant to procreation act. Lettuce appeared among offerings in many tombs as it believed to positively influence sexual functions (Darby et al. 1977).

Khu Fans

Khu (xw) (Erman and Grapow 1928, Gardiner 1973, Faulkner 1981) was a ceremonial fan that is made of one tall ostrich feather with a wooden handle. It was known in ancient Egypt since the 18ᵗʰ Dynasty and later on. It was held by high officials who had the title "the fan bearer on the right of the king". This type of fans appeared as a decorative motif for ceilings of the Ramesside temples and onwards (Erman and Grapow 1928, Fischer 1977, Thompson 1992).

The Khu fan was held by a number of officials as an indicator of their post as fan bearers. This appeared in the scenes of Ipy (Cat.6.a,b) (Pasquali and Gessler-Löhr 2011, Staring 2015), Amenemone (Cat.24.a) (Gohary 1991, Staring 2015) Ramsesempere (Cat.40) (Figure 13), Hekamaatre-neheh (Cat.45) (Staring 2015, Málek 1985). Tia held a group of objects consisting of a Khu fan, a folded cloth and a Heqa scepter (Cat.42.e) (Martin et al. 1997). A group which is identical even in the manner of carrying the folded cloth to that of the High Priest of Ptah, Iyry (Cat.27.c) (Anthes 1965), both 19th dynasty tombs. The title of a fan bearer is not attested among the latter's titles (Staring 2015). It is the same case with the General Ameneminet (Cat.9.b) (Moscau 2000, Staring 2015), both held the Khu fan probably signifying their high rank or that the related title is not found yet.

The Heqa (HqA), a determinative used for the word "to rule, to govern" (Erman and Grapow 1929, Gardiner, Faulkner 1981), refers as well to a well-known scepter that appeared twice in the current studied scenes. It is a short staff bent from the top; a crook. It is probably derived from the shepherded staff. Together with the flail, they formed royal insignia of kingship and gods. It is rarely held by individuals. It is similar to the awt scepter which is taller and held by individuals (Jéquier 1921, Kaplony 1986, Graham 2001). Probably the individuals who carried the Heqa scepter were related to the royal family. Tia was a brother in low of Ramses II for marrying his sister the same named Tia and probably Iyry was somehow royally connected.

Vessels and Censers

Vessels of different kinds did not appear frequently in the studied scenes. The majority of scenes where the vessels and the incense burners appear represent part of the purification of the deceased or of the offerings.

Purification was a very important matter in ancient Egyptian believes. It was part of both religious and funerary ceremonies and clearly attested in both scenes and texts. There was the purification almost in every aspect of life. Purification (washing) of the in the secular life included purification of the body, before meals, of birth, after the sexual intercourse. Purification included that of the king and the priests. After death, purification was conducted during mummification and the opening of the mouth ritual (Abd El-Hakim 2010).

Nothing was supposed to be presented to either to the deceased or the god without being purified. Offerings were purified to be "good and pure". Purification is conducted in scenes through the sprinkling of water mixed with natron and the fumigation through incense, where the gum was mixed with natron to give an aromatic smell. These rituals either in front of the gods or the deceased were mostly performed by Sem priests or the elder sons acting as Sem priests (Abd El-Hakim 2010).

Six scenes in the studied corpus of reliefs represented purification of offerings mostly in front of gods and all date back to the 19th Dynasty. In front of King Seti I and his son the future Ramses II, Amenwahsu- though not a Sem priest (Staring 2015) holds a Hst vessel with water coming out of it, while in the other hand he holds a censer with fumes appearing from it (Cat.26) (Figure 16) (Martin 1987).

The Hst vessel was known since the Pre-dynastic period where mud and stone examples were found. It is one of the commonly used vessels in purification. It is tall with a narrow neck and round shoulders, sometimes provided with a spout to pour water (Abd El- Hakim 2010).

Figure 16. *Amenwahsu Censing and Libating before Seti I and Prince Ramses, 19th Dynasty*
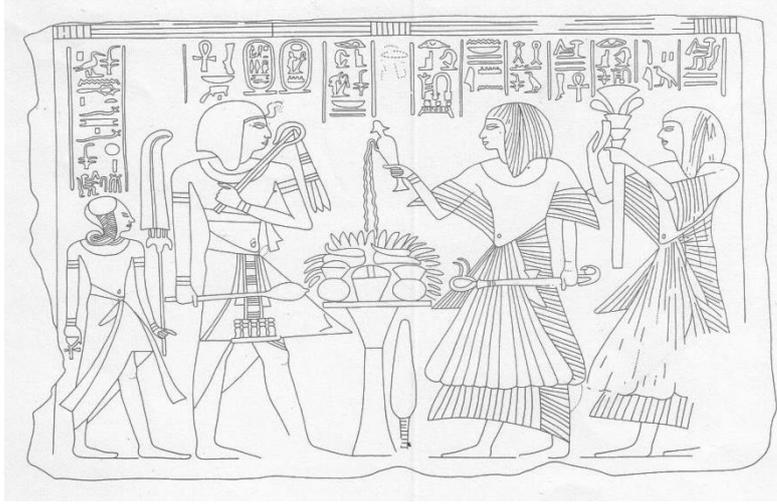
Source: Martin 1987. *Corpus of Reliefs of the New Kingdom Necropolis and Lower Egypt*, Pl. 27 (74)

The common form of a censor known since the Old Kingdom represented an arm ends with a hand holding a small bowl serving as a burner where the flames come out of it. In the middle of the handle is a square vessel where the priest throws balls of incense. This censor is known in texts either as a-n-xt "an arm of wood" or a-n-snTr "an arm of incense" (Jéquier 1921).

Weneefdjedsen, though not a Sem priest appeared in two successive scenes purifying the offerings in front of Ptah, the Patron god of Memphis (Cat.28.a) and the god Horus, god of kingship (Cat.28.b) to take their blessings. In front of Horus he is pouring water from a nmst vase (Martin 1987, Staring 2015). The nmst was known since the Archaic period as a purification vessel. It was very popular during the New Kingdom. It had a short neck, flat base with round and broad shoulders (Abd El-Hakim 2010).

While Neferrenpt, also a High priest of Memphis and the Sem priest appeared in front of Anubis fuming and libating offerings from a nmst vase (Cat.36) (Figure 17) (Martin 1987, Staring 2015), the High Priest of Ptah, Khemwaset appeared as a Sem priest holding a Hst vase. It is not clear if he is holding a censer or not as the block is damaged (Cat.37) (Martin 1987, Staring 2015). In front of Horus Tia appeared with the same instrument performing the same ritual but without apparent water or fumes (Cat.42.c) (Martin et al. 1997).

Figure 17. *Neferrenpt Censing and Libating before Anubis, 19ᵗʰ Dynasty*
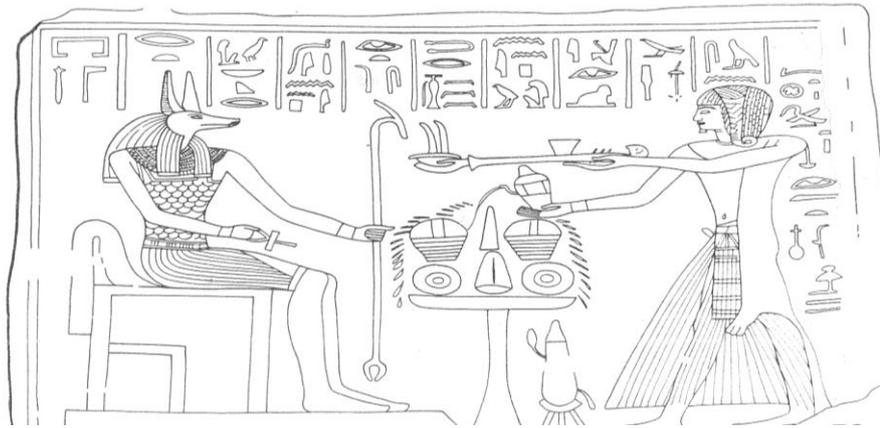
Source: Martin 1987. *Corpus of Reliefs of the New Kingdom Necropolis and Lower Egypt*, Pl. 27 (74)

Within the same context of religious rituals Tia presented a tray of the seven sacred oils to the seated figure of Osiris (Cat.42.b) (Figure 18). It was thought that oil has a magical effect in joining the limbs, the bones and the flesh. It also protected the deceased from evils when anointed with. Thus, it is understandable to present such substance to Osiris, the first one to be mummified and assembled. Meanwhile, the god needed to be purified through anointing with these oils to be ready to proceed to the daily cult (1980). Oils together with water and incense completed the process of purification by which the deceased is ready to proceed to the afterlife.

Figure 18. *Tia Presenting the Seven Sacred Oils to Osiris, 19ᵗʰ Dynasty*
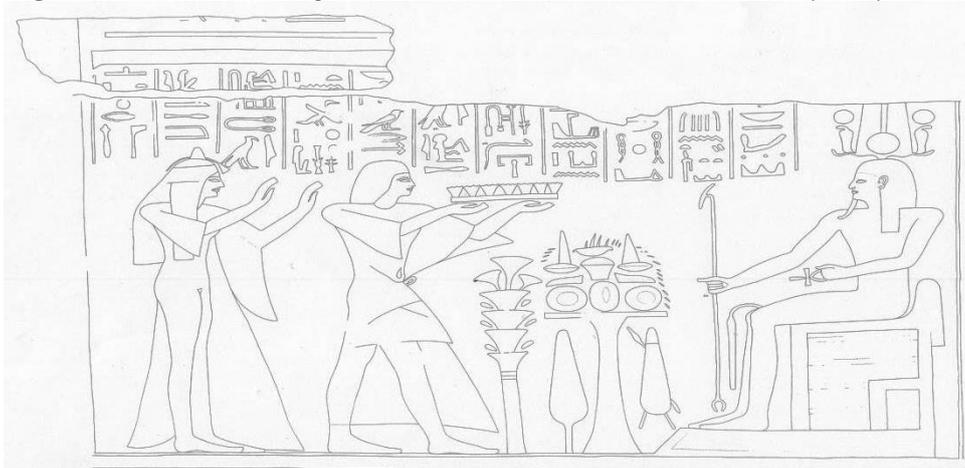
Source: Martin et al. 1997. *The Tomb of Tia and Tia*, Pl.23 (32)

The seven sacred oils were known from early times and real examples of jars containing these oils were found in the tombs of queen Hetepheres of the 4ᵗʰ Dynasty and of the Middle Kingdom princess at Lahun and Dahshur. They were also represented among the frizzes of objects of the Middle Kingdom coffins. The seven jars of oils appeared in the New Kingdom temples and tombs. The oils and

unguent jars were important that they were even placed under the chairs of the tomb owners during the New Kingdom and later on (Dawson 1927, Bourriau 1984, Mahran and El Kilany 2016).

Since the Old Kingdom each type of oil was associated to a certain shape of jar. The scenes usually represented two or three of the jars while texts referred to all seven. The first representation of all seven jars in scenes came from the temple of Hatshepsut. The scene gives the form of the jar and the name of its content beside it (Pischikova 1994). In Tia's scene the jars are different from the known forms as they are presented on a tray, thus being minimized.

A different type of containers appeared in the hand of Ya. In a banquet scene he held a bowl where water or wine is being poured (Cat.5.a) (Quibell 1912). The theme of funerary banquets was very popular in New Kingdom tomb scenes, where the deceased and members of his family and guests were represented seated in front of tables laden with food. Processions of offering bearers, musicians and servants were shown. Drinking was considered as an essential part of the banquet as getting drunk was somehow believed to get you closer to the gods (Hartley 2012).

Conclusion

The Saqqara New Kingdom scenes were mostly of no difference from those of the Theban scenes and were a continuation of the same scene contexts of the Old Kingdom tombs. Scene contexts represented the deceased seated in front of offering tables either alone, with his wife or family members as well standing in inspection of workers or offering to the gods.

It was a common practice to hold different types of objects in the hands. Each of these objects referred to something. Some objects were more popular than others judging from the number of appearances. In the studied corpus of scenes, a number of tombs showed a variety of objects as the same tomb owner held various types of objects in different scenes even with same context (Table 1). The majority represented the kherep scepter (27 scenes), followed by the so-called salad scepter (24 scenes), then the long staff (18 scenes). The double staff wAs and *mdw* appeared in 13 scenes. The short nehbet scepter was not that popular. It made appearance only 6 times. The folded cloth either alone or with other objects-mainly the kherep scepter- made 26 appearances almost as popular as the kherep scepter. Flowers seem to be common as well with 16 scenes, while different plants and lettuce were shown in only 6 scenes. The xw fan appeared 8 times, the same as vessels and censors. Some objects made few appearances like the HqA scepter (2 scenes), scribal equipment (1 scene) and the anx sign (1 scene).

The scepters and the long staff were reference of office and authority. The kherep scepter has a function in the offering rituals. This may explain the multiple appearance of this scepter in offering scenes leaning in a kind of movement towards the offering tables. It was held by both high officials from different ranks and priests as well.

The so-called salad scepter representing a kherep scepter held in one hand with a round fan in some scenes or with plants in others. It was not a sole entity. The salad scepter seems to be an innovation of the New Kingdom Memphite artists, as they didn't make appearance during the Old Kingdom like other objects nor it appeared in Theban scenes. It was very popular in some tombs than others. Six scenes in the tomb of Pay (Cat.11) are represented and three scenes in the tomb of Ameneminet (Cat.9).

The folded cloth probably represented a handkerchief that was probably a reference of class like the Europeans in the Middle Ages. Or probably more simple to wipe sweat or hands. It was represented with multiple types; as a knot, medium long pleated or not pleated cloth or long plain cloth with a special manner for holding; a reference of change in fashion and taste.

Flowers were more related to women though held by men as reference of rebirth. A required thought to hold on to for the afterlife. Flowers seemed to be very popular judging from the number of scenes attested and variety of forms. Representing purification vessels and censors moves things from the civic symbolism of authority and power to a different context which is more religious and more related to the gods and the afterlife.

Finally, tomb owners wished to proceed for the afterlife in the same manner that they lived. This fact justifies the variety of objects held in the hands of tomb owners. These objects served as tools to practice power for high officials as in the scepters and staffs. On the other hand some objects served religious purposes to offer and pay respect to the gods either for priests or officials as sacred vessels, incense burners and sometimes flowers. With this variety the deceased guaranteed to combine between his posts in the real life and religious necessities of the afterlife. In this sense the objects were not merely decorative things but formed a part of both life and afterlife contexts.

References

Abd El-Hakim WM (2010) *Purification scenes in Theban private tombs during the New Kingdom.* Master Theseis. Minia: Minia University.

Anthes R (1965) *Mit Rahineh 1956*. Philadelphia: The University Museum.

Assem R (2006) Stela of Ameneminet (TN.10/6/24/8). Mitteilungen des Deutschen Archaölogischen Instituts Abteilung Kairo. (Communications from the German Archaeological Institute, Cairo Department) 62: 63–66,

Berlandini-Grenier J (1979) Varia Memphtica III-Le Géneral Ramsés-Nakht. (Various Memphitca III- The General Ramses- Nakht). *Bulletin de l' Institut français d'Archéologie Orientale* 79: 249–265.

Bourriau JD (1984) Salbgefässe. (Ointment vessels). In W Helck, E Otto (eds.), *Bemerkungen und Korrekturen zum Lexikon der Ägyptologie*. Weisbaden: Otto Harrassowitz, 363–367.

Brovarski E (2000) *The Mastabas of Senedjemib Inti (G2370), Khnumenti (G2374), and Senedjemib Mehi (G2378), Giza Masatbas 7*. Boston: Museum of Fine Arts.

Darby W J, Ghalioungui P, Grivetti L (1977) *Food: the gift of Osiris 2*. New York: Academic Press.

Davies NDG (1941) *The tomb of the Vizier Ramose*. London: Egypt Exploration Society.

Davies NDG (1943) *The tomb of Rekh-mi-re at Thebes.* Volume II. New York: The Metropolitan Museum of Art.

Davies, N, Davies NDG (1933) *The tombs of Menkheperre, Amenemose and another.* London: Egypt Exploration Society.

Dawson WR (1927) The number "seven" in Egyptian texts. *Aegyptus* 8(½): 97–101.

El Hadidi NMN, Hamdy R (2011) Basketary acessories: footwear, bags and fans in ancient Egypt. *Journal of Archaeological Science* 38(5): 1050–1061.

Erman A, Grapow H (1926) *Wörterbuch der Aegyptischen Sprache.* (Dictionary of Egyptian language). Bd.I. Leipzig: J.C.Hinrichsche Buchhandlung.

Erman A, Grapow H (1928) *Wörterbuch der Aegyptischen Sprache.* (Dictionary of Egyptian language). Bd.II. Leipzig: J.C. Hinrichsche Buchhandlung.

Erman A Grapow H (1929) *Wörterbuch der Aegyptischen Sprache.* (Dictionary of Egyptian language). Bd.III. Leipzig: J.C. HinrichscheBuchhandlung.

Erman A, Grapow H (1930) *Wörterbuch der Aegyptischen Sprache.* (Dictionary of Egyptian language). Bd.IV. Leipzig: J.C. Hinrichsche Buchhandlung.

Faulkner RO (1981) *A concise dictionary of Middle Egyptian.* Oxford: Oxford University Press.

Fischer HG (1977) Facher und wedel. (Fans and Whisks). In W Helck, E Otto (eds.), *Bemerkungen und Korrekturen zum Lexikon der Ägyptologie* II. Weisbaden: Otto Harrassowitz: 82–86.

Fischer HG (1979) Notes on sticks and staves in Ancient Egypt. *The Metropolitan Museum Journal* 13(1978): 5–32.

Fischer HG (1986) Stocke und stabe. (Sticks and staffs). Wo Helck, E Otto (eds.), *Bemerkungen und Korrekturen zum Lexikon der Ägyptologie* VI. Weisbaden: Otto Harrassowitz: 49–57.

Gaballa G A (1977) *The Memphite tomb - Chapel of Mose.* Warminister: Aris and Philips.

Gardiner A (1973) *Egyptian grammar, being an introduction to the study of the hieroglyphs.* 3rd Edition. London: Oxford University Press.

Gohary S (1991) The tomb-chapel of the royal scribe Amenemone at Saqqara. *Bulletin de l' Institut français d'Archéologie Orientale* 91: 195–205.

Gohary S (2009) *The twin tomb chapel of Nebnefer & his son Mahu at Sakkara.* Cairo: Supreme Council of Antiquities.

Gohary S (2010) The cult-chapel of the fortress Commander Huynefer at Saqqara. *Egyptian Culture and Society. Studies in Honour of Naguib Kanawati. Supplément aux Annales du Service des Antiquitiés de l'Égypte. Cahier* I(38): 59–163.

Graefe E (1975) Das Grab des Schatzhausvorstehers und Bauleiters Maya in Saqqara (The grave of the treasurer and the construction manager Maya in Saqqara). *Mitteilungen des Deutschen Archaölogischen Instituts Abteilung Kair*o 31: 187–220.

Graham G (2001) Insignia. In D Redford (ed.), *The Oxford Encyclopaedia of Ancient Egypt* 2. Oxford: Oxford University Press: 163–167.

Harpur Y (1987) *Decoration in Egyptian tombs of the Old Kingdom.* London-New York: Kegan Paul.

Hartley M (2012) The eighteenth dynasty banquet: a portal to the gods. *Bulletin of the Australian Centre* 23: 25–44.

Hassan A (1976) *Stöcke und Stabe im Pharaonischen Aqypten bis zum Ende des Neuen Reiches.* (Sticks and staffs in Pharaonic Egypt until the end of the New Kingdom). Münchener Ägyptologische Studien Heft 33. Miinchen-Berlin: Deutscher Kunstverla.

Hofmann E (2004) Bilder im Wandel: Die Kunst der Ramessidischen Privatgräber. (Changing images: the art of the Ramesside private tombs). Theben 7. Mainz am Rhein.

Jéquier G (1921) Les Frises d'objets des Sarcophages du Moyen Empire. (The freizes of objects from the sarcophagi of the Middle Kingdom) Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale.

Kanawati N, Woods A (2009). *Artists in the Old Kingdom: techniques and achievements*. Cairo: Supreme Council of Antiquities Press.

Kaplony P (1986) Zepter. (Scepter). In W Helck, E Otto (eds.), *Bemerkungen und Korrekturen zum Lexikon der Ägyptologie* VI. Weisbaden: Otto Harrassowitz: 1373–1389.

Koefoed-Petersen O (1956) *Catalogue des Bas-Reliefs et Peintures Ègyptiens*. (Catalogue of Bas-relief of Egyptian paintings). Copenhagen: Publication de la Glyptotheque NY Carlsperg.

Loeb W Y, Nunn FJ (1997) Staffs as walking aids in Ancient Egypt and Palestine. *Journal of the Royal Society of Medicine* 90(8): 450–454.

Lurker M (1980) *An illustrated dictionary of the gods and symbols of Ancient Egypt*. London: Thames and Hudson.

Mahran H, El Kilany E (2016) What lies under the Chair, Part II: Objects. *Journal of the American Research Center in Egypt* 52(1): 11–26.

Málek J (1985) The tomb chapel of Hekamaetre-neheh at Northern Saqqara. *Studien Altägyptischen Kultur* 12(1985): 47–60.

Martin GT (1977). Excavations at the Memphite tomb of Hormoheb 1976: prileminary report. *Journal of Egyptian Archaeology* 63(1): 5–13.

Martin GT (1987) *Corpus of reliefs of the New Kingdom from the Memphite Necropolis and lower Egypt*. London: KPI.

Martin GT (1991) The hidden tombs of Memphis: new discoveries from the time of Tutankhamun and Ramses the Great. London: Thames and Hudson.

Martin GT (1997) The tomb of Tia and Tia, a royal monument of the Ramesside period in the Memphite Necropolis. London: Egypt Exploration Society.

Martin GT, Frazer KJ, Schneider HD, Vinkesteijn MJ (1985) *The tomb-chapels of Paser and Ra'ia at Saqqara*. London: Egypt Exploration Society.

Martin GT, Van Dijk Frazier JK, Bomhof PJ, De Kemp A (2012) *The tomb of Maya and Meryt I, the reliefs, inscriptions and compositions*. London: Egypt Exploration Society.

Moskau OD (2000) Das Grab des Generals Ameneminet in Saqqara. (The tomb of general Ameneminet). In M Barta and J Kerjci (eds.), *Abusir and Saqqara in the Year 2000 ArOr Supp 9*. Praha: Academy of Science of the Czech Republic Oriental Institute.

Mostafa D (1994) L' Usage Cultuel du Bouquet et sa Signification Symbolique. (The cultural use of bouquets and its symbolic meaning). *Bulletin de L'Egypt* 106(4): 243–245.

Müller M (2015) Iconography and symbolism. In MK Hartwig, *A Companion to Ancient Egyptian Art*. Chichester: Willey Blackwell: 78–96.

Newberry P (1893) *Beni Hassan*. Part II. London: K. Paul, Trench, Trübner and Co.

Ockinga B (1998) The Saqqara tomb of Amenemone. *Bulletin Australian Centre of Egyptology* 9: 73–87.

Ockinga B (2004) *Amenemone the chief Goldsmith: A New Kingdom tomb in the Teti cemetery at Saqqqara*. Sydney: Australian Centre for Egyptology.

Ockinga B (2009). *The tomb of Amenemope* (TT148) Vol.1: Architecture, text and decoration. Oxford: Aris and Phillips Ltd.

Oeters V (2017) The tomb of Tatia, Wab – Priest of the front of Ptah and chief of the Goldsmiths. In Van Walsem (ed.), *Imaging and Imagining the Memphite Necropolis*. Leuven: 59–80.

Orsenigo C (2013) A newly identified relief from the tomb-chapel of Mose at Saqqara. *Zeitschrift fur Ägyptische Sprache und Alterumskunde* 140(2) 167–171.

Pasquali S, Gessler-Löhr B (2011) Un Nouveau Relief du Grand Intendant de Memphis, Ipy, et le temple de Ptah du Terrain-bꜥḥ. (A new relief of the Great Steward of Memphis, Ipy and the temple of Ptah in the Land-bꜥḫ). *Bulletin de l' Institut français d'Archéologie Orientale* 111: 281–299.

Pischikova EV (1994) Representations of ritual and symbolic objects in Late XXVth dynasty and Saite period private tombs. *Journal of the American Research in Egypt* 31, 63–77.

Quibell JE (1912) *Excavations at Saqqara (1908-9, 1909-10): The monastery of Apa Jeremias*. Cairo: Imprimerie de l' Institut Français d' Archéologie Orientale.

Quibell JE, Hayter AGK (1927) *Excavations at Saqqara: Teti Pyramid, North Side*. Cairo: Imprimerie de l' Institut Français d' Archéologie Orientale.

Raven MJ (2005) *The tomb of Pay and Raia at Saqqara*. Leiden: Egypt Exploration Society.

Raven MJ, Van Walsem R, Aston BG, Strouhal E (2001–2002) A preliminary report on the Leiden excavations at Saqqara, season 2001: The tomb of Meryneith. *Jaarbericht Ex Oriente Lux* 37(2001-2002): 71–89.

Raven MJ, Van Walsem R, Aston BG, Dunsmore A, Ikram S (2006–2007) A preliminary report on the Leiden excavations at Saqqara, season 2007: the tomb of Ptahemwia. *Jaarbericht Ex Oriente Lux* 40: 19–39.

Raven MJ, Hayes HM, Aston BG, Capper R, Deslandes B, Horáčková L (2011) A preliminary report on the Leiden excavations at Saqqara, season 2010: an anonymous tomb. Jaarbericht *Ex Oriente Lux* 43: 3–18.

Raven MJ, Van Walsem R (2014). *The tomb of Meryneith at Saqqara*. Turnhout: Brepols.

Schneider H D (2012) *The tomb of Iniuia in the New Kingdom Necropolis of Memphis at Saqqara*. Turnhout: Brepols.

Smith WA (1949) *History of Egyptian sculpture and painting in the Old Kingdom*. 2nd Edition. London: PL 60.

Staring N (2014) The tomb of Ptahmose, Mayor of Memphis Analysis of an early 19th dynasty funerary monument at Saqqara. *Bulletin de l' Institut Français d'Archéologie Orientale* 114(2): 455–518.

Staring N (2015) *Studies in the Saqqara New Kingdom Necropolis: from the Mid-19th century exploration of the site to the new insights into life and death of Memphite officials, their tombs and the use of sacred space*. PhD Thesis. Sydney: Macquarie University.

Swinton J (2003) The depiction of wives of tomb owners in the later Old Kingdom. *Bulletin of the Australian Centre of Egyptology* 14: 95–109.

Thompson E (1992) Two unusual fans in wall-scenes at El-Hagrasa. *Bulletin of the Australian Centre of Egyptology* 3: 77–83.

Vandier J (1964). *Manuel d'Archéologie Égyptienne*. (Manual of Egyptian Archaeology). Paris: A et J. Picard.

Wilkinson RH (2003) *Reading Egyptian art, a hieroglyphic guide to ancient Egyptian painting and sculpture: with over 450 illustrations*. London: Thames and Hudson.

Woods A (2015) Relief. In MK Hartwig (ed.), *A Companion to Ancient Egyptian Art*. Chichester: Willey Blackwell, 219–248.

Zaki F (2013) *Scenes of presenting bouquets of flowers in Egyptian temples during the Greco-Roman period*. Master Thesis. Minia: Minia University.

Zivie A (2000) La resurrection des hypogeés du Nouvel Empire á Saqqara. (The resurrection of the New Kingdom hypogees in Saqqara. In M Barta, J Kerjci (eds.),

Abusir and Saqqara in the Year 2000 ArOr Supp 9. Praha: Academy of Science of the Czech Republic Oriental Institute, 173–190.

Zivie A (2010) *La Tombe de Maia, Mére Nouriciére du Roi Toutânkhamon et Grande du Harim*. (The tomb of Maia, the nurturing mother of king Tutankhamun and the great of the Harim). Touloze: Caracara Edition.

Zivie A (2013) *La Tombe de Thoutmes: Directeur des Peintres dans la Place de Maat.* (The tomb of Thutmosis: director of the painters in the place of Maat (BUB. I. 19). Touloze: Caracara Edition.

British Women Travellers in Algeria, Tunisia, and Morocco, 1850–1930

By Amina Marzouk Chouchene[*]

*Algeria, Tunisia, and Morocco attracted many British women travellers mainly
during the second half of the nineteenth century and the early decades of the
twentieth. Although their number was smaller than that of their male colleagues,
these women were attracted to the so-called North African Barbary States and
left interesting accounts of their journeys. They recorded their perceptions of the
various regions they visited and the people they encountered. Through
examining a corpus of travelogues, this article explores these women's reasons
for travelling to and writing about the three North African countries and their
responses to the new lands. The article reveals that these women travellers
enjoyed the climates, mineral springs, and natural landscapes of these countries.*

Keywords: *Algeria, Tunisia, Morocco, British women travellers, tourism*

Introduction

In the second half of the nineteenth century, the presence of British women
travellers in Algeria, Tunisia, and Morocco became much more remarkable. This
is evident through the proliferation of women's travelogues describing their
journeys to the so-called Barbary States of North Africa. This trend contrasts with
the eighteenth century during which most travellers were males. British women's
travels in the three North African countries were enabled, to a large extent, by the
political stability following the French Revolution and the Napoleonic wars in the
late eighteenth and early nineteenth centuries and the improved transportation.

The introduction of new means of transport such as steamships and railways
facilitated the movement of women travellers to different parts of the world
including Algeria, Tunisia, and Morocco. Although the number of British women
travellers was smaller than that of men, their travelogues offer detailed descriptions
of these North African countries. They provide interesting information about the
climate, natural scenery, people's manners and customs, religion, and other
interesting subjects. Nevertheless, scholarly attention to these women's travelogues
remains scant. Most of the existing literature is particularly concerned with
notorious male travellers such as John Drummond Hay, Arthur Leared, Thomas
Shaw, Greville Temple, and others and considered these travellers' attitudes to the
countries they visited and their obvious feelings of cultural superiority (Chamekh
2018, Manai 2007, Graves 2011).

Much of the rare literature on British women travellers in Algeria, Tunisia,
and Morocco did not deviate from this perspective. In his article "Ellen M.Rogers

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as a Feminist and Orientalist Travel Writer," Mouloud Siber provided an analysis of the Orientalist and feminist discourses in Ellen Rogers's *A Winter in Algeria*. As a travelogue that confirms the West's Orientalist attitudes to Algeria, *A Winter with Algeria* is, according to Siber, laden with negative representations of Algerian people. Rogers described them as politically, culturally, and intellectually inferior to the French and Europeans and especially the English. They were lazy. Unsurprisingly, the average Englishmen engaged in Algiers "take infinite pains in training the ouvriers under them, but the Arabs are usually so lazy that they have to be trained with an iron fist" (Rogers 1865: 53). Moreover, Arabs were regarded by Rogers as habitual liars. This makes French colonization of Algeria a legitimate act. The travelogue, according to Siber, shows also Rogers's feminist stance. The status of Algerian women as "subjects in need of salvation by their British feminist sisters" is a ubiquitous theme in her travelogue (Siber 2016: 1). The author concluded that the desire to emancipate Algerian women is clearly expressed by Ellen M. Rogers.

British women travellers' perceptions of local women surface also in Adel Manai's *British travellers in Tunisia*. Most of the travelogues analyzed by Manai were written by male travellers given the fact that British travellers who journeyed in Tunisia during the nineteenth and early twentieth century were mostly males. Yet British women travellers' views of Tunisian society and culture are particularly highlighted in Manai's chapter on "Women and the Harem."

Being an exclusive space, British women travellers such as Norma Lorimer, Nesbitt France, Lady Herbert, and others "had the privilege to visit Tunisian harems and report on everything they saw and experienced" (Manai 2007: 65). In other terms, they "were direct eyewitnesses" (Manai 2007: 65). They described Tunisian women's physical appearances, their dresses, their makeup, and their social ceremonies. In most of their descriptions, their feelings of cultural superiority are obvious. Francis Nesbitt attended a wedding ceremony and described the women as "short and generally stout, handsome in a rather heavy way, with thick painted eyebrows, darkened eyelashes, and henna stained hands" (Manai 2007: 70). She concluded that "all the married women however young, were moving mountains of fat" (Manai 2007: 70). Based on these descriptions and others, Manai rightly remarked that women's subsidiary position was a major theme in British women's travelogues. He concluded that "travellers' descriptions and views of women, with a few exceptions, properly fit in the much broader framework of Western perceptions of what is generally referred to as the Oriental woman" (Manai 2007: 65).

Amy J. Johnson also analyzed the writings of a number of late nineteenth and early twentieth century Western women in Morocco including those by some British women such as Amelia Perrier, Eleanor Elsner, and Mrs Howard Vysse. Johnson is mainly interested in highlighting how these women perceived Moroccan women and their role within society and determining the validity of Melman's major argument that Western women perceived the Orient in a different way from male travellers. Through the major themes of marriage and divorce, life in the harem, women's dress and appearance, the economic function of women and women and religion, the author classified women travellers into three

categories: those who were extremely or mildly critical of the position of Moroccan women, and those who accepted the role of women in Moroccan society. In this way, Johnson did not deal with Western women travellers as a homogenous group. Nevertheless, she noted that gender relations were at the heart of their writings and that this often led, as in Perrier's case, "to greater reflection on the role and status of women within their own society" (Johnson 2001: 230).

This article seeks to contribute to the existing literature on British women travellers in Algeria, Tunisia, and Morocco by considering their motivations for travelling to and writing about the North African Barbary States and their representations of the new lands. It spans the second half of the nineteenth century and the early years of the twentieth which coincided with the rise of tourism. The advent of new means of transport such as railway travel, and steamships provided cheaper and safer means of travel over long distances. Women took advantage of these changes and there was a consequent rise in the number of women traveling around the world. The period witnessed also what is commonly referred to as the democratization of travel. Thomas Cook's tours made travel for leisure and recreation easier and cheaper. Jennifer Speake affirmed that "by providing escorted and lower-cost journeys, and taking care of all the mundane and intimidating details of travel (choosing an itinerary, buying the proper tickets, finding a decent hotel, exchanging currency), Cook made large strides towards the democratization of travel" (Speake 2003: 279). As a result, women began to travel to the Barbary States of North Africa that were traditionally visited by male aristocrats.

The article aims to answer the following major questions: Why were these women attracted to these North African countries? How did they react to the new lands they visited? The next section presents some of the primary and secondary sources I relied on to address these questions. The following two sections clearly examine these women's reasons for visiting and writing about Algeria, Tunisia, and Morocco and their responses to the new lands.

Research Method

The research method is both analytical and descriptive. It pays close attention to British women travellers' motivations for travelling to and writing about Algeria, Tunisia, and Morocco. At the same time, it considers how these women perceived the three North African lands. The article is also based on a number of travelogues by British women who journeyed in these countries in the second half of the nineteenth and the early decades of the twentieth century as a primary source. These include but not limited to Herbert's *A Search After Sunshine* or *Algeria in 1871,* Betham-Edwards's *A Winter in the Swallows*, Amelia Perrier's *A Winter in Morocco*, Eleanor Elsner's *The Magic of Morocco*, Mrs Greville Nugent's *A Land of Mosques and Marabouts,* Emily Ward's *Three Travellers in North Africa,* Lady Warren's *Through Tunisia and Algeria on a Motorcycle.* Little biographical information exists about most of these women. Nevertheless, their travelogues illuminate our understanding of their representations of the three North African countries under discussion. Unlike other sources, these women's

travelogues cover almost every aspect of the countries they visited. The weather conditions, political systems, trade and commerce, people's manners, religious beliefs and practices, were some of the predominant themes in these women's writings.

This article relies also on secondary literature on travel and tourism such as the works of Kenneth J. Perkins, Adel Manai, and Vladimir Jankovic. These sources offer interesting analyses of British travellers' perceptions of Algeria, Tunisia, and Morocco and the rise of health tourism.

Reasons for Visiting and Writing about Algeria, Tunisia, and Morocco

Some of the British women travellers under discussion wrote about their reasons for traveling to the Barbary States of North Africa. Some of them visited Algeria, Tunisia, and Morocco in search for health. These women fall into two main groups: those who were suffering from "a clear physiological disease" (Morris 2018: 2) such as the baroness Mary Elizabeth Herbert and Isabella Bird. Herbert declared that her journey to Tunisia and Algeria was spurred by a desire "to test the efficacy of certain warm springs, which had been strongly recommended to [her] by a Paris doctor for rheumatism" (Herbert 1872: 3). Isabella Bird journeyed in Morocco and other parts of the world in 1901 following her doctors' orders who recommended her these regions in order to be relieved from her back pains and insomnia. The doctor advised that a "sea voyage and a change of air would restore her health" (Chaouch 2004). Other women such as Ellen Rogers fall within the second category, those who thought that a change of air would keep them healthy. Rogers visited Algeria in October 1863 based on the widespread belief that a change of air would be beneficial to her health. Although she had very little information about the country, she was influenced by the opinion of a German writer that "excursions to new regions are useful, to rub off the cryptogamic growths with which too long a residence in one of the same country, is apt to encrust the human soul" (Rogers 1865: v–vi). These women's journeys to the three North African countries for therapeutic reasons are part of a well-established practice of British travel for health.

A number of nineteenth publications such as Thomas More Madden's *On Change of Climate: A Guide for Travellers in Pursuit of Health* and Isaac Burney Yeo's *Climate and Health Resorts* emphasized the intertwined relationship between climate and health. Physicians often recommended travel to foreign climates to patients suffering from physiological or nervous ailments. Lara Marks and Michael Worboys rightly pointed out that:

> the notion that the body was influenced by its environment was commonplace in medicine and wider Western culture in the eighteenth and nineteenth centuries. It followed that a change of air or travel to a different area were ways to improve health, and doctors tried to match a person's constitution and illness with potential healing environments (Marks and Worboys 1997: 8).

The Mediterranean was a popular destination for many Victorians seeking health and repose. John Pemble affirmed that climate therapy played a central role in fuelling the "Mediterranean passion."Victorian climate therapists discussed the effects of different climates on people's minds and bodies. They stressed the importance of choosing the right climate for every ailment. Sedative climates were particularly recommended in cases of inflammatory and feverish affections marked by an irritable or hysterical disposition and gastric and nervous dyspepsia. On the other hand, diseases of debility indicated by a low pulse, a gloomy or lymphatic temperament, a tonic or sluggish dyspepsia need a tonic climate (Pemble 1987: 92). British winters were seen by the Edinburgh professor, James Gregory, as an "exciting cause of chronic disease for which the physicians had no remedy but to wait for summer, or what seemed equally logical, travel to summer" (Jankovic 2006: 274). Gregory explained that the British weather with its extremes of hot and cold had a negative effect on people's health. On the contrary, the dry and warm climate of Mediterranean winters was highly recommended.

This was confirmed by many statistics about the temperature, rainfall, hours of sunshine, direction and velocity of winds, atmospheric pressure, humidity, electricity, and other factors. Thermometers, barometers, pluviometers, and military statistics confirmed also the beneficial impact of the Mediterranean (Pemble 1987: 92). Based on the army reports of the 1830s, Dr Johnson Davy, Inspector General of Army Hospitals, concluded that the warm and dry climate of the Mediterranean "counteracted the effects of poor accommodation and dissipation, and so kept down both mortality from consumption among native populations" (Pemble 1987: 92). Based on this therapeutic value of the Mediterranean, some of the British women travellers under discussion visited Algeria, Tunisia, and Morocco "in quest of physical health, mental diversion, and rejuvenation of sprits and stamina" (Jankovic 2006: 271).

Other British women travelled looking for novel places and experiences. Lady Warren journeyed in Tunisia in 1922 in company of her husband in search for risk, adventure, and the "super oriental" (Warren 1922: 11). Eleanor Elsner visited Morocco out of a romantic desire to see "lands where these the sun shines and the sky is blue, places where the quietness and dignity of the old life still counts for something" (Elsner 1928: 14). Similarly Mrs Greville constructed Tunisia and Algeria in a romantic way. In these countries, the traveler could still enjoy the beauty and authenticity of times past. Greville wrote that:

> I can, if you will take my hand, lead you through these cities where the women walk veiled and trousered, where a strange monotonous music strikes the ear and when a wealth of wondrously harmonized color delights the eye. Pluck a few flowers with me from the soil of this marvelous Africa, that so, amid the mirk of dire December days in England, you may yet know that beauty and la joie de vivre are not wholly things of the past (Greville 1894: 2).

While some of these women did not express clearly their reasons for traveling, they stated their purposes in writing their travelogues. Lisbeth Gooch Strahan clearly admitted that she wanted her travelogue to be a guidebook for visitors to Algeria. She noted the scarcity of books written on Algeria in English and

intended her travelogue to fill in this gap (Strahan 1878: preface). Unsurprisingly, Strahan offered advice for future travellers about their daily necessities. They should bring with them proper clothing including an umbrella and smoked glasses which would protect them from the "burning sun." Moreover, they need to follow a healthy diet (Strahan 1878: 12). Likewise, Mrs Howard- Vyse suggested that the major purpose of her travelogue *A Winter in Tangier* was to provide information about Tangier, "the surrounding country and its climate as little is known of these" (Howard-Vyse 1882: 11) especially for those seeking a wild winter climate. Emily Ward purported her travelogue *Three Travellers in North Africa*, to be "of use to future travellers….and help them in making their own itinerary" (Ward 1920: vi). Similarly, Amelia Perrier avowed that her purpose in writing *A Winter in Morocco* was to provide information about a country that was unknown to many Britons. She wrote:

> I know nothing about the country when I went there. Everything I saw was novel and interesting to me. And it is for that section of the reading public whose minds may be in the same blank condition on the subject that mine was, that I have written down my experiences in Morocco, and described, as well as I could, all that I saw and heard there, in the hope that even thus at second hand, it may afford some amusement, and perhaps a little instruction, to them also, as it did to me (Perrier 1873: vi).

Certainly by providing the information needed for prospective travellers, these women's travelogues functioned as a guidebook for those who wanted to know more about foreign places and people, who were afraid of being lost, and those who needed to be reassured about their personal safety and health in a foreign climate. This was a major concern for British women travellers in Algeria, Tunisia, and Morocco and the climatic conditions are a common theme in these women's travelogues.

British Women Travellers' Responses to the New Lands

The British women travellers under discussion wrote positively about the climates of the Maghrebean countries they visited. Their travelogues abound with constant references to the weather conditions and most importantly the therapeutic value of the climates of these countries. Strahan praised the moderate nature of Algeria's climate. She quoted the opinions of many eminent doctors on the subject such as Dr. A. Mitchell of Edinburgh who wrote and published newspapers on Algeria's climate in the British and Foreign Medico-chirurgical Review, Dr. Shaw who was chaplain to the English factory in Algiers from 1720–1730, and extracts from the work of the British physician and anthropologist Dr. Eugene Bodichon. Dr. Mitchell found that the "the weather is delightful, being neither too hot nor too cold" (Strahan 1878: 5). Additionally, he suggested that the evenness of the temperature mainly from October to the end of May made Algeria's climate charming (Strahan 1878: 5).

Similarly to Dr. Mitchell, Dr Shaw stressed the evenness of the Algerian climate. Dr. Bodichon, on the other hand, offered a list of the people to whom the climate may be beneficial and to those it might be harmful. Persons of dry temperament, elderly people, rheumatic subjects, people of lymphatic temperament, and those predisposed to phthisis would regain their health. Yet the climate may not be beneficial to fat people, those suffering from a hypertrophy of the heart of large vessels, dysentery, organic diseases, nervous exhaustion, and drunkards. After citing the opinions of these doctors, Strathan came to the conclusion that "there can be no doubt that the first, the chief, the ever present charm of Algiers is its beautiful climate" (Strahan 1878: 11). Ellen Rogers stressed as well the beneficial impact of the Algerian climate on the health of invalids, mainly for those in an early stage of lung disease (Rogers 1865: 101). Matilda Betham Edwards found the Algerian climate genial especially from October to May (Betham Edwards 1867: 247). She affirmed that it is particularly beneficial to elderly people and to invalids suffering from phthisis, rheumatism, scrofula, gout and lymphatic temperaments (Betham Edwards 1867: 249).

These favorable comments on the Algerian climate explain the fact that Algeria was a popular winter resort for many Britons' in the nineteenth and twentieth century. Kenneth Perkins suggested that starting from 1837, many British physicians took special interest in highlighting the medical and curative qualities of the Algerian climate which made the country a perfect winter venue (Perkins 2013: 217). Adel Manai reiterated a similar argument and emphasized that from the 1830s onward until the outbreak of WWI, Algeria was "one of the most appreciated winter resorts in the world rivaling the French Riveira, Southern Spain, Madeira, Switzerland" and other popular winter resorts (Manai 2018a: 2). He persuasively remarked that Algiers (the capital) was seen as a perfect winter resort "to such an extent that in 1937, the French Larousse dictionary defined the term "hiverneurs" (meaning winter residents and tourists) as those who spend the winter in Midi, Algiers" (Manai 2018a: 2). Certainly, British women travellers' glowing descriptions of the Algerian climate referred to earlier contributed to establishing the reputation of the country as an excellent winter venue. British women, who visited Morocco in the second half of the nineteenth century and the early twentieth, praised as well the curing qualities of the climate.

Eleanor Elsner, who journeyed in Morocco in company of several other men and women, wrote that, "after I had been in the town for some time I came to the conclusion that I should love to live there, because the climate is incomparable, and it is impossible to be bored" (Elsner 1928: 232). Amelia Perrier praised the local climate and quoted Arthur Leared's view that it was "delightful, bright, and bracing with no extremes of cold or heat" (Perrier 1873: 353). Similarly to Algiers, Tangier started to be reputed as a winter health resort from the mid-nineteenth century.

This reputation reached its climax in 1873 with the publication of Arthur Leared's article entitled "Tangier as a winter resort for Invalids" (Martinez 2017: 58). The article was published "in the prestigious British medical journal The Lancet" (Martinez 2017: 58). The Irish doctor, who was a medical graduate of Dublin's Trinity College and Fellow of the Royal College of Physicians of

London, wrote favorably about Tangier (Martinez 2017:58). He visited the country twice in the 1870s and wrote two travel accounts about his journey: his book *Morocco and the Moors* (1876) and *A Visit to the Court of Morocco* (1879). He affirmed that Tangier was "well suited for an invalid residence," mainly "for consumptive tuberculosis patients" (Martinez 2017:59). He highlighted its equable climate and its even temperature with no extremes of heat and cold in winter and summer. For Leared such a climate makes Tangier "a healthy town" despite the fact that the "sanitary arrangements are very imperfect" (Martinez 2017:59). Unsurprisingly, Leared considered Tangier's climate as much more favorable to that of Madeira, Egypt and even Algiers, which were the three most visited countries by British invalids (Martinez 2017:59).

Although references to the climate and discussions of its curing qualities are scant in British women travelogues about Tunisia, Mary Elizabeth Herbert noted, on her way to Tunis, that she was accompanied by an Irish family who wanted their elderly son to reap the benefits of a healthy climate (Herbert 1872: 243). Adel Manai interestingly noted that by the late nineteenth century there was a common belief that Tunisia would be "a popular winter health resort" (Manai 2018b: 52).

This is evident in the comments of some of the British women travellers who visited Tunisia in the late nineteenth and early twentieth century. They admired the sea and health resorts which the local population benefited from and which some of them found much pleasurable and beneficial. Emily Ward admired the spa town of Korbous and described it as a "wonderfully beautiful spot, where rheumatic, lane and very fat people seek a cure" (Ward 1920: 147). There, she saw very fat jewesses who came to benefit from the curing qualities of water. The height of the spot and the hills protect the invalids from the wind and healing waters sprang out of the mountain-side (Ward 1920: 147).

It is interesting to note that Korbous was not only a popular among Tunisians. Eric Jennings demonstrated that the sea and health resort was a favorite hydro-mineral spa for the local population, and French colonials with its healthy temperate marine climate and hydro mineral waters during the nineteenth century (Jennings 2006: 154). Julia Clancy Smith showed that resident and European visitors used the waters of Korbous to treat rheumatism and other diseases such as arthritis, dermatis, and digestive problems (Clancy Smith 2011: 165). For example, the English consul general in Tunis, Sir Richard Wood visited the "Baths of Korbous" in November 1858 in order to cure his rheumatisms (Clancy Smith 2011: 165). This "health-seeking behavior" as Julia Clancy Smith calls it, is also clear through Erskine Stewart's delight in having a bath in al Hamma, an oasis with some thousands of date palms in Southern Tunisia. The spot was characterized by many Roman baths "made of slate, or some dark, coal substance" (Erskine 1925: 213). She was delighted with the hot water which "bubbled in at one end and went out at the other, making a delicious bath with the water changing all the time" (Erskine 1925: 213). Although tourism infrastructure was not developed enough in the early decades of the twentieth century, Erskine Stewart greatly appreciated the rest-house at al Hamma. The latter was quite comfortable with its big and white-washed sitting room. It had quite decent bedrooms with blue tiles

on the walls, and a raised garden in the middle with a well in the centre (Erskine 1925: 213). Similarly, Herbert recommended to prospective travellers a tourist spot between Carthage and Goletta

> where a number of villas and country houses or rather sea-side watering places of the Bey's family or his ministers; and I can conceive no more enjoyable spot in the summer-time than this sea shore with its big shady rocks, beautiful sands, lovely shells and glorious blue sky…Mrs Wood told me that it was her children's greatest delight to come here for the day for their country home at Marsa which is only a few miles off and did not wonder at their taste. Remounting the hill we came to the ruins of the famous temple of Esculapius. The view from thence and of the whole line of coast, with the range of mountains beyond, and the sparkling Mediterranean, was wonderfully beautiful (Herbert 1872: 285–259).

Certainly, these tourist spots provided entertainment to women travellers. Some of them sought pleasure and relaxation in the hot and mineral springs. British women travellers in Algeria such as Lisbeth Gooch Séguin Strahan enjoyed the hot springs of Hammam Rira, which was a major tourist attraction. Guidebooks such as Robert Lambert Playfair's and John Murray's *Handbooks for Travelers in Algeria* emphasized the therapeutic value of these mineral waters. Although Strahan noted that the Hammam is the site of the "most important of the many natural springs of Algeria," she did not deny the fact that the country abounds with mineral springs "of various temperatures" (Strahan 1878: 462). She offered a detailed description of the mineral springs of Hammam Rira and their various therapeutic uses. Some were saline and extremely beneficial in cases of rheumatism and cutaneous diseases (Strahan 1878: 463). Some others were ferruginous and "have marvelous effect" upon bodies weakened by fever, diarrhea, dysentery, and other diseases (Strahan 1878: 463).

Moreover, Strahan admired the pure and sweet quality of the air of Hammam Rira. She wrote that "the air …is pure and sweet, the temperature equal and even in summer, it is said that the sea-breezes, carried over the plain bring morning and evening a certain freshness which tempers the heat" (Strahan 1878: 464–465). Perrier offered also a detailed description of the hot springs of Hammam Rira, its location, the purity of the air and offered a detailed analysis of the ingredients of these waters and their curative qualities. Undoubtedly, Algeria is rich in mineral springs.

Herbert praised the curing qualities of the mineral springs of Biskra. She enjoyed them and was relieved from her rheumatism immediately. She wrote: "As I was suffering from numbness of one leg in consequence of the rheumatic fever I had had the previous winter, I resolved to try these waters, and was sensibly relieved by them even after first experiment" (Herbert 1872: 202). Although the spot lacked proper infrastructure and invalids were expected to bring all what they need from Biskra, Herbert had "very great faith, not only in the efficacy of the spring itself, but in the effect of warm dry climate of this place for all such ailings" (Herbert 1872: 202). Similarly, Mrs. Llyod Evans, who visited Algeria in 1867, described the mineral waters of Hammam Rira as "of great efficacy" (Evans 1868: 90). Moreover, she admired the "charming situation" of Hammam Meskoutin

(Evans 1868: 322). The spot was surrounded by beautiful scenery. She was fascinated by the "grassy slopes," the "magnificent olives," and the "brilliant flowers," the verdure of the landscape and the unexpected discovery of hot springs (Evans 1868: 322). Certainly this description draws our attention to British women travellers' appreciation of the wild landscapes they found in Algeria, Tunisia, and Morocco. Most of their descriptions of the natural landscapes reflect the influence of the romantic movement of the eighteenth and nineteenth centuries. The movement venerated "nature as a benign, maternal goddess capable of renewing the spiritual batteries of jaded urbanites" (Beeton 2005: 5).

Ellen M. Rogers, who was very often annoyed by the "passing to and fro of dirty Arabs under the narrow arcades" of Algiers, was relieved by the pleasant atmosphere in the hills. She was particularly captivated by the summer residence of the Italian consul at el Biar. From there,

> no words can paint the beauty of the distant coloring of the hills: the Plain of the Metidja, Cape Matifon, bathed in the warm glow of the setting sun, jutting out into the sea, with the deep blue waters forming a frame on three sides: snow wreaths and mists on some of the peaks of the Atlas, with others of the same range dipped in sunbeams, all seemed like enchantment (Rogers 1865: 87).

Matilda Betham-Edwards showed also great interest in Algeria's natural beauty. In a party of twenty, she reveled in a picnic and enjoyed drinking tea and eating cakes and strawberries under the shadow of olive trees (Bentham Edwards 1867: 171). Edwards was fascinated by the wild flowers of different types and colors: mignonette, rosemary, golden marigolds, and "beautiful tall asphodels, sprinkle the turf" (Bentham Edwards 1867: 21). In one of her walks, she enjoyed the breathtaking natural landscapes and wrote that:

> the outlying country was lovely beyond description. We went out to pluck wild flowers, and in ten minutes our hands were full; there were crimson anemones, the pale asphodel, the iris, white and purple, marigolds large as roses, golden as ripe oranges, vetches purple, blue and pink, rosemary mignonette, and an infinity whose names I do not know. With this glory of color on the hills, a river rippling amid oleanders below, a fresh spring air quickening our pulses, and a horizon of mountains of every sides, here of the deepest green, there of dreamiest violet-who would not envy us such as walk (Bentham Edwards 1867: 122).

Likewise, British women travellers appreciated the natural beauty of Tunisia. Their travelogues abound with glowing descriptions of the natural scenery. On her way from Bizerta to Tunis, Mrs Greville asserted that the scenery was magnificent. She was delighted to see bold cliffs, with mountains in the background and at times a rocky islet upstanding in the blue sea (Greville 1894: 139). Francis Nesbitt was impressed with the "wondrous blue" of the Mediterranean and the lagoon of the Bahira. She was fascinated with the scene with its distinctive beauty as:

the water shimmers in the sunshine and the town of La Goulette gleams likewise and so do the houses scattered along the coast. The slopes of the hill and the whole of the plain towards the sea are covered as it were with cloth scarlet and gold and green, poppies and marigolds and a waving corn, in masses such as can rarely be found elsewhere (Nesbitt 1906: 183).

She commented further on the fantastic scenery as the twin peaks of Bou Korneine, the Gemini Scopuli of Virgil were "soft as a dream in the early morning" (Nesbitt 1906: 183). Seen from a distance, the ancient ports of Carthage still keep their original form. The tiny lakes were "calm as glass and almost more definitely blue than the Mediterranean" (Nesbitt 1906: 183). She concluded that the view was beautiful on all sides. A similar attitude can be found in Eleanor Elsner's *The Magic of Morocco*, Howard Vyse's *A Winter in Tangier*, and Perrier's *A winter in Morocco*. These women, like British women travellers in Tunisia and Algeria, show a romantic appreciation of the wild scenery.

Conclusion

This paper has explored some of the travelogues written by British women who visited Algeria, Tunisia, and Morocco in the second half of the nineteenth century and the first half of the twentieth. Lady Herbert, Amelia Perrier, Emily Ward, Ellen Rogers, and others took advantage of the unprecedented travel opportunities offered by the development of new means of transport and journeyed in different parts of these Maghrebean countries. The paper has paid close attention to these women's reasons for travelling to and writing about the three countries. It has dwelt also on their representations of the new lands. It has revealed that these women enjoyed the climates, hot springs, and natural landscapes of the three North African countries. Most interestingly, these women's favorable descriptions suggest that Algeria, Tunisia, and Morocco were attractive tourist destinations for many British women travellers at least during the period under discussion. They also indicate the importance of what Vladimir Jankovic termed as "the health factor" (Jankovic 2006: 271) in motivating women's journeys to foreign lands. As I already pointed out, some women travellers such as Mary Elizabeth Herbert, Isabella Bird, and Ellen Rogers travelled for health reasons. Other women such as Emily Ward, Lisbeth Gooch Seguin Strahan, and Erskine Stewart admired and enjoyed the hot springs and praised their curing qualities. This is a compellingly interesting aspect of these women's views of the three North African lands that has received scant attention in the existing literature. It opens as well new avenues for further research, for example, on whether these women's favorable impressions of the climates of Algeria, Tunisia, and Morocco were shared by their male counterparts.

References

Beeton S (2005) *Film-induced tourism.* Toronto: Channel View Publications.
Betham-Edwards M (1867) *A winter with the swallows.* London: Hurst and Blackett.
Chamekh M (2018) Algeria in British travel writing (1850–1930): images and perceptions. *Athens Journal of Tourism* 5(4): 271–282.
Chaouch K (2004) British travellers to Morocco and their accounts, from mid-16th o mid-20th centuries: a bibliography. *Working Papers on the Web. Representing Morocco* 7.
Clancy-Smith J (2011) *Mediterraneans: North Africa and Europe in an age of migration c.1800–1900.* Berkeley: University of California Press.
Elsner E (1928) *The magic of Morocco.* New York: Dodd, Mead.
Erskine S (1925) *Vanished cities of Northern Africa.* London: Hutchinson. Evans HL (1868) *Last winter in Algeria.* London: Chapman and Hall.
Graves MS (2011). A certain barbaric originality: Moroccan pottery as viewed by British travel writers of the nineteenth century. *The Journal of North African Studies* 12(4): 501–516.
Greville NE (1894) *A land of mosques and marabouts.* London: Chapman & Hall Ld.
Herbert ME (1872) *A search after sunshine or Algeria in 1871.* London: Richard Bentley & Sons.
Howard-Vyse L (1882) *A winter in Tangier and home through Spain.* London: Hatchards.
Jankovic V (2006) The last resort: a British perspective on the medical South, 1815–1870. *Journal of Intercultural Studies* 27(3): 271–298.
Jennings E T (2006) *Curing the colonizers: hydrotherapy, climatology, and French colonial spas.* Durham, N.C: Duke University Press.
Johnson A (2001) Orientalism and gender: the condition and status of women in Morocco. In P Starkey, J Starkey (eds), 209–233. *Interpreting the orient: travellers in Egypt and the near East.* Reading, Great Britain: Ithaca Press.
Manai A (2018a) Early Algerian tourism. https://www.researchgate.net/publication/327664756_Early_Algerian_Tourism.
Manai (2018b) The origins of Tunisian tourism. *Journal of Mediterranean Studies* 27(1): 49–61.
Manai (2007) *British travellers in Tunisia, 1800–1930: a history of encounters and representations.* Tunis: Centre for University Press.
Marks L, Worboys M (1997) *Migrants, minorities, and health: historical and contemporary studies.* London and New York: Routledge.
Martinez FJ (2017) Mad at Tangier: hygienist discourses, mental disorders, and european competition for hegemony in early twentieth century Morocco. *The Journal of the Middle East and Africa* 8(1): 57–73.
Morris RE (2018) The Victorian 'change of air' as a medical and social construction. *Journal of Tourism History* 10(1): 49–65.
Nesbitt F (1906) *Algeria and Tunis painted and described.* London: A & C Black.
Pemble J (1987) *The Mediterranean passion: Victorians and Edwardians in the South.* Oxford: Oxford UP.
Perkins KJ (2013) So near and yet so far: British tourism in Algiers, 1860–1914. In M Farr, X Guégan (eds), 217–235. *The British abroad since the eighteenth century*, Volume 1. London: Palgrave Macmillan.
Perrier A (1873) *A winter in Morocco.* London: H.S. King.
Rogers EM (1865) *A winter in Algeria, 1863-64.* London: Sampson Low, Son and Marston.

Siber M (2016) Ellen M. Rogers as a feminist and orientalist travel writer: a study of her *a winter in Algeria: 1863-64*. *Alicante Journal of English Studies* 29(Dec): 213–228.

Speake J (2003) *Literature of travel and exploration.* New York: Fitzroy Dearborn.
Strahan L (1878) *Walks in Algiers and its surroundings.* London: Daldy and Isbister and Co.

Ward E (1920) *Three travellers in North Africa.* London: John Lane.

Warren L (1922) *Through Algeria and Tunisia on a motor bicycle.* London: Jonathan Cape.

The Transition of Urban Toponymy of Izmir: Impacts of Modernism and Nationalism on the Street Names

By Orcun Cobangil*

Street names are one of the most important indicators of urban identity and memory as they can manifest different parts of urban life. However, after the emergence of modernity and nationalism, street naming process has become a subject for political agendas to disseminate their influences over urban places by favoring some names over the others and this process has some inevitable impacts on urban memory. Therefore, this article aims to evaluate this process by examining the history of the street names and street naming in Izmir as it provides an appropriate case in this regard due to the transformations it went through. While analyzing it, the paper does not only focus on the basic categorization of the street names but also the political mentality behind them. In this context, it shows the relationship between the modernist and nationalist tendencies in the urban geopolitics and the transformation of the street names.

Introduction: Collective and Urban Memory

The relationship between place and memory was discussed at length in the course of history especially since Cicero who invented a method to remember things by imagining them in some basic spaces such as houses, arcs and the like in the mind (Perlman 1988: 49–50). This approach underpins the role of basic spatial elements in the process of remembering by bounding the concepts of memory and place together. Centuries later the same approach can be followed in Halbwachs' renowned work "The Collective Memory" in which he argues that people are deeply attached to their nearest surroundings (houses, streets, neighborhoods, etc.) or their "material aspect". Residents find stability and comfort in their surroundings which basically remind them that life simply continues whatever a major detrimental breakdown occurs outside of their places. Depending on their nearest places people can access to some comfort and therefore, they tend to resist the interventions aimed at changing their places. According to Halbwachs (1992), the level of the resistance against policies aimed to change their place is closely related to the level of dependence of their collective memory on place. That is the main reason that people do not alter their built environment so easily such as demolishing and rebuilding. Social groups' attachment to their places impedes it (Halbwachs 1992: 3–5). Attachment of social groups in a defined place of their closest environment such as houses, streets and neighborhoods is also the main

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reason explaining why collective memory depends on place; the features of this attached place simply contribute to the formation of collective memory. In this sense, urban places provide a unique environment for this formulation as their role is to be "the theater of our memories" even though cities are constantly being changed due to social realities. In the course of urban transformations, memories are being buried down in the physical environment (Boyer 1996: 31). But the relationship between urban place and memory cannot be explained simply by physical places, it is also about the social groups who handle all kinds of daily interactions in these places. The term "group" is particularly of importance here as collective memory is more than a total sum of individual memories; it also encompasses group trends and characteristics to which it belongs (Green 2011: 99). Therefore, it can be assumed that the spatial nature of collective memory has both material and social backgrounds. Some discuss that modern societies try to intervene this connection in order to create "a memorial background" in accordance with their "histories" combined with their political mentalities. The examples of this process can be traced especially in urban places. French scholar Pierre Nora evaluates this phenomenon by the concepts of "*milieu de memoire*" and "*lieu de memoire*".

According to Nora (1996), modern societies try to design a cure to cope with the seemingly inevitable incident of losing their memories so, they transform "*milieu de memoire*" to "*lieu de memoire*". This transformation also marks the dominance of history over memory as while milieu de memoire contains the vivid and continuing parts of collective memory based on its habitants' doings in their most mundane and daily lives, lieu de memoire is the manifest of designed and politically corrected place of memory. In order to create lieu de memoire, history captures memory by using some modern archiving methods. Hence, history creates a designed representation of the past in the form of lieu de memoire at the expense of losing living remnants of the past found in the form of milieu de memoire (Nora 1996). In other words, milieu de memoire is created in an organic way in the course of history of social groups and expresses the real features of collective social memory but, lieu de memoire is an artificial place excluding the real features of collective memory while including only a fixed "favorable" part of it. The dominance of lieu de memoire has become evident with the advent of modernism and nationalism which aim to shape the social formations and relations in accordance with their visions. These assumptions can shed light when it comes to define the urban memory and urban places of memory and trace the transformation of milieu de memoire to lieu de memoire in urban areas. In this context, street names are the perfect examples imbued with collective urban memory and the role of street naming process (i.e., how streets are named) can provide some observations about the interventions of political/ideological mentality on the (re)formulation of urban memory. The street naming process based on patterns of lieu de memoire defined by Nora, which is the dominant method in Europe, shapes the street names in accordance with the nationalist commemorative narratives of nation states. However, in addition to this method, a modernist perspective based on letters and numbers, dominant in the United States, also goes hand in hand as to it aims to spread its rationale in order to create

an ordered city. This system might also have some impacts on urban memory and identity. Hence, this paper will try to discuss the role of street names and the process of street naming by evaluating their characteristics and their meanings for urban memory in the case of Izmir, Turkey. As a city having been changed completely in the beginning of the 20th century, it will be worthwhile considering the role street names in urban memory of Izmir and modernist and nationalist impacts on them in the course of near history.

Methodology

In the context described above, this article will discuss the relevant literature and theories about street names/street naming at first. Then, it will evaluate the process of street naming and street names in Izmir based on the pre-Republican (Smyrna) and Republican (Izmir) periods of the city. The relationship between the urban memory of the city and the street names, which is the main research question of the paper, will be discussed by the experiences found in these periods.

Since the aim of this paper is to depict the impacts of modernism and nationalism on the street names in the case of Izmir, the street names found in two different time periods of the city will be presented with the relevant historical developments and sources of urban memory/identity. The insurance map of the city created by Goad in 1905 will be used to show the street names at the pre-nationalist stage (i.e., the Ottoman period). For the next (nationalist and modernist) period, the meeting minutes of the Municipality and local newspapers in 1937 (which is the year when all of the street names were changed), both of which are found in the archives of Izmir Metropolitan Municipality, will be used in order to demonstrate the complete changes of street names and the mentality behind new street naming. As the insurance map shows only the historical central part of the city, the same area has been selected for the contemporary period, therefore this paper only covers the street names found in the city center for the both periods.

For the categorization of street names of the both periods, the literature about street names presented above has been taken into consideration to some extent particularly in the creation of categories of street names of contemporary Izmir (such as numbers (alphanumerical system) and republican values (commemorative street names)). However, categories are generally constructed by the author based on the historical identity of the city, which will be discussed.

Street Names and Street Naming

In order to evaluate relationship between street names and urban memory, "a critical reading of toponmys for wider social context" (Yeoh 1996: 298) is needed. Rose-Redwood et al. (2017) trace the toponymic studies back to their foundations in their study. In the first three quarters of the 20th century, toponymic studies were confined to the categorization of names with their cultural backgrounds. However, after the 1980s three main critical toponymic approaches have emerged: City-text

approach which is based on the use of semiotics particularly in the process of commemoration and practices of renaming street names according to the political mentality; cultural arena approach which deals with the interaction between street names and socially marginalized groups in urban landscape and, performative space approach which is more deeply concerned with the use of street names in daily lives of their users and goes beyond the representative nature of names in its analysis (Rose-Redwood et al. 2017: 24–25). Bearing their differences between each other in mind, it should be stated that these three approaches cannot be separated completely as all of them consider power relations and political mentality behind the creation of street names to a certain degree and in order to achieve their goals they do a lot more than just a basic categorization of street naming process does. This paper will mainly rely on the assumptions of city-text approach as it is aimed to evaluate the semiotics about the official street (re)naming process with actual street names found on the maps from different time periods considering their commemorative functions and roles in shaping urban memory and lieux de memoire as discussed below particularly in Azaryahu's assumptions.

Street names can basically serve two main purposes: Firstly, they mark streets for spatial orientation so they function as a way of navigation method. Secondly, they are a manifestation of symbolic values and political order in their commemorative use as they link "national past" to urban geography. They attach meanings of urban landscapes to the past by shaping urban memory with these symbolic values (Neethling 2016: 145–147, Light 2004: 168, Azaryahu and Kook 2002: 210, Alderman 2003: 171–172). Azaryahu defines their roles in navigation as the primary function by definition that the main function of street names (odonyms) are to organize spaces in a settlement for the sake of orientation by referring to spaces with defined markers. Neethling argues that in this use, their initial meanings which were attributed to them by their first users become less important since people start using them to navigate and their names simply become markers. But this process needs to be evaluated deeply considering the second effect of street names which Azaryahu defines as commemorative function. In that use, street names are constantly being used to create historical memory of city dwellers (Azaryahu 1996: 312, Neethling, 2016: 145). The commemorative power of street names comes from the fact that streetscapes are the places where the formulation of social production of urban spaces within collective identity and memory takes place. (Rose-Redwood et al. 2017: 24). "*Collective identity is constructed by and experienced through shared symbols and presentations*" and it is defined and maintained in people's attachment to these symbols and representations (Azaryahu and Kook 2002: 198–199). These can be found embodied in street names therefore they can infiltrate into the mundane lives of city dwellers as people use streets in almost every aspect of their daily lives. The interaction between street names and daily life can be explained even by the frequency of their use in the spoken language as some discuss that "*the way the name is pronounced reflects, and contributes to, the constitution of an imagined community*" (Kearns and Berg 2002: 284). This process provides a perfect opportunity for political regimes and ideologies to spread their influences.

Therefore (re)naming street names is a very powerful political instrument in the urban politics.

Before the 18th century, street naming had not been an 'official' process; it had been created by local topography and history but, since then it has been managed by administrative authority. What this meant for street names is that the interferences of the administration on street names diminished the effects of locally lived history on street names in favor of the (nationalist) political agendas of the administration; administrative authority started deciding which names are suitable and appropriate to commemorate as a street name. In other words, this "official" process had detrimental effects on the continuity of locally formed urban memory while it has favored the nationalist ideals. But at the same time, new "historical" street names became an example of lieu de memoire as they introduce an authorized version of history while molding the symbolic values into the urban spaces (Azaryahu 1996: 312–313). In this context, street names are being chosen and renamed in par with desired nationalist political order because the new political order needs a new historical narrative to be imbued in the urban geography in order for nationalist mentality to manifest itself through its indicators on urban areas by symbolic values which constitute collective identity and memory (Light 2004: 155). This is not a linear procedure as there are many candidates to be commemorated in urban spaces so, street naming itself reflects contesting power relations in shaping urban memory (Azaryahu 2011: 28). When street names are defined, they also demonstrate a hierarchy of historical memory (Azaryahu and Kook 2002: 199) in which some forms of commemorations have won the struggle against the others over urban spaces. As indicated above, these authorized versions of history are being disseminated into mundane lives by the use of street names imbued with politically authorized commemorations.

Another way of naming streets, especially in the United States, is to use numbers and letters. This alphanumerical street naming system is mainly based on the primary function of street naming; to address and distinguish streets in order 'to regulate administrative control' over cities (Azaryahu 1996: 312). This is also an implementation of the Cartesian system on urban landscapes as these signs provide measurement in terms of locations of streets in relation to each other based on the logic of mathematical techniques (Rose-Redwood and Kadonaga 2016) therefore it basically makes rational Cartesian paradigm predominant in urban geopolitics for creating "ordered" cities. At first glance using alphanumerical street naming system seems politically neutral as numbers do not seem related to political values but, if these numbers replace the previous actual names by removing old street names consisting full of actual words, it can be assumed that alphanumeric names erase the traces of urban memory and fill them with the modernist Cartesian logic instead. This policy also constitutes another politically biased decision about urban spaces: it erases the non-desired past and replaces it with seemingly value free rational categorization in a modernist perspective. In other words, even though this system itself does not have the function of commemoration (i.e. lieu de memoire), it still has implications for the relationships between place and collective memory (i.e., milieu de memoire). While street numbers rationalize the urban spatial organization, they disseminate the modern

state's geo-locational regime (Vuolteenaho 2012, Harris and Lewis 2012). As Rose-Redwood et al. (2017: 31) put it into words, both words and numbers are important elements in the formulation of approved narrative of urban memory.

An Overview of Urban Identity and Memory of Smyrna/Izmir

According to Mansel (2014: 221), there are eight basic characteristic features distinguishing the Levantine port cities from the others; "geography, diplomacy, polyglottism, hybridity, trade, pleasure, modernity, and vulnerability". Having been the largest external trade port city of Ottoman Empire (Tasci et al. 2015: 62), Izmir –or back then, Smyrna- was no exception in this regard: the foundations of the urban memory of Smyrna[1] lay down on these elements which are interrelated between each other. Therefore, it is worthwhile considering how these elements formed the near history of the city and its urban memory.

The rise of Smyrna in the course of near-history started in the beginning of the 17th century when its trade incomes surpassed the trade income of the rival port town of Chios. The European consuls started moving in Smyrna following the success of the city in its trade performance. The presence of these newcomer Europeans who were generally the English, the Venetian, the French, and, the Dutch became visible in the geopolitics of the city. An international community was being formed whilst the importance of the city in the international commerce between the Ottoman Empire and the West was increasing (Mansel 2011: 17–20). Smyrna could gain an important role in the trade networks against its rivals thanks to its strategic position between the East and the West and therefore it could attract many populations from the different parts of the world who were gathering in the city (Özveren 2010: 120). In other words, its geography –the city is located at the very end of a highly sheltered gulf of Izmir– helped the city became a trade center and the trade brought a plural society consisting of different communities and polyglottism. Smyrnelis (2009a: 17–22) also points outs these elements whilst defining the main patterns of urban history of Smyrna; a main trade port city and a connecting hub not just for trade goods but also for ideas and cultures, a host city presenting an earlier version of "Modernity" for a plural cosmopolitan society consisting of many non-Muslim populations in a Muslim Empire and a cultural and intellectual center in the Mediterranean.

The different neighborhoods for the different communities emerged in the 16th and 17th centuries (Mansel 2011: 24) and the urban settlement patterns in Smyrna were formed according to these different communities (Serçe 2010: 26). In their neighborhoods different languages (Turkish, Dutch, English, French, Italian, Provençal, Greek, Armenian, Ladino) were spoken and different religions (Islam, Roman Catholic, Protestant, Anglican, Greek Orthodox, Armenian Gregorian,

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[1]From now on, the word "Smyrna" will be used when referring to the city in the Ottoman period. On the other hand, "Izmir" will be used to refer the post-Ottoman, contemporary city of the Republic. This duality is followed because of the fact that "two cities" differ in so many subjects one of which are street names. The name "Izmir" was made official name of the city in the Republic period. However, the name Izmir itself is derived from the name Smyrna.

Judaism) had their own believers. Even though the city hosted a plural and cosmopolitan society, their neighborhoods were separated and this separation was a reflection of the relevant roles of different communities in the logic of trade system of the city (Bilsel 2009a: 145). The settlement patterns between the 16th century and the beginning of the 20th century therefore can be roughly summarized as follows: Whilst Europeans (Franks, Levantines) settled in the coastal part of the city that was very close the port, Muslims remained in the inner parts and the neighborhoods of local Non-Muslims (Greeks, Armenians and Jews) were located between the European and Muslim quarters reflecting local non-Muslims' commissioner role between Muslims and Europeans in the commerce system of the city.

This separation between different communities in the urban geography of the city led some researchers to assert that "even though these communities could manage to live together, the contact amongst them was limited and they were alienated to each other" (Kayın 2010: 360). This assumption also implies that the urban identity of Smyrna consisted of the identities of 'fragmented communities' and each neighborhood had different sets of memories regarding their attachments to their neighborhoods. However, while different communities perceived the city from their own perspectives, these perspectives were being formed in relation to each other. So, both the similarities and differences were seen in the ground of "common of interests" (Smyrnelis 2009a: 19–20). Hence, the identity of cosmopolitan Smyrna presented both singularity and plurality consisting of elements that were created interdependently.

The formulation of urban identity of Smyrna should be evaluated in a broader context that includes the impacts of some political and social movements happened throughout the Ottoman Empire on the Ottoman port cities where affluent Non-Muslim communities were being flourished and culminating power (Köksal 2018: 53–54). Both nationalist and new Ottomanism movements had some profound impacts on these communities. Whilst nationalism strengthened the national identity of the communities at the expanse of the interests of the Empire, Ottomanism movement tried to overcome this issue by bringing forth the concept of the imperial citizenship encompassing all the subjects of the Empire regardless of their nationalities and religious beliefs. The tension between these movements were not feeble but the concept of new Ottoman citizenship helped Smyrna build new social spaces in a "modernist" way with the appointments of new Ottoman bureaucrats as the governors of the city who received a westernized education. Kırlı also asserts that both European colonialism and Ottoman Tanzimat Reforms had some considerable impacts on the modernization of the city in this regard (Kolluoğlu Kırlı 2007: 220). Ottoman high officers collaborated with European companies to construct new facilities in the city like the port and the promenade and tried to deal with the considerable poor situation of the Muslim quarter of the city.

The Cosmopolitan era of Smyrna, which had been survived under the tension mentioned above came to the end after the World War I. Smyrna, which was once an agent of cosmopolitanism, found itself at the front of nationalism (Mansel 2011: 207). After the Great Fire in 1922, even the physical materials and buildings

which epitomized the cosmopolitan past of the city literally burned down to the ground and the city lost its remaining non-Muslim populations due to the population exchange between Greece and Turkey in 1923. A new city, Izmir, was born from the ashes in the plans of the new modernist urbanization process of Turkey. In fact, Smyrna was already constructed under the influence of modernism in the late Ottoman period but this new version of modernism in the Republic Era can be considered slightly different from the previous one as the differences can be shown in Table 1 (Kolluoğlu Kırlı 2007: 217). This new city now has a different face and a different population and it does not endeavor to settle with its glorious and conflicted past and to rediscover its long history (Smyrnelis 2009a: 22). To put it differently, whilst the urban landscape and population composition changed during this transformation, the urban identity and memory were also altered. Therefore, it would be worth considering this transformation by evaluating the street naming process and street names in both the Ottoman and Republic Eras as they reflect the social conditions and political mentality in which the city had been through and they can also be valid indicators of urban memory or tools to create a desired urban memory (or lieu de memoire) as mentioned above.

Table 1. *Differences between Smyrna and Izmir*

Smyrna	Izmir
Located in an Empire	Located in a nation state
Multicultural and cosmopolitan population	Homogenized population
Heterogeneous urban landscape	Homogeneous landscape
Under the influence of flexible and early version of modernity	Under the influence of well-structured and rigid modernity

Source: Compiled from Kolluoğlu Kırlı 2007: 217.

Streets, Street Naming and Street Names in Smyrna (before 1923)

When Smyrna was becoming a major Levantine port city in the 16th and 17th centuries, even though the streets were packed with merchants from different nationalities and trade goods from different parts of the World, they were quite narrow and even the main street, the Frank street, which was paralleled to the coast, was dirty, ill paved, very narrow and too crowded. But in the 19th century, the Frank Street and the Street of Roses (*la rue des roses*) became the most beautiful streets of the city (Smyrnelis 2009a: 11). It was no surprise that Frank Street had become well maintained as it was being organized in accordance with the complex trade system of the city with Europeans, it was the hearth of Frank Quarter and the rest of the city, especially the parts where European influences were being felt. However, the rest of the streets remained narrow and ill maintained and socioeconomic activities and relations were crammed into these narrow streets (Kolluoğlu Kırlı 2007: 226). Even though most of the streets were dirty, ragged and dangerous particularly at night and all types of crimes such as arson, homicide, extortion were not uncommon, the inhabitants of Smyrna met and interact with each other on these streets (Smyrnelis 2009b: 199–201). These interactions happened on the streets were one of the main factors contributing to

the creation of cosmopolitan urban identity and its memories amongst the inhabitants. Even the narrow shape of the streets might have encouraged people to communicate with each other and this is what Halbwachs asserts about the formulation of collective identity as mentioned above. The collective identity of the city was being created naturally by the occurrences, happenings, interactions amongst all kinds of people which the city had during these centuries.

The city went through an earlier version of modernism towards the 20th century which can be followed on the urban plans aimed to organize the city space in a more systematic manner than before considering the need to change the dominance of narrow, disorganized and rugged streets on the urban landscape. The first application of modern urban planning in the Ottoman Empire was introduced in Smyrna in 1840s when the Armenian quarter (*Haynots*) burned down (Bilsel 2009a: 146–147). While the locations of the modern port and train stations made the streets of the Frank Quarter around the Frank Street more vivid, the recently established Municipality of Smyrna (1874) opened up some news streets and tried to ameliorate some ragged streets especially in the southern districts where the Muslim and Jewish communities lived as the streets in these areas were more problematic and disorganized in comparison to the ones found in the Christian quarters. Governor Mithad Pasha (1880–1881) even tried to open up new boulevards connecting the rich and poor parts of the city but failed eventually (Bilsel 2009a: 154–159). What these instances point out is that the streets became a form of device to modernize the city for the interests of its economic life but, under these transformations the street names remained relatively the same[2] and they could represent the socioeconomic and cultural features of their users and passersby as the streets were given names not in a systematic way in the Ottoman Empire but according to some symbols with which they were associated (Star, 2014). Therefore, it can be assumed that the street names in Smyrna were one of the indicators of its collective urban identity.

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[2]The maps showing the growth of urban center of Smyrna from 17th until 20th centuries can be traced in Beyru (2011).

Figure 1. *Insurance Plan of Smyrna which was issued by Charles E. Goad in 1905[3]*
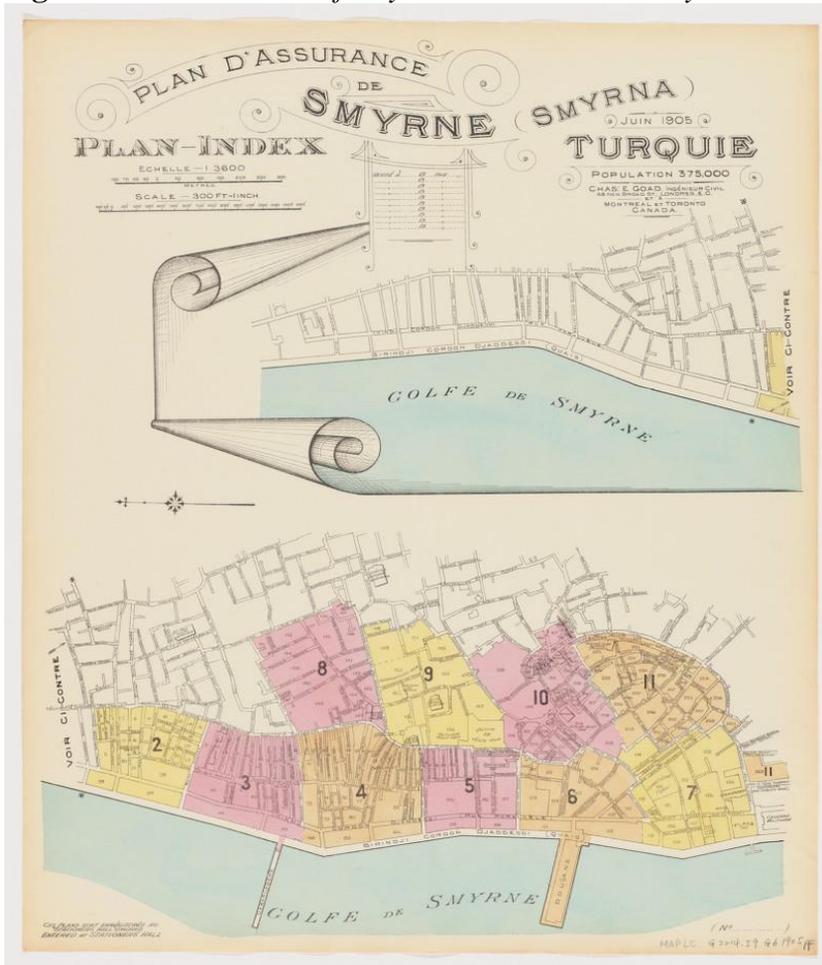
Source: Goad 1905.

In order to list the street names of Smyrna, Insurance Plan of Smyrna which was issued by Charles E. Goad in 1905 (Goad 1905) has been selected as this plan has the full list of street names for the each designed section (See Figure 1). The names found in the index of the plan and the other visible street names which are not included in the index since they are not located in the sections but can be seen on the map have been taken into consideration. Then, the names have been categorized into the seven basic classes depending on the meaning of the names. What is interesting is that even though the language of the map is French, different languages (French, Greek and Turkish) are used to name the streets on the map in a mixed way.

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[3]For the high resolution images of each colored section and the table containing all of the street names, see the main source: Plan Index, Index, Plate number 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 in Goad, Charles E. Plan d'assurance de Smyrne (Smyrna): Turquie: plan, index. Londres: C. E. Goad, 1905. https://nrs.harvard.edu/urn-3:FHCL:3746611. [Accessed 6 September 2020.]

Table 2. *Categories of Street Names in the City Center of Smyrna in 1905*

Category	Description	Frequency
Commercial/Economic Activities	They generally refer to the names of trade goods, commodities, professions and passages (Turk. Ferhane (Frank House) – Verhane. These passages emerged in the 19th Century as trade centers alongside the Frank Street.	120
Landscape	The names in this group refer to both the natural and sociocultural features of the relevant lands.	38
Religion	The names about Christianity and Islam are covered in this section. They are about the temples, saints and reverends of these religions in general.	14
Levantine Community	The passages generally bear the names of affluent Levantine families. Some family names are also given to some streets.	27
Greek Community	Some passages and streets are associated with Greek family names. Also some streets are named after some saints revered in the Greek Orthodox Church.	30
Ottoman Bureaucrats	Some streets are named after the Ottoman bureaucrats and statesmen	10
Others and Unidentifiable	The features which do not fit in the other categories or of unknown origin are listed here	44

Note: Some street names are given place in more than one section as their meanings can be associated with multiple categories. See the Appendix 1 for the full list.

As seen in the Table 2, the street names of Smyrna represented the cosmopolitan nature of this Levantine and Ottoman port city. They were created by the relevant social, economic, cultural, communal activities with which the inhabitants were interacting in their daily lives and because of this fact, the street names of Smyrna could be considered as indicators of Halbwachs' notion of collective identity and Nora's concept of milieu de memoire. These names remained consistent during the centuries were the carriers of urban memory to the next generations.

Street Naming in Izmir (after 1923)

The Great Fire at Smyrna and the Population Exchange between Greece and Turkey had a profound impact on the topographic and demographic composition of the city: The city lost its Non-Muslim population and their built environment. Now the new city, Izmir, born out of the ashes of the old one became a political

and nationalist case for the recently established modern Republic of Turkey as Izmir was the symbol of the National War of Independence (Alim Baran 2003: 75). Nationalism and modernism were the main themes of the political agenda of the newly founded Republic. The Reforms in Turkey aimed to transform the society to a modernist stage by political and administrative devices including urban planning (Bilsel 2009b: 250).[4] Rebuilding Izmir was the product of this nationalist and modernist mentality as Izmir was a perfect experimental area since the city center had been destroyed to a great extent and the city was nationalized. In this regard, changing street names of Smyrna was one of the most effective implementations of the nationalist and modernist urban planning in Turkey back then.

The street names of this new city were changed by the decrees of Municipality of Izmir and the relevant meeting records about changing street names kept by the Municipality which were obtained from its archives[5] shed light to underlying reasons for changes (or the total replacement) in street names. In this regard, on the 11th of February in 1937 the Municipality accepted the proposal which was put forth by the commission established exclusively for the street names in order to change the street names. According to the proposal, streets whose lengths are longer than 20 meters must have a name but streets shorter than 20 meters must have a number instead and their old names shall be removed. Consequently, this decree removed all of the old street names some of which are shown in the Appendix 1 and replaced them with numbers or novel names. The reasons of the Municipality to change to street names can be found in the meetings records of this decree: It is expressed that "ancient and meaningless" names should be changed. The city is being rebuilt in a "scientific" way and the numeric system is considered more beneficial as streets are being organized vertically and horizontally. Even the Mayor himself refers to the American numeric street naming system as a useful system to categorize the streets. It is also stated that longer street names containing more words require bigger street name signs and therefore cost too much financial resources than the street name signs consisting of numbers only.

The main reason for the street naming process was to remove the former Ottoman and Levantine street names (Ürük 2008: 4). Thus, all of the street names now were of Turkish origin to make the city more national. This trend can be observed in the local newspapers of the city during this period as this changing process was described by local newspapers such as "*changing unsuitable street names in order to give historical and beautiful names*" (Anadolu 1937) and "*Commission of Street Naming changed the names making nonsense*" (Yeni Asır 1937). Street name changes in Izmir can also be evaluated within the context in which many topographic names were changed in Turkey due to the Turkification policy (Öktem 2008, Sahakyan 2010).

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[4]In her study about the street names of Izmir, Asımgil also argues that this process has ideological and nationalist paradigms behind it (see Asımgil 2018).
[5]The meeting minutes of the Municipality used in these paper were obtained from Ahmet Piriştina Kent Arşivi ve Müzesi (2019).

The large and long streets which needed to be named were given names after the high statesmen, military officials and republican values after the 1940s. The decree mentioned above immediately changed the names of First Cordon, Second Cordon and Guzelyali Tram Streets to Atatürk, Republic and Inönü Streets respectively on the 11th of February in 1937. Four days later, this pattern was followed as the new squares of the city were given names by the Municipality after the names of the Treaties such as Lausanne and Montreux which are important for the establishment of the Republic and after the important dates like the 9th of September which is the day Turkey retook Izmir in 1922. However, naming squares after the Treaties was a matter of debate because their names are not of Turkish origin. The solution could be found by the Municipality stating that these names were important reminders of the victories of the Republic and their Turkified equivalents were going to be used (*Lozan* and *Montrö*). The trend of naming streets after military officials (also martyrs) and statesmen was followed when the Municipality of Izmir named some boulevards such as Mithat Pasha, Veteran Osman Pasha, Martyr Sir Fethi, Martyr Nevres, Talat Pasha in 1951 (Ürük 2008: 3).

Considering the developments above, it can be stated that streets were named in the city center of Izmir by two main factors: Firstly; numbers and secondly; concepts, people and values which are important for the Republic. As discussed in the theoric approaches in the literature of street naming, numeric systems aim to make urban areas ordered, rational and value free while Republican names have a commemorative function. As Azarhayu puts it, commemorative street names indicate that a certain party wins the struggle in an urban setting and this is the Republican values in the case of Izmir. These designed names are an example of lieu de memoires as they are chosen by specific political agendas and only refer to a defined time period in history which is favored by political mentality while eliminating the other aspects of history and collective memory.

Despite the fact that the alphanumeric system, or just the numeric system in the case of street naming in İzmir, seems neutral and doesn't imply any commemorative meanings, the use of numbers as street names erased the actual street names from the urban memory of Izmir (Ürük 2008: 5). However, a few of them could survive these changes at least in daily uses; for example, people still call the 1382th street as "Gul Sokak" (Originally; Rue des roses; street of roses).

Today, the numeric system still prevails the street naming system in Izmir (see Table 3). In this context, The City Council of Metropolitan Municipality of Izmir issued a decree on 13th of January in 2014 aiming to guide all the district councils of Izmir about the changing of street names throughout all of the districts of the city. In this decree, it is expressed that the remaining street names, i.e., mostly numbers but also names about the Republican values, must not be changed in order to avoid any confusions in the urban address system by stating "changing names of places such as boulevards, avenues and streets disrupts the database of Geographic Address Information System and outdates the data processed in National Address Database" (İzmir Büyükşehir Belediyesi 2014). Hence, the Municipality generally rejects the demands about changings of street names by referring this decree. After the tremendous changes of the street names before the

1950s, the street names have remained the same because of the practical reasons (i.e., for the sake of navigation). This phenomenon can be observed by referring the Table 3; the numbers of streets given by the Municipality in 1940s still dominate the street names of the central part of Izmir as seen in the Table.

Table 3. *Street Names in City Center of Izmir today*

Category	Description	Frequency
Numbers	These numbers show the dominance of modernist Cartesian logic over the street names	149
Values	The names in this group refer to values about the Republic/ Political Regime/Ideology/Nationalism	21
Others	The names which do not fit in the other categories are listed here	12

Note: The neighborhoods of Konak, Akdeniz, İsmet Kaptan, Kültür and Alsancak in contemporary Izmir have been chosen as the areas they roughly cover are approximately the areas shown in Charles E. Goad's map. See the Appendix 2 for the full list.

Because the street names were changed entirely, the Table 3 represents completely different names (with a different categorization) than the Table 2. Since the numbers are used for small streets, they have the highest frequency. However, Republican commemorative values are also dominant as the main streets and boulevards, which are obviously more prominent in the urban landscape than the smaller streets, are named after them. Both numeral Cartesian logic and commemorative function reflect the modernist and nationalist imagination which is in accordance with the values of the nation state. However, exceptions (others) can also be found; for example, there are also some street names named after renowned artists (see Appendix 2).

Conclusion

Streets are an inseparable part of people's daily lives and they are a very important source for the formation of collective identity. The elements of collective identity are shared amongst people on streets and their features make street names very important in terms of shaping collective urban memory as streets bearing their names have both material and social aspects of collective memory. Because of their functionality in this context, street names have become a political device for urban politics to spread desired values throughout the inhabitants of urban areas since the advent of Modernity. In this context, street names may lose their power to carry the elements of collective identity since designed street names only promote "a defined and limited" period of time and disregard the other aspects of cities. Therefore, desired and designed history suppresses actual elements of collective memory in urban spaces. Even though alphanumerical street naming system may ease the navigation and make the urban order in accordance with Cartesian logic, it may remove a certain part of urban identity by replacing names representing real aspects of city dwellers' lives with "value free" numbers and this implementation also relies on some values inherently such as the superiority of the

logic of modernity. The experiences in street naming and street names in Smyrna/ Izmir provide some valuable findings in this regard.

Street names in Smyrna were representing the plurality that the city had in terms of its socioeconomic activities and demographic composition. The words/ terms associated with commercial activities, such as trade goods, titles of professions and passages were the most frequently used street names as the city owed its rise to its role in the international trade. The trade-associated names were followed by the signs of other pluralities; names from different communities, religious names from different religions. Landscape associated names were also in use as cultural and natural landscapes are inseparable parts of urban identity. As stated in the paper, urban infrastructure was being improved not only by Western merchants but also Ottoman bureaucrats who were trying to meet the former's demands. Therefore, some names associated with Ottoman bureaucrats were also not uncommon. In short, it can be stated that street names were demonstrating the elements of urban identity of back then-Smyrna.

However, when the street names in Izmir became a subject of politics of the modernist nation state, they lost their power of being a representative indictor of urban identity. The new street names in the city center are consisted of numbers or commemorative names in general. Their role is not to demonstrate the elements of urban identity, but to promote the Cartesian logic of modernism and the commemorative national values in Izmir today. This paradigm still prevails as it is shown in the relevant issues of the Municipality aiming to fix the contemporary street names in this manner.

It can be concluded that especially with the emergence of the commemorative street names imbued with the Republican ideology and numerical street names, street naming process in Izmir after the first quarter of the 20th century as discussed throughout the paper presents a case which follows the patterns of transition from milieu de memoire to lieu de memoire alongside with the Cartesian logic. Therefore, it conforms to both urban politics of European nation states (i.e., the emergence of lieux de memoir) and the logic of American Cartesian ordered city, both of which have impacts on urban memory and identity. However, street naming is only one case in the forming of lieu de memoire and the modern urban spaces in the urban history of Izmir. This transition can also be traced by evaluating different aspects of urban identity and built environment in the city (or in another city in this regard). Depending on the relevant theoretical background, these studies might enrich our understanding about the relationships between place and people.

References

Ahmet Piriştina Kent Arşivi ve Müzesi (2019) *Defter Grubu - Meclis Karar Tutanakları - Meclis Karar Tutanakları-17.* (Ledger group - assembly decision minutes - assembly decision minutes-17) (1 February 1937 – 15 February 1937).

Alderman DH (2003) Street names and the scaling of memory: the politics of commemorating Martin Luther King, Jr within the African American community. *Area 35*(2): 163–173.

Alim Baran T (2003) *Bir kentin yeniden yapılanması: İzmir, 1923–1938*. (Reconstruction of a city: Izmir, 1923-1938). İstanbul: Arma.

Anadolu (1937) *İzmir Sokakları Ad mı Numara mı Taşıyacak?* (Will the streets of Izmir be named with Names or Numbers?) The newspaper issue, dated on 5 February 1937. Ahmet Piriştina Kent Arşivi ve Müzesi. Retrieved from: https://www.apikam.org.tr/ [Accessed 10 September 2020.]

Asımgil B (2018) İzmir'de Kentsel Kimlik Bileşenlerinden Cadde Ve Sokaklarin Toponimisi Ve Milliyetçi, Etnik İzlerin Sosyal Yapi Oluşumuna Katkilari. (Street toponymy as components of urban identity in Izmir and contributions to social structure formation of ethnic culture). *Trakya Üniversitesi Mühendislik Bilimleri Dergisi* 19(1): 21–36.

Azaryahu M (1996) The power of commemorative street names. *Environment and planning D: Society and Space* 14(3): 311–330.

Azaryahu M (2011) The critical turn and beyond: the case of commemorative street naming. *ACME: An International e-Journal for Critical Geographies* 10(1): 28–33.

Azaryahu M, Kook R (2002) Mapping the nation: street names and Arab-Palestinian identity: three case studies. *Nations and nationalism* 8(2): 195–213.

Bilsel C (2009a) Modern Bir Akdeniz Metropolüne Doğru. (Towards a modern mediterranean metropolis). In MC Smyrnelis (ed.), I Ergüden (trans.), *Izmir 1830-1930 Unutulmuş Bir Liman Kenti mi? Bir Osmanlı Limanından Hatıralar*, 143–160. İstanbul: İletişim.

Bilsel C (2009b) Bir Şehir Küllerinden Yeniden Doğuyor: Cumhuriyet Smyrna'sının Doğuşu. (A city is reborn from its ashes: the birth of republic Smyrna). In MC Smyrnelis (ed.), I Ergüden (trans.), *Izmir 1830-1930 Unutulmuş Bir Liman Kenti mi? Bir Osmanlı Limanından Hatıralar*, 239–255). İstanbul: İletişim.

Beyru R (2011) *19. Yüzyılda İzmir Kenti.* (The city of Izmir in the 19th century). İstanbul: Literatür.

Boyer MC (1996) *The city of collective memory: its historical imagery and architectural entertainments*. The United States of America: Mit Press.

Goad CE (1905) *Charles E. Plan d'assurance de Smyrne (Smyrna): Turquie: plan, index*. (Charles E. insurance plan of Smyrna: Turkey, plan, index). Londres: Harvard Map Collection, Harvard University. Retrieved from: https://nrs.harvard.edu/urn-3:FHCL: 3746611. [Accessed 6 September 2020.]

Green A (2011) Can memory be collective. In DA Ritchie (ed.), *The Oxford Handbook of Oral History*, 96–111. New York: Oxford University Press.

Halbwachs M (1992) *On collective memory.* Chicago, USA: University of Chicago Press.

Harris R, Lewis R (2012) Numbers didn't count: the streets of colonial Bombay and Calcutta. *Urban History* 39(4): 639–658.

İzmir Büyükşehir Belediyesi (2014) *Meclis Kararı.* (Council decision). No:97509404.301. 05.22. Date: 13 January 2014. Retrieved from: https://www.izmir.bel.tr/tr/KararDeta yi/14720. [Accessed 10 September 2020.]

Kayın E (2010) Mekansal ve Sosyo-Ekonomik Ayrılıksılar Geriliminde İzmir: Küresel-Yerel Fenomenler. (Izmir in the tension of spatial and socio-economic differences: global-local phenomena). In D Yıldırım, E Haspolat (eds.), *Değişen İzmir'i Anlamak*, 337–360. Ankara: Phoenix.

Kearns RA, Berg LD (2002) Proclaiming place: Towards a geography of place name pronunciation. *Social & Cultural Geography* 3(3): 283–302.

Köksal Y (2018) Kent Mekanı ve Milliyetçilik: 19. Yüzyıl'da Osmanlı İmparatorluğu'nda Değişen Ağlar. (Urban space and nationalism: changing networks in the Ottoman Empire in the 19th century). In PN Diamandouros, T Dragonas, Ç Keyder (eds.), E

Kılıç (trans.), *Mekan ve Millet. Yunanistan ve Türkiye'nin Coğrafyalarının Oluşumu*, 53–71. İstanbul: Koç University Press.

Kolluoğlu Kırlı B (2007) Cityscapes and modernity: Smyrna morphing into Izmir. In A Frangoudaki, C Keyder (eds.), *Ways to Modernity in Greece and Turkey, Encounters with Europe*, *1950*, 217–235. New York: I.B.Tauris & Co Ltd.

Light L (2004) Street names in Bucharest, 1990–1997: exploring the modern historical geographies of post-socialist change. *Journal of Historical Geography* 30(1): 154–172,

Mansel P (2011) *Levant: splendour and catastrophe on the Mediterranean*. USA: Yale University Press.

Mansel P (2014) Cities of the levant-the past for the future? *Asian Affairs* 45(2): 220–242.

Neethling B (2016) Street names: a changing urban landscape. In C Hough (ed.), *The Oxford Handbook of Names and Naming*, 144–157. New York: Oxford University Press.

Nora P (1996) *Realms of memory rethinking the French past*. New York: Columbia University Press.

Öktem K (2008) The nation's imprint: demographic engineering and the change of toponymes in Republican Turkey. *European Journal of Turkish Studies. Social Sciences on Contemporary Turkey* Thematic Issue N° 7, No. 7 | Demographic Engineering - part I, https://journals.openedition.org/ejts/2243 [Accessed 10 September 2020.]

Özveren E (2010) Dünden Bugüne İzmir İçin Artı ve Eksileriyle "Küresel Kent" leşme Süreci. (Process of being "global city" with pros and cons for Izmir from past to today). In D Yıldırım, E Haspolat (eds.), *Değişen İzmir'i Anlamak*, 107–134. Ankara: Phoenix.

Perlman M (1988) *Imaginal memory and the place of Hiroshima.* Albany: SUNY Press.

Rose-Redwood R, Kadonaga L (2016) "The Corner of Avenue A and Twenty-Third Street": Geographies of Street Numbering in the United States. *The Professional Geographer* 68(1): 39–52.

Rose-Redwood R, Alderman D, Azaryahu M (2017) The urban streetscape as political cosmos. In R Rose-Redwood, D Alderman, M Azaryahu (eds.), *The Political Life of Urban Streetscapes*, 23–46. New York: Routledge.

Sahakyan L (2010) *Turkification of the toponyms in the Ottoman empire and the Republic of Turkey*. Montreal: Arod Books.

Serçe E (2010) II. Meşrutiyet Döneminde Izmir. (Izmir during second constitutional era). In D Yıldırım, E Haspolat (eds.), *Değişen İzmir'i Anlamak*, 23–41. Ankara: Phoenix.

Smyrnelis M (2009a) Öndeyiş: Tarihini Arayan Şehir. (Preface: the city looking for ıts history). In MC Smyrnelis (ed.), I Ergüden (trans.), *Izmir 1830–1930 Unutulmuş Bir Liman Kenti mi? Bir Osmanlı Limanından Hatıralar.*, 9–24. İstanbul: İletişim.

Smyrnelis M (2009b) Dekorun Arka Yüzü. (The back of the decor). In MC Smyrnelis (ed.), I Ergüden (trans.), *Izmir 1830–1930 Unutulmuş Bir Liman Kenti mi? Bir Osmanlı Limanından Hatıralar*, 197–207. İstanbul: İletişim.

Star (2014) *Sokak isimleri değişirken hafiza da siliniyor*. (Memory is erased as street names change). star.com.tr, 15 November 2014. Retrieved from: https://www.star.com.tr/pazar/sokak-isimleri-degisirken-hafiza-da-siliniyor-haber-966812/. [Accessed 10 September 2020.]

Taşci B, Özden B, Davras F, Akkurt HB (2015) Rediscovering the 19th century of a port town in Levant: Smyrna/Izmir. *Athens Journal of Mediterranean Studies* 1(1): 61–80.

Ürük Y (2008) *İzmir'i İzmir Yapan Adlar*. (The names that make the city of Izmir). Izmir: İzmir Metropoliten Municipality.

Vuolteenaho J (2012) Numbering the streetscape: mapping the spatial history of numerical street names in Europe. *Urban History* 39(4): 659–679.

Yeni Asır (1937) *Şehir meclisi toplandı.* (The city council convened). The newspaper issue, dated on 12 February 1937. Ahmet Piriştina Kent Arşivi ve Müzesi. Retrieved from: https://www.apikam.org.tr/. [Accessed 10 September 2020.]

Yeoh BS (1996) Street-naming and nation-building: toponymic inscriptions of nationhood in Singapore. *Area* 28(3): 298–307.

Appendix 1. *Street Names in the City Center of Smyrna in 1905*

Street names associated with:

Commerce/Economic Activities	Customs Access, Algeria (South Coast)), Anastasse Agha Passage, Arabic Market, Arabic Passage, Solicitor (Profession), Bakur Gallery, Honeymakers, Fish Market, Barbaressi Inn, Glassmakers, Gun Powder Market, Flourishing (?), Flea Market, Boscovitch Passage, Devil's Market, Confectioners, Javalinmakers, Cousinery, Critikos Inn, Iron, Blacksmith, Dervişoğlu Inn, Algeria Inn, Old Fish Market, Old Customs, Old Chokha Gallery, Fassoulia Square, Fassoulia, Frank, Gioya Inn, Grand Taverns, Ekizler Passage, Pancake Makers' Market, Halim Aga Market, Wicker Makers, Homer Passage, Homsy Passage, Honischer Passage, Hardware Stores, English Pier, Weighers, Butchers, Kemeralti (Colonnade), Lumbermen, Lumbermen's Market, Chestnut Market, Linen Market, Beltmakers' Market, Goats, Jewelers, Kupecioglu Passage, Levy Passage, Lemon Sellers, Lombardo Passage, Mine, Matthew Passage, Megistis Lavras Passage, Meyvedar (Fruitful) Custom, Clamp (?),Minghetti Passage, Moraitine Passage, Natali Pier, Negrepont Passage, Wood Market, Osmaniye (Ottoman), Apricot and Road Bedesten, Saddle Makers' Market, Peshtemal Makers, Peshtemalgioglu Passage, Cheesemongers' Market, Psaro Hano (Greek: Fish Market), Quais (Docks), English Quay, Rossi Passage, Rouk Passage, Soap Factory, Sakizli Inn, Saman (Hay) Pier, Chest Makers' Market, Sayian passage, Sofianopoulo Passage, Spanoudhi Passage, Spartali Passage, Sponti Passage, Stepenapoulos Passage, Synaitiko Passage, Circlet, Circlet Makers, Circlet Makers' Market, Poulterer's Market, Pocketknife Market, Bowl, Bag Makers' Market, Tchanguirli (?) Market, Drawer Makers' Market, Chocolate (?), Nail Makers' Market, Clasp Makers' Market, Tenekides Passage, Terdjimanoglou Passage, Teskere (Stretcher?), Salt Storage, Pressers, Vlissides Passage, Whitetall Passage Oil maker, Nuts Market, New Flea Market, Road Market, Youssouf Passage, Sir Youssouf Passage. Vegetables, Chandler, Tea, Grand Dyehouse, Powder Maker, Chicken, Hen, Big Swine, Rabbit, Locksmith.
Landscape	Goldenriver, Head Seat Square (?), Garden, Flourishing (?) (Commerce-Landscape), First Cordon, Pine Garden (?), Apricot, Second Cordon, Back of Castle, Partridge, Kemeralti (Colonnade), Kemeralti (Colonnade) Mosque, Hisar (Fortress) Mosque Square, Elaeagnus, Köprülü (Bridged) Street (?), Cut, Tulip, Long, Parallel, Borealis, Quais (Docks), English Quay, Hidden, Yellow, Onion Castle, Soumi Graveyard, Suzekli (Continious) (?), Below the Fountain, Muddy, Clove, Lilly, Spring, Stone Bridge, Cherry, Roses (Rue des Roses), Cypress, Well, Forest.
Religion	Saint George, Catholic Church Passage, Haci Huseyin Mosque, Hisar (Fortress) Mosque Square, Imam Han Square, Grand and Small Imam Han, Monk, Kemeralti (Colonnade) Mosque, Patriarch of Jerusalem Passage, Saint George, Saint Mary, Saint Photeini, Vakıf Hodja, Cathedral.

Levantine Community	Aliotti, Baltaci, Catholic Church Passage, Fassoulia Square, Fassoulia, Frank, Homer Passage, Homsy Passage, Honischer Passage, English Pier, Levy Passage, Lombardo Passage, Maltese, Matthew Passage, Minghetti Passage, Moraitine Passage, Natali Pier, Negrepont Passage, Impasse of Providence, English Quay, Rafnewski, Rossi Passage, Rouk Passage, Whitetall Passage, Charnaud, Natali, Bella Vista.
Greek Community	Antiprikides, Saint George, Athanissiades, Carfisdhika (probably Greek origin?), Greek Embassy, Anastasse Agha Passage, Critikos, Critikos Inn, Fassoulia Square, Fassoulia, Kenourio, Megistis Lavras Passage, Phaeton, Psaro Hano, Greek Hospital, Saint George, Saint Photeini, Yellow George, Sofianopoulo Passage, Spanoudhi Passage, Spartali Passage, Sponti Passage, Stepenapoulos Passage, Synaitiko Passage, Tsigharohartadhika, Vlissides Passage, Yaliadhika, George, Pantelis, Triantafilides.
Ottoman Bureaucrats	Ali Pasha (Kemeralti), Ali Pasha (or Old Courthouse), Gentlemen (Ottoman Bureaucrat-Social Acitivity?), Şahinzade Square and Street, Sir Şeker, Sir Hamid, Kaymak Pasha, Kasapoglu (?), Köprülü Han Manor, Köprülü (Bridged) Street Mahmudiye (?).
Others and Unidentifiable	Akkar (Proper noun?), Alhambra (Theater), Attar (Unknown Origin), Araicik (Unknown Origin), Across the Municipality (Government Building), Gentlemen (Ottoman Bureaucrat-Social Acitivity?), Municipality First (Government Building), First Ladies House (Social Activitiy), Dilber (Ottoman name), Djidjifia (?), Doudou (A female name?), Doullar (?), Ekizler (A family name?), Old Courthouse (Government Building), Gales (?), Haci Stamo (?), Haik (?), Halici (?), Hamam (Turkish Public Bath) (Social Activity), Hopitaux (Hospitals) (Medicine), Ibirsim House (?), Idil Roubah (?), Second Ladies House (Social Activity), Khorassannian (A family name?), Girls (Social Activity), Manor (Government Building), Mavunaci (?),Russian (?), Nihadiye (?), Osmanlı (Ottoman) Post Office, Asvan (?),Reilir (?), Safakhat (Ottoman?), Sahur (?),Soultanie (Ottoman), Tchadjilar (?Probably associated with Turkish), Teşrifiye (Ottoman name associated with honour and dignitiy), Roulane (?). Past, Courthouse (Government Building), Instrumentalist Sister (?), Noise, Kamburoglu (A Turkish surname), Reçide (?), Souzan (a Turkish female name).

Appendix 2. *Street Names in the City Center of Contemporary Izmir*

Street names associated with:

Numbers	852. 853. 854. 855. 856. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 869. 870. 871. 872. 873. 874. 876. 877. 879. 880. 883. 887. 888. 889. 890. 892. 895. 898. 900. 901. 902. 904. 905. 906. 907. 909. 910. 911. 914. 1481. 1326. 1327. 1328. 1329. 1330. 1331. 1332. 1333. 1335. 1336. 1337. 1338. 1339. 1340. 1341. 1342. 1343. 1344. 1346. 1347. 1349. 1350. 1351. 1352. 1353. 1354. 1409. 1360. 1361. 1362. 1363. 1364. 1365. 1366. 1367. 1368. 1369. 1370. 1371. 1372. 1373. 1374. 1385. 1375. 1377. 1378. 1379. 1380. 1381. 1382. 1383. 1386. 1387. 1388. 1389. 1390.1391. 1398. 1407. 1436. 1437. 1435. 1439. 1440. 1441. 1446. 1447. 1448. 1449. 1450. 1453. 1454. 1455. 1456. 1457. 1458. 1459. 1460. 1461. 1462. 1463. 1464. 1465. 1466. 1467. 1468. 1469. 1470. 1471. 1472. 1473. 1474. 1475. 1476/1. S1476. 1477. 1478. 1479. 1480. 1481. 1482. 1483. 1484. 1485. 1488.
Values about the Republic/Political Regime/Ideology/Nationalism	Republic, Martyrs, Atatürk Square, Architect Kemalettin, Sir Martyr Fethi, Governor Kazım Dirlik, Republic Square, Veteran Osman Pasha, Veteran, The 9th of September Square, Fevzi Pasha, Freedom, Atatürk, Martyrs of Cyprus, Mahmut Esat Bozkurt, Vasıf Çınar, Plevne, Lausanne Square, Talat Pasha, Ali Çetinkaya, Republic
Others	Love Way, Silk Market, Mucibur Rahman, Mediterranean, Halit Ziya, Necati Bey, Poet Eşref, Kızılay (Red Crescent), Bedia Muvahhit, Italy, Professor Doctor Nusret H. Fişek, Sait Altınordu

The Determinants of the Capital Structure: An Applied Study on SMEs in the City of Meknes-Morocco

By Mohamed Oudgou[*]

This article aims to present the determinants of the debt of Small and Medium-sized Enterprises' (SMEs') in the city of Meknes. To test the research hypothesis, a sample of 47 non-listed SMEs has been compiled and a static multiple regression model is developed. The result of the regression obtained indicates that size, profitability, and risk negatively influence the SMEs' debt. Whilst profitability and commercial debt are positively associated with debt. Industrial SMEs' use more debt compared to commercial SMEs'.

Introduction

The role of SMEs in economic and social development is strongly recognized in several academic and institutional studies (OECD 2007, St-Pierre 2004, Torres, 2004). They account for about 90% of all enterprises in each country and generate more than 50% of GDP (OECD 2002, 2007). The importance of SMEs in the Moroccan economy is statistically significant. However, these enterprises face prohibitive internal and external handicaps, wherein the recourse to debt has been the most confronted difficulties. This problem makes SMEs focus on survival instead of innovation. However, even though the public authorities are aware of the importance of SMEs and have made considerable efforts, SME recourse to debt remains a persistent problem. Solving the problem of SME financing will certainly be a major challenge, a major development issue for the country. This encourages all stakeholders (institutions and researchers) to develop objective diagnoses to identify the real obstacles and propose solutions that will enable SMEs to get started and to play a main role in the economy.

In this present paper, we focus on the determinants that are relevant to SMEs in explaining their propensity to use debt. Indeed, while several empirical studies have attempted to explain the financial structure of SMEs, there is still no consensus on the determinants of debt (Colot and Croquet 2007). In the Moroccan context, there is still a substantial lack of studies on the subject, which leaves enough ambiguities in the financial characteristics of SMEs. On this basis, the present paper intends to contribute to the knowledge of scientists' work on the determinants of indebtedness of Moroccan SMEs.

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The literature review of the financial structure is based on the founding article of Miller and Modigliani (1958). Under a restrictive assumption (perfect market without taxes, transaction costs, and bankruptcy costs) Miller and Modigliani (1958) confirm that the value of the firm is independent of the type of financing (debt or equity). Moreover, the financial structure does not affect investment decisions, and it is irrelevant to determining the value of a firm. In a second model, Miller and Modigliani (1963) take into account the tax-deductibility of interest. They concluded that firms preferred debt over other sources of financing because the interest payments are a deductible tax. This positive impact affects the market value of the business. This means that the company value is positively correlated with debt.

The questioning assumption that there is no conflict between shareholders and managers has given rise to the agency theory (Jensen and Meckling 1976). According to this theory, indebtedness minimizes agency conflicts between shareholders and executives. Nonetheless, it can create conflicts between the company and its lenders because of the existence of informational asymmetries in the relationship of financing.

To limit these conflicts of interest, lenders often introduce restrictive clauses in the debt contract. The purpose of these mechanisms is to encourage the borrowing firm to meet its commitments and reduce the risk of asset substitution (Besanko and Thakor 1987). Under these conditions, the optimal financial structure results, according to the arbitrage theory, from the trade-off between the advantage generated by indebtedness and the bankruptcy costs generated by over debt. Besides, the debt can be used as a signaling tool for the quality of the company in an environment characterized by asymmetric information (Leland and Pyle 1977, Ross 1977). A strong asymmetry of information can lead firms to make **a** massive use of internal financing resources, if necessary, calling on debt before increasing capital (Myers and Majluf 1984).

Referring to the empirical review, we find that there is no theoretical framework that encompasses all the theories and from which the explanatory variables for the financial structure of SMEs would be determined. As a result, the question of the application and relevance of the financial theory in explaining the indebtedness of SMEs is still partially validated. Table 1 illustrates the main factors explaining the corporate debt found in the Moroccan empirical literature.

Table 1. *The Main Factors Explaining the Debt*

Variables	Effect on debt	Author(s)
Size	Positive	(Hakmaoui and Yerrou 2013), (Achy and Rigar 2005), (Amraoui et al. 2018), (Kartobi 2013), (Rahj 2016)
	Negative	(Achy and Rigar 2005), (Oudgou and Zeamari 2018)
ROE	Positive	(Oudgou and Zeamari 2018)
	Negative	(Rafiki 2008), (Amraoui and al. 2018), (Messaoudi and Binkkour 2016)
ROA	Positive	(Hakmaoui and Yerrou 2013)
	Negative	(Amraoui et al. 2018), (Kartobi 2013), (Rahj 2016), (Oudgou and Zeamari 2018)

Tangibility	Positive	(Hakmaoui and Yerrou 2013), (Kartobi 2013)
	Negative	(Yerrou and Hakmaoui n.d.), (Achy and Rigar 2005), (Amraoui et al. 2018), (Kartobi 2013)
Growth	Positive	(Rafiki 2008)
	Negative	(Messaoudi and Binkkour 2016), (Dine-dine and El-Khamlichi 2017)
Risk	Positive	Kartobi (2013)
	Negative	(Hakmaoui and Yerrou 2013), (Yerrou and Hakmaoui n.d.), (Oudgou and Zeamari 2018)

The main determinants of indebtedness derived from the financial theory and encountered in empirical work are generally contradictory. Whereupon, there is no consensus on these determinants. The current paper will, therefore, attempt to formulate the hypotheses while referring to the main variables encountered in previous empirical works.

Hypotheses and Variables

The Dependent Variable

The dependent variable to be explained is the total debt ratio (END). This ratio reflects the financial policy pursued by a firm (Drobetz and Fix 2003), and it is a pertinent indicator for assessing the risk of bankruptcy of a borrowing firm (Rajan and Zingales 1995). The study will adopt the measure used by Zou and Xiao (2006), Gaud and Jani (2002), Drobetz and Fix (2003), Kremp and Stöss (2001):

$$Total\ debt\,(END)\ =\ Total\ liabilities/balance\ sheet\ total.$$

Independent Variables

The size (TAL): the size does not refer to a specific theory, but it is a matter of doctrine in empirical studies of debt. This variable assesses the solvency and the quality information produced and published by SMEs. The size is, therefore, a proxy for asymmetric information and financial constraints. In fact, the problems of information production and disclosure are more significant among SMEs. These problems render SME more opaque and unable to get access to debt (Ang 1992, Beck and Demirguc-Kunt 2006, Achy and Rigar 2005). We retain the size measure often used in empirical studies, especially by De Jong andVeld (2001), Chen (2004), Chen et al. (2014), Fakhfakh and Atitallah (2006), Zou and Xiao (2006): *TAL = Log (total assets)*.

Hypothesis 1: Size has a Negative Impact on the Debt Ratio of SMEs

Profitability (ROA): According to the signal theory and static equilibrium theory, high profitability has a positive influence on the debt ratio since the firm

can take advantage of the interest deductibility (Bourdieu and Colin-Sédillot 1993). High profitability is also a signal of the sound financial health of the company. However, profitability, according to the Pecking Order Theory, is an indicator of cash financing which affects negatively the debt of asymmetrical companies (Fama and French 1999, Rajan and Zingales 1995, Wessels 2009). SMEs are opaque and they consider debt more expensive and, therefore, prefers equity. As proclaimed by Benkraiem (2010), Colot and Croquet (2007), the profitability measured by the ratios: *ROA = net income/total assets.*

Hypothesis 2: A Negative Effect of Profitability on the Debt Ratio of SMEs is Expected

Return on equity (ROE): According to the Trade-Off Theory, financial profitability is a guarantee for creditors of the companies' ability to repay debts. This is a positive signal of the company's financial health in accordance with the signal theory. Consequently, a sustained improvement in profitability should lead to an increase in debt. Drawing upon this theory, profitable companies with a low risk of financial failure would use debt to benefit from the interest deductibility. This theoretical framework predicts a positive relationship between debt and financial profitability. As advocated by Colot and Croquet (2007) and Rafiki (2008), we use the ratio of: $ROE = net\ income/\ equity$.

Hypothesis 3: Financially Profitable SMEs Offer More Security to Creditors and Make Greater Use of Debt

Growth (CRO): a high growth rate is synonymous with self-financing capacity, but it leads to a deterioration in the level of the company's working capital need. The agency theory contends that high-growth firms tend to have a less debt ratio. Whereupon, high growth tends to reconcile the interests of managers and shareholders (Kooyul et al. 1996). As a result, debt agency costs are high (Jensen and Meckling 1976, Myers 1977) and debt can no longer play its role as a regulator to the opportunistic behavior of managers. According to the Pecking Order Theory, companies with growth opportunities to finance turn first to external debt, which is less subject to asymmetric information. For the Compromise Theory, high-growth companies have incentives to increase their debt to take advantage of the interest tax deductibility. Growth estimates differ among major studies, the indicator used in this article is the asset growth rate (CRO):
$$= \frac{TA_n - TA_{n-1}}{TA_{n-1}}$$

Hypothesis 4: A Negative Effect of the Growth Rate on Debt is Expected

Risk (RSQ): Risk consists of two components: financial risk and economic risk. The first is the overuse of debt. The second is due to the volatility of operational/net income (Dubois 1987). According to the trade-off theory, high volatility of operating income deprives the firm of the benefit of tax-deductibility

of debt costs. In the context of the Pecking Order theory, earnings volatility may lead firms to build up a reserve of easily liquid assets so as not to face the problem of under-investment in the future. High volatility in operating results may lead the company to default so that lenders demand a high-interest rate. This suggests a negative relationship between risk and the debt ratio, which has been proved in several empirical studies (Prowse 1990, Jarrell and Kim 1984, Gaud and Jani 2002). Conversely, Kremp and Stoss (2001) predict a positive relationship between risk and debt. This can explain the presence of an over-investment strategy concealed by the firm from lenders. Risk will, therefore, be measured by the absolute value of the change in profits between t and t-1: $RSQ = \frac{R_t - R_{t-1}}{R_{t-1}}$.

Hypothesis 5: Earnings Volatility is Negatively Correlated with Debt Ratio

Asset tangibility (TAG): tangible assets lose less value over usage or over time and are less subject to information asymmetries. For the agency theory (Jensen and Meckling 1976), the existence of a large share of tangible assets is an important guarantee for lenders faced with problems of over-investment. This can also reduce the agency external costs. For the theory of hierarchical financing, firms with a low share of tangible fixed assets in their assets will be exposed to information asymmetries (Harris and Raviv 1991).Empirical work by Frank and Goyal (2003), Bourdieu and Colin (1993), Gaud and Jani (2002), Rajan et al. (2000) and Rajan and Zingales (1995) found a positive effect of tangible or collateral assets on debt. Some works have found a negative effect (Achy and Rigar 2005, Amraoui et al. 2018, Kartobi 2013). Asset tangibility is measured by the ratio of net tangible assets (AC) augmented by stocks (S) to total assets (TA) (Adair and Adaskou 2011, Kremp and Stöss 2001, Rafiki 2008): $TAG = \frac{AC + S}{TA}$

Hypothesis 6: Total Debt should be Positively Correlated with Asset Tangibility

Taxes (FIS): According to the work of Modigliani and Miller (1963), to maximize their value, it is in the interest of firms to increase their indebtedness to take advantage of the tax-deductibility of debt costs. The Trade-off theory (Trade-Off Theory) suggests that an optimal debt-to-income ratio could be achieved by balancing the marginal benefits and costs of indebtedness (the tax savings and bankruptcy costs associated with a high debt-to-income ratio) (Baxter 1967). On the other hand, the presence of non-debt related tax benefits reduces the attractiveness of debt. Many considerations may explain this limitation of debt. In Morocco, a large proportion of companies avoid paying income tax for various reasons: nearly 80% of corporate taxes are paid by 0.98% of companies in 2018. This can explain not only the existence of tax advantages that are not linked to indebtedness, but also the asymmetric nature of Moroccan SMEs.

Hypothesis 7: The Attractiveness of Debt for SMEs is made Less Attractive by the Presence of Income Tax

Commercial debt (DFR): according to the compromise theory, the use of commercial debt can be interpreted by the bank as a signal of the company's ability to repay its debts. Therefore, SMEs can easily have access to debt. On the contrary, Petersen and Rajan (1994) consider commercial debt as a substitute for financial debt in situations of credit rationing. The Pecking Order Theory considers commercial debt as a less risky means of short-term financing for small firms.

Hypothesis 8: An Increase in Commercial Debt Reduces Interest on Debt Financing

The business sector (SCT): The business sector is an important indicator of the type of capital structure and debt decision. Firms in the service and retail sectors make little use of debt since they do not have enough assets to present as collateral to banks. Conversely, firms in the industrial sector are characterized by a rigid asset structure and have easy access to bank credit (Riding et al. 1994). Margaritis and Psillaki (2010) consider the business sector as an indicator of the risk of the firm's core business. The sector of activity is a dummy variable, taking 1 if the firm is industrial, and 0 if it is retail.

Hypothesis 9: Industrial SMEs are more Indebted than Commercial SMEs

Data

This section is devoted to describe the research methodology as well as presenting the data collection procedures.

Data Collection

The accounting data required for the empirical study are collected from three trustees based in Meknes city and accredited by the National Order of Chartered Accountants. The data dated back to 2015 and were obtained after their official deposit at the General Taxes Directorate in Meknes city in 2016.

The first sample consists of 53 SMEs that correspond to the definition of Morocco-SME Agency (an SME is an enterprise with an annual turnover of less than 175 million MAD). For the sake of homogeneity, we kept only 47 companies after the elimination summary statement with incomplete financial information. We found that the largest number of SMEs do not have long-term financing debts. The availability of trade debts and very short-term bank debts in the liabilities part of their balance sheets was enough to keep them for the empirical study.

Econometric Model

To attain our research objective, we perform the following regressions equation to find the impact of exogenous variables on the total SMEs debt (Table 2). The empirical specification of the model as shown in equation below, is estimated by ordinary least square (OLS):

$$END_i = C + \beta_1 TAIL + \beta_2 ROA + \beta_3 ROE + \beta_4 RSQ + \beta_5 CRO + \beta_6 TAG \\ + \beta_7 FIS + \beta_8 DFR + \beta_9 SCT + \varepsilon$$

Table 2. *Variables and Expected Signs*

Variables	Acronym	Formula	Expected sign
Total debt	END	Total liabilities /balance sheet total	***
Profitability	ROA	net income/total assets	-
Return on equity	ROE	net income / equity	+
Assets tangibility	TAG	(tangible assets + stocks)/total assets	+
Size	TAL	Log (total assets)	-
Risk	RSQ	The absolute value of the variation in net income	-
Growth	CRO	Variation in total assets between t and t-1.	-
Taxes	FIS	Taxes/Current income before tax	-
Commercial debt	DFR	Commercial debt/total assets	-
Business sector	SCT	1 = Industrial ; 0 =retail	+

To verify the hypotheses formulated, the study starts with econometric tests using a basic model (Model 1) that has only firm size (TAL) and firm growth (CRO). The second model (model 2) tests the hypotheses on economic profitability (ROA) and financial profitability (ROE). To complete the econometric study, the paper tests the effect of the other variables on the total debt while adding one variable per model.

Results

Descriptive Statistics

The sample of 47 SMEs of the empirical study is divided into the commercial sector (76.60%) and the industrial sector (23.40%).

Table 3 gives a description of the variables used in our analysis. The total debt ratio (TDS) is on average 1,080 of total assets and it is a 5% truncated is on average 92% of total assets. It ranges between 52.67% and 1.19 according to the first and third quartile. For the SMEs in the sample as a whole, we find that they achieved a low economic profitability (ROA) averaging 1.21%, compared with 15.41% for the best-performing companies. Return on equity (ROE) averaged 9.76% and 75% of the companies had a profitability ratio of 50.95% or less. Tangible assets (TAG) are on average 43.77% of total assets. Tangible assets (TAG) are on average 43.77% of total assets. For the risk variable (RQS), we

observe it shows high volatility (4.24). Companies with highly volatile net income can be perceived as riskier and use bank debt only to a limited extent. The average growth rate (CRO) of assets is 16.11% with a standard deviation of 50%, indicating a significant difference among firms. A low growth rate can reduce the use of debt. SME in the sample pay less tax (FIS) it is on average 6.82%, and 75% of SMEs pay less than 13.05% tax on their income. Commercial debt on average represents 30.23% of total assets.

Table 3. *Descriptive Statistics*

	END	ROA	ROE	TAG	TAL	RSQ	CRO	FIS	DFR
Mean	1.0806	0.0121	0.0976	0.4377	5.6209	2.1352	0.1611	0.0682	0.3023
Sd	1.1821	0.8173	2.9267	0.3396	0.8160	4.2460	0.4999	0.8582	0.5627
p25	0.5267	-0.1806	-0.0330	0.0838	4.9946	0.2124	-0.1037	-0.0137	0
p50	0.8231	0.0018	0.1595	0.4302	5.5782	1	0.0734	0	0.0587
p75	1.1980	0.1541	0.5095	0.7586	6.2740	2.4959	0.2993	0.1305	0.4304

Quality of Regression Results

The Pearson correlation matrix between the independent variables (Table 4) shows that some associations are statistically significant but relatively low. This indicates the absence of serious multicollinearity problems among the exogenous variables.

Table 4. *Pearson Correlation Matrix*

	ROA	ROE	TAG	TAL	RSQ	CRO	FIS	DFR
ROE	0.4260**	1.0000						
TAG	-0.0703	-0.2558	1.0000					
TAL	-0.1590	-0.1758	0.1896	1.0000				
RSQ	-0.2187	0.1174	0.0331	-0.0319	1.0000			
CRO	0.0870	-0.2736	-0.0996	-0.0419	0.1772	1.0000		
FIS	0.0805	0.0253	0.1222	0.2747	-0.0596	-0.0538	1.0000	
DFR	-0.3256*	-0.2161	-0.0419	-0.2125	0.4164**	0.2448	-0.1218	1.0000
SCT	-0.2184	-0.0362	0.0555	0.3174*	-0.0636	-0.1731	0.2845	0.1271

*Correlation is significant at the 5% level **Correlation is significant at the 1% level

Table 5 presents the empirical results of the multiple regression models. The different specifications which allow the variability of total debt (END) are explained by the previously selected exogenous variables. They have an explanatory capacity (Adj R-square) ranging from 2.11% (model 1) to 65.30% (model 8) and a good global significance (prob > F) at the 5% threshold. However, the primary model (model 1) based on size (TAIL) and growth (CRO) is not significant.

The Durbin-Watson (D-W) statistic is around 2 in the different specifications and indicates the inexistence of error auto-correlation problems. The Tolerance and Variance Influence Factor (VIF) parameters are near 1, are less than the recommended limits (VIF <3.3). This result shows the absence of multicollinearity problems among exogenous variables, which confirms the results of the Pearson correlation matrix. All the tests converge towards identical results, which is a satisfactory indication of the different econometric specifications.

Table 5. *OLS Regression Output*

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
C	2.982	3.464	3.465	3.570	3.432	1.810	2.183	2.406
P>|t|	(0.017)	(0.002)	(0.002)	(0.001)	(0.003)	(0.041)	(0.014)	(0.006)
TAL	-0.330	-0.422	-0.422	-0.433	-0.408	-1.173	-0.260	-0.2813
-	(0.125)	(0.023)	(0.027)	(0.022)	(0.038)	(0.251)	(0.092)	(0.059)
CRO	-2.982	-0.0326	-0.0335	0.1248	0.121	-0.0806	-0.0181	-
-	(0.424)	(0.916)	(0.916)	(0.708)	(0.718)	(0.751)	(0.942)	-
ROA	-	-0.919	-0.918	-1.038	-1.029	-0.821	-0.7696	-0.7905
-	-	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROE	-	0.0759	0.0756	0.1091	0.110	0.158	0.1466	0.1400
-	-	(0.198)	(0.224)	(0.101)	(0.101)	(0.003)	(0.005)	(0.002
TAG	-	-	-0.0068	0.0973	0.115	0.240	0.240	-
-	-	-	(0.988)	(0.832)	(0.803)	(0.491)	(0.476)	-
RSQ	-	-	-	-0.0542	-0.0547	-0.118	-0.1074	-0.1061
-	-	-	-	(0.160)	(0.160)	(0.000)	(0.001)	(0.001)
FIS	-	-	-	-	-0.0824	-0.088	-0.1512	-
-	-	-	-	-	(0.644)	(0.511)	(0.260)	-
DFR	-	-	-	-	-	1.340	1.2123	1.209
-	-	-	-	-	-	(0.000)	(0.000)	(0.000)
SCT	-	-	-	-	-	-	0.5494	0.4809
-	-	-	-	-	-	-	(0.062)	(0.082)
R-squared	0.0636	0.3856	0.3856	0.4155	0.4187	0.6830	0.7119	0.6982
Adj R	0.0211	0.3271	0.3106	0.3278	0.3144	0.6163	0.6418	0.6530
F-statistic	1.50	6.59	5.15	4.74	4.01	10.24	10.16	15.43
Prob>F	0.2353	0.0003	0.0009	0.0010	0.0021	0.0000	0.0000	0.0000
Max VIF	1	1.41	1.54	1.77	1.77	1.82	1.85	1.60
D-W	2.32	2.29	2.29	2.32	2.36	2.11	2.18	2.13

Discussion

According to the results of the different econometric models (models 1 to 8), six variables in the final optimal model (model 8) influence the debt ratio of SMEs in a significant way. However, we found that three variables are not statistically significant in any of the models tested: growth rate (CRO) with irregular signs, asset tangibility (TAG), and taxes (FIS). Removing these variables in the final model (Model 8) increased the value of the adjusted R² to 65,30%. Based on these results, the study appears, unfortunately, unable to verify assumptions 4, 6, and 7.

The size variable (TAL) is statistically significant and impacts negatively the total debt ratio. This result confirms hypothesis 1 along with the negative sign predicted by the Pecking Order Theory. This result can be explained by the fact that SMEs do not habitually have a diversified business portfolio that can reduce the volatility of cash-flows and require the use of debt. Moreover, these companies do not have the desirability of debt to avoid financial revealing and total loss of control of their enterprises'. Our results converge with those of Bourdieu and Colin- Sédillot (1993), Johnson (1997), Carpentier and Suret (1999), Adair and Adaskou (2011).

Following the arguments of the Pecking Order Theory, economic profitability (ROA) has a negative and significant influence on the total debt. We can therefore confirm hypothesis 2. This result can be explained by the fact that profitable SMEs prefer to use the resources generated by their assets. These resources allow the firm to maintain full control over ownership and they are less costly. Our results corroborate the findings of Titman and Wessels (1988), Harris and Raviv (1991), Colot and Croquet (2007), Fama and French (1999), Benkraiem (2010), and Rajan and Zingales (1995).

As for the return on equity (ROE) variable, the econometric results show that this variable is statistically significant and has a positive influence on the total debt ratio of SMEs. This confirms the Trade-off Theory predictions that profitable firms would have to take on debt to benefit from the tax-deductibility of interest charges. Besides, the existence of solid financial earnings can be interpreted by lenders as an indicator of the firm's financial health and its ability to honor its commitments within the meaning of the signal theory. Financial profitability makes it possible to reduce the information asymmetries that are an obstacle to SMEs' access to debt. Hypothesis 3 is confirmed again and our results are in accord with those of Hakmaoui and Yerrou (2013), Bourdieu and Colin-Sédillot (1993), and Johnson (1997).

The risk variable (RSQ) is statistically significant at the 1% level and negatively correlated with the total debt ratio. Hypothesis 5 of the negative relationship between earnings volatility and the debt ratio is confirmed. High earnings volatility makes it difficult to assess failure risk, which can cause more extensive problems of information asymmetry and difficulties in accessing debt (De Angelo and Masulis 1980). Our results are similar to those of Castanias (1983), Bradley et al. (1984), Bevan and Danbolt (2000), Benkraiem (2010) and Hakmaoui and Yerrou (2013).

The coefficient of the commercial debt variable (DFR) is positive and significant at the 1% level. An increase in the company's commercial debt is a reliable signal for lenders. That indicates the companies' ability to pay their loans. This result confirms the predictions of the Trade-Off Theory and invalidates the thesis of the Pecking Order Theory and Petersen and Rajan (1994) commercial debt is a less risky funding source and a substitute for the financial debt. Our hypothesis 8 cannot therefore be confirmed. Moreover, the empirical results are in line with those of Trabelsi (2006) and Adair and Adaskou (2011).

Activity sector (SCT) is a dummy control variable with industry as the reference variable. The coefficient associated with this variable is positive and significant at the 10% level. The empirical result confirms that SMEs in the industry sector are more indebted than those in the trade sector. Hypothesis 9 is verified and the sector influences the debt ratio of SMEs.

Conclusion

This paper examines the determinants of the capital structure of non-financial listed firms in the city of Meknes using a sample of 47 SMEs. This study was

conducted using the econometric tool of the ordinary least squares estimation method (OLS). The econometric results show that 6 variables have a statistically significant effect on the total debt level of SMEs. These variables are: size, economic profitability, financial profitability, risk, commercial debt, and sector of activity. According to our assumptions, size, economic profitability, and risk are negatively associated with the total debt ratio. Contrary to our predictions, commercial debt is positively associated with the debt ratio. Financial profitability and industry sector are positively related to total debt ratios. The asset tangibility, growth, and tax variables suffer throughout the estimates from a lack of significance when other variables are integrated into the model. Moreover, statistical tests on the coefficients of the non-significant variables confirm that they are all zero.

References

Achy L, Rigar SM (2005) What determines financial structure in the Moroccan manufacturing sector? A firm level analysis. In *12th Annual Conference, Economic Research Forum: Grand Hyatt, Caire, Egypte* (1–17).

Adair P, Adaskou M (2011) Théories financières et endettement des PME en France : Une analyse en panel. (The financial theories and debt of SMEs in France: a panel analysis). *Revue internationale P.M.E. : Économie et gestion de la petite et moyenne entreprise* 24(3–4): 137–171.

Amraoui M, Jianmu Y, Bouarara K (2018) Firm's capital structure determinants and financing choice by industry in Morocco. *International Journal of Management Science and Business Administration* 4(3): 41–50.

Ang J (1992) On the theory of finance for privately held firms. *The Journal of Entrepreneurial Finance* 1(3): 185–203.

Baxter ND (1967) Leverage, risk of ruin and the cost of capital. *The Journal of Finance* 22(3): 395–403.

Beck T, Demirguc-Kunt A (2006) Small and medium-sized enterprises: access to finance as a growth constraint. *Journal of Banking & Finance* 30(11): 2931–2943.

Benkraiem R (2010) Taille des entreprises et structure du capital : tests empiriques sur Euronext Paris. (Business size and capital structure: empirical tests on Euronext Paris). *Management International* 14(4): 115–124.

Besanko D, Thakor AV (1987) Collateral and rationing: sorting equilibria in monopolistic and competitive credit markets. *International Economic Review* 28(3): 671–689.

Bevan AA, Danbolt J (2002) Capital structure and its determinants in the UK - A decompositional analysis. *Applied Financial Economics* 12(3): 159–170.

Bourdieu J, Colin-Sédillot B (1993) Structure du capital et coûts d'information: le cas des entreprises françaises à la fin des années quatre-vingt. (Capital structure and information costs: the case of French companies at the end of the 1980s). *Économie et Statistique* 268(1): 87–100.

Bradley M, Jarrell GA, Kim EH (1984) On the existence of an optimal capital structure: theory and evidence. *Journal of Finance* 39(3): 857–878.

Carpentier, Cécile, and Jean-Marc Suret. (1999). Stratégies de financement des entreprises françaises: une analyse empirique (Financing strategies of french companies: an empirical analysis). *Stratégies* 99(Apr).

Castanias R (1983) Bankruptcy risk and optimal capital structure. *The Journal of Finance*

38(5): 1617–1635.

Chen J (2004) Determinants of capital structure of Chinese-listed companies. *Journal of Business Research* 57(12): 1341–1351.

Chen J, Jiang C, Lin Y (2014) What determines firms' capital structure in China? *Managerial Finance* 40(10): 1024–1039.

Colot O, Croquet M (2007) La contribution de variables propres aux PME et à leur dirigeant dans l'explication de la structure financière des PME. (The contribution of specific variables for SMEs and their managers in the explanation of the capital structure of SMEs). *La Revue des Sciences de Gestion* 6(228): 61–72.

De Angelo H, Masulis R (1980) Optimall capital structure under corporate and personal taxation. *Journal of Financial Economics* 8(1): 3–29.

De Jong A, Veld C (2001) An empirical analysis of incremental capital structure decisions under managerial entrenchment. *Journal of Banking & Finance* 25(10): 1857–1895.

Dine-dine N, El-Khamlichi B (2017) Financement et croissance des PME locales: Cas de la ville de Nador. (Financing and growth of local SMEs: the case of the city of Nador). *Revue Du Contrôle de La Comptabilité et de l'Audit* Décembre(3): 567–584.

Drobetz W, Fix R (2003) What are the determinants of the capital structure? Some evidence for Switzerland. *University of Basel. WWZ/Department of Finance, Working Paper 4*(03): 51–75.

Dubois M (1987) Les déterminants du niveau d'endettement des entreprises: les théories à l'épreuve des faits in finances et comptabilité. Ressources humaines. Approche globale de l'entreprise. Système industriel (The determinants of business debt levels: the facts in finance and accounting theories. Human resources. Global approach of the enterprise. Industrial system). *Economies et Sociétés. Cahiers de l'ISMEA* 21(6): 5–29.

Fakhfakh H, Ben AR (2006) Les déterminants de la structure du capital des firmes tunisiennes : une étude à travers la théorie de Market Timing. (The determinants of the capital structure of Tunisian firms: a study across the theory of Market Timing). In *Conférence Internationale en finance : Finance d'entreprise et finance de marché : quelles complémentarités? Pitiers*, 1–25.

Fama EF, French KR (1999) The corporate cost of capital and the return on corporate investment. *The Journal of Finance* 54(6): 1939–1967.

Frank MZ, Goyal VK (2003) Testing the pecking order theory of capital structure. *Journal of* Financial Economics 67(2): 217–248.

Gaud P, Jani E (2002) Déterminants et dynamique de la structure du capital des entreprises suisses : une étude empirique. (Determinants and dynamics of the capital structure of Swiss companies: an empirical study). Retrieved from: http://archive-ouverte.unige.ch/unige:5810. [Accessed 18 March 2018.]

Hakmaoui A, Yerrou H (2013) Les déterminants de la structure financement: une étude empirique sur des entreprises marocaines. (Determinants of Financing Structure: An Empirical Study of Moroccan Firms). *Journal of Economic* 1(2): 83–93.

Harris M, Raviv A (1991) The theory of capital structure. *The Journal of Finance* 46(1): 297–355.

Jensen MC, Meckling WH (1976) Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics* 3(4): 305–360.

Johnson SA (1997) An Empirical Analysis of the Determinants of Corporate Debt Ownership Structure. *Journal of Financial and Quantitative Analysis* 32(1): 47–69.

Kartobi SE (2013) *Déterminants de la structure financière et réaction du marché boursier aux décisions de financement: cas des sociétés marocaines cotées à la bourse des valeurs de Casablanca. (Determinants of financial structure and stock market response to financing decisions: the case of moroccan companies listed on the*

casablanca stock exchange). Thèse de Doctorat en Sciences économiques et de gestion. Maroc-France: Université de Cadi Ayyad-Marrakech et de Nice Sophia Antipolis.

Kooyul J, Kim YC, Stulz RM (1996) Timing, investment opportunities, managerial discretion, and the security issue decision. *Journal of Financial Economics* 42(2): 159–85.

Kremp É, Stöss E (2001) L'endettement des entreprises industrielles françaises et allemandes: des évolutions distinctes malgré des déterminants proches. (The indebtedness of French and German industrial companies: distinct trends despite similar determinants). *Économie et Statistique 341*(1): 153–171.

Leland HE, Pyle DH (1977) Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance* 32(2): 371–387.

Margaritis D, Psillaki M (2010) Capital structure, equity ownership and firm performance. *Journal of Banking & Finance* 34(3): 621–632.

Messaoudi A, Binkkour M (2016) Comportement d'endettement des PME au Maroc : etat des lieux et facteurs explicatifs. (Debt behavior of SMEs in Morocco: current status and explanatory factors). *International Journal of Innovation and Applied Studies* 15(2): 395–405.

Miller M, Modigliani F (1958) The cost of capital, corporation finance and the theory of investment 48(3): 261–297.

Miller M, Modigliani F (1963) Corporate income taxes and the cost of capital: a correction. *The American Economic Review* 53(3): 433–443.

Myers SC (1977) Determinants of corporate borrowing. *Journal of Financial Economics* 5(2): 147–75.

Myers SC, Majluf NS (1984) Corporate financing and investment decisions when firms have informationthat investors do not have. *Journal of Financial Economics* 13(2): 187–221.

OCDE (2002) Le rapport annuel de Organisation de Coopération et de Développement Economique (OCDE). (The annual report of the Organisation for Economic Co-operation and Development). Retrieved from: https://www.oecd.org/fr/presse/3852 8227.pdf. [Accessed 22 June 2019].

OCDE (2007) Le rapport annuel de Organisation de Coopération et de Développement Economique (OCDE). (The annual report of the Organisation for Economic Co-operation and Development). Retrieved from: https://www.oecd.org/fr/presse/385 28227.pdf. [Accessed 22 June 2019]

Oudgou M, Zeamari M (2018) Les déterminants de la structure financière des PME marocaine: cas de la ville de Meknès. (Determinants of the financial structure of Moroccan SMEs: the case of the city of Meknes). *Finance & Finance International* 12(Jul): 1–25.

Petersen M, Rajan R (1994) The benefits of lending relationships: evidence from small business data. *The Journal of Finance* 49(1): 3–37.

Prowse SD (1990) Institutional investment patterns and corporate financial behavior in the United States and Japan. *Journal of Financial Economics* 27(1): 43–66.

Rafiki A (2008) Les déterminants de la structure financière: une analyse empirique de la situation marocaine. (Determinants of financial structure: an empirical analysis of the Moroccan situation). *Revue Marocaine d'Administration Locale et de Développement* (80): 113–139.

Rahj I (2016) *Explication du recours à l'endettement: cas des PME marocaines.* (Explanation of the recourse to indebtedness: the case of Moroccan SMEs). Thèse de doctorat en sciences de gestion. Casablanca, Maroc: Groupe ISCAE.

Rajan RG, Zingales L (1995) What do we know about capital structure? some evidence

from international data. *The Journal of Finance* 50(5): 1421–1460.

Rajan R, Servaes H, Zingales L (2000) American finance association. *The Journal of Finance* 55(1): 35–80.

Riding A, Haines GH, Thomas R (1994) The Canadian small business–bank interface: a recursive model. *Entrepreneurship Theory and Practice* 18(4): 5–24.

Ross SA (1977) The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics* 8(1): 23–40.

St-Pierre J (2004) *La gestion du risque: comment améliorer le financement des PME et faciliter leur développement.* (Risk management: how to improve SME financing and facilitate their development). Québec: Presses Universitaires de Québec.

Titman S, Wessels R (1988) The determinants of capital structure choice. *The Journal of Finance* 43(1): 1–19.

Trabelsi A (2006) *Les déterminants de la structure du capital et les particularités du financement dans les PME: un étude sur données françaises.* (The determinants of the capital structure and the particularities of financing in SMEs: a study based on French data). Thèse de Doctorat en Sciences de Gestion. Paris, France: Paris Dauphine EDOGEST.

Wessels R (2009) The determinants of capital structure choice. *The Journal of Finance* 43(1): 1–19.

Yerrou H, Hakmaoui A (n.d.) La politique de signalement et condition de financement: Étude empirique sur un échantillon d'entreprises marocaines. (Signaling policy and financing conditions: an empirical study of a sample of Moroccan firms). *Revue d'Evaluation et d'Anticipation Des Politiques Publiques* (2): 129–150.

Zou H, Xiao ZJ (2006) The financing behavior of listed Chinese firms. *The British Accounting Review* 38(3): 239–258.