

**THE NEHUSHTAN (NUMBERS 21:4–9) AS ‘HEALING TOOL’ IN THE ANCIENT
NEAR EAST: A REASSESSMENT IN LIGHT OF APOTROPAIC AND
SYMPATHETIC MAGIC**

by

GILLIAN PATRICIA WILLIAMS

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**SUPERVISOR: PROFESSOR M LE ROUX
CO-SUPERVISOR: DR MARIETTE HARCOT**

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DEDICATIONS

I wish to dedicate this thesis to my husband, Rabbi Malcolm Matitiani. He has supported me through my ovarian cancer diagnosis and treatment. He has been my computer technician, my favourite 'chef' and has undertaken many household tasks and brought me countless cups of tea and coffee despite his heavy Zoom schedule during the Covid19 pandemic. This has enabled me to concentrate on the writing of this thesis.

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DECLARATION

Name: **GILLIAN PATRICIA WILLIAMS**

Student Number **2300532**

Degree: **PHD (RELIGIOUS STUDIES) BIBLICAL ARCHAEOLOGY**

I declare that **THE NEHUSHTAN (NUMBERS 21:4–9) AS ‘HEALING TOOL’ IN THE ANCIENT NEAR EAST: A REASSESSMENT IN LIGHT OF APOTROPAIC AND SYMPATHETIC MAGIC** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

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28 February 2023

DATE

ABSTRACT

Apotropaic magic as well as sympathetic magic in the Ancient Near East and early Israel are examined to ascertain whether they can elucidate the Nehushtan as a possible healing tool as narrated in the Hebrew Bible (Numbers 21:4–9).

Apotropaic magic, such as amulets, incantations, gestures, spells, and charms to ward off evil spirits or to cure illness – despite the existence of Biblical prohibitions – will be examined. This use was echoed in the cultural traditions of the Ancient Near East and recorded in sources such as the Babylonian and Jerusalem *Talmudim*.

Sympathetic magic was, among other purposes, used in conjunction with snakes in healing practices in ancient Canaan and Greece. In Egypt, snakes formed an integral part of mythology and symbolism. Archaeological evidence has provided useful evidence of both sympathetic and apotropaic magic practices.

The principles of apotropaic and sympathetic magic will be used as far as possible as a theoretical framework to apply to the narrative of the Nehushtan in Numbers.

Key terms: Anatolia, Ancient Near East, apotropaic and sympathetic magic, archaeology, Canaan, Egypt, Greece, healing tool, Hebrew Bible, Jerusalem and Babylonian *Talmudim*, *Midrashim*, Nehushtan, Numbers 21:4-9, serpent, snake, temples.

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In 2013, I was diagnosed with aggressive ovarian cancer. Most of 2014 was spent undergoing chemotherapy, which unfortunately affected my optic nerve. This damage proved to be permanent. I was able to defer my studies for two years. I resumed them in 2016. I am so grateful for God's blessings and His grace that I have received to enable me to finally complete my degree.

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TABLE OF CONTENTS

| | |
|--|-----|
| DEDICATIONS | ii |
| DECLARATION | iii |
| ABSTRACT..... | iv |
| ACKNOWLEDGEMENTS | v |
| COPYRIGHT NOTICE | vi |
| TABLE OF CONTENTS..... | vii |
| LIST OF FIGURES | xii |
| CHAPTER ONE | 1 |
| INTRODUCTION | 1 |
| 1.1 INTRODUCTION | 1 |
| 1.2 PROBLEM STATEMENT..... | 4 |
| 1.3 RESEARCH QUESTIONS..... | 4 |
| 1.4 AIMS AND OBJECTIVES OF THE STUDY..... | 5 |
| 1.5 HYPOTHESIS..... | 6 |
| 1.6 SOURCES..... | 6 |
| 1.6.1 Primary sources..... | 6 |
| 1.6.2 Secondary sources | 8 |
| 1.7 METHODOLOGICAL CONSIDERATIONS | 11 |
| 1.7.1 Approach | 11 |
| 1.7.2 The structure of the thesis..... | 12 |
| 1.8 LIMITATIONS OF THE STUDY | 14 |
| 1.9 THE SIGNIFICANCE OF THE STUDY | 14 |
| CHAPTER TWO | 16 |
| PRINCIPLES OF APOTROPAIC AND SYMPATHETIC MAGIC | 16 |
| 2.1 INTRODUCTION | 16 |
| 2.2 APOTROPAIC MAGIC..... | 16 |
| 2.2.1 Definition of apotropaic magic..... | 16 |

| | | |
|---|---|----|
| 2.2.2 | Amulets..... | 17 |
| 2.2.3 | The psychology behind the use of amulets | 40 |
| 2.3 | SYMPATHETIC MAGIC..... | 41 |
| 2.3.1 | Definitions of sympathetic magic..... | 41 |
| 2.3.2 | Examples of imitative/homeopathic magic | 43 |
| 2.4 | SUMMARY AND CONCLUSION | 58 |
| 2.4.1 | Apotropaic magic..... | 58 |
| 2.4.2 | Sympathetic magic..... | 60 |
| CHAPTER THREE..... | Error! Bookmark not defined. | |
| SYMPATHETIC AND APOTROPAIC MAGIC IN EGYPT..... | | 64 |
| 3.1 | INTRODUCTION | 64 |
| 3.2 | SNAKE SYMBOLISM IN EGYPT | 65 |
| 3.2.1 | The <i>ureaus</i> | 65 |
| 3.2.2 | Ra's solar barque..... | 68 |
| 3.3 | EXAMPLES OF SYMPATHETIC (IMITATIVE/HOMEOPATHIC) MAGIC | 69 |
| 3.3.1 | Mummification, the afterlife and the legend of Isis and Osiris..... | 69 |
| 3.3.2 | Pharoah Tutankhamun's ceremonial sandals..... | 72 |
| 3.3.3 | Execration texts | 73 |
| 3.4 | EXAMPLES OF APOTROPAIC MAGIC IN EGYPT | 74 |
| 3.4.1 | The dung beetle (scarab) amulet | 74 |
| 3.4.2 | Amulets in the Metropolitan Museum of Art..... | 76 |
| 3.5 | SUMMARY AND CONCLUSION | 79 |
| CHAPTER FOUR..... | | 81 |
| SYMPATHETIC AND APOTROPAIC MAGIC IN GREECE AND ANATOLIA | | 81 |
| 4.1 | INTRODUCTION | 81 |
| 4.2 | THE SNAKE AS HEALING SYMBOL..... | 82 |
| 4.3 | SNAKES AND THE HEALING GOD ASKLEPIOS IN GREECE | 84 |
| 4.3.1 | Background | 84 |
| 4.3.2 | The healing temples/sanctuaries..... | 85 |
| 4.3.3 | Serpents employed in healing therapy and snake symbolism | 85 |

| | | |
|---|---|-----|
| 4.4 | SYMPATHETIC MAGIC IN GREECE | 91 |
| 4.4.1 | Anatomical votive offerings and imitative/homeopathic magic | 91 |
| 4.4.2 | Imitative/homeopathic healing in the modern Christian churches | 94 |
| 4.5 | APOTROPAIC MAGIC IN GREECE | 96 |
| 4.5.1 | The evil eye | 96 |
| 4.6 | SYMPATHETIC MAGIC IN ANATOLIA..... | 97 |
| 4.7 | SUMMARY AND CONCLUSION | 100 |
| 4.7.1 | Principles of sympathetic magic that might apply to the Nehushtan | 100 |
| CHAPTER FIVE..... | | 102 |
| THE CANAANITE CONTEXT OF THE NEHUSHTAN..... | | 102 |
| 5.1 | INTRODUCTION | 102 |
| 5.2 | REMNANTS OF A SNAKE CULT IN CANAAN | 103 |
| 5.2.1 | The Nehushtan in Canaan before the settlement | 103 |
| 5.3 | THE ANCIENT COPPER INDUSTRY AT TIMNA AND FEINAN | 108 |
| 5.3.1 | The magic of copper smelting in antiquity | 111 |
| 5.3.2 | Timna | 113 |
| 5.3.3 | The Hathor temple at Timna | 118 |
| 5.3.4 | Feinan..... | 126 |
| 5.4 | YHWH AND THE CANAANITE GOD OF METALLURGY | 128 |
| 5.4.1 | The Kenites | 128 |
| 5.4.2 | The Kenites, Exodus and YHWH | 129 |
| 5.4.3 | The Kenites, YHWH and the Canaanite god of metallurgy | 131 |
| 5.4.4 | The Midianites and YHWH..... | 132 |
| 5.4.5 | The Kenite-Midianite hypothesis revisited..... | 134 |
| 5.5 | THE NEHUSHTAN IN THE SOLOMONIC TEMPLE. | 135 |
| 5.5.1 | Background information | 135 |
| 5.5.2 | King Hezekiah's iconoclastic reforms | 136 |
| 5.5.3 | King Hezekiah's reforms reassessed | 137 |
| 5.6 | SUMMARY AND CONCLUSION | 140 |
| CHAPTER SIX..... | | 143 |

| | |
|--|-----|
| SYMPATHETIC AND APOTROPAIC MAGIC IN THE HEBREW BIBLE, THE <i>TALMUDIM</i> AND <i>MIDRASHIM</i> WITH SPECIFIC FOCUS ON THE NEHUSHTAN..... | 143 |
| 6.1 INTRODUCTION | 143 |
| 6.2 SYMPATHETIC AND APOTROPAIC MAGIC IN THE HEBREW BIBLE | 144 |
| 6.2.1 Sympathetic magic in the Hebrew Bible | 144 |
| 6.2.2 Apotropaic magic in the Hebrew Bible..... | 149 |
| 6.3 SYMPATHETIC AND APOTROPAIC MAGIC IN THE <i>TALMUDIM</i> AND THE <i>MIDRASHIM</i> | 154 |
| 6.3.1 Sympathetic magic in the <i>Talmudim</i> and <i>Midrashim</i> | 154 |
| 6.3.2 Apotropaic magic in the <i>Talmudim</i> and <i>Midrashim</i> | 159 |
| 6.4 INTERPRETATION OF THE NEHUSHTAN NARRATIVE..... | 161 |
| 6.4.1 Interpretation of the Nehushtan as a healing tool in the Hebrew Bible, <i>Talmudim</i> and <i>Midrashim</i> (Num 21:4–9) | 161 |
| 6.5 SUMMARY AND CONCLUSION | 174 |
| CHAPTER SEVEN..... | 179 |
| SUMMARY AND CONCLUSION..... | 179 |
| 7.1 INTRODUCTION | 179 |
| 7.1.1 Background to the Nehushtan narrative | 179 |
| 7.1.2 Research questions and methodology | 179 |
| 7.2 PRINCIPLES OF APOTROPAIC AND SYMPATHETIC MAGIC | 180 |
| 7.2.1 Apotropaic magic | 181 |
| 7.2.2 Sympathetic magic..... | 182 |
| 7.3 PRINCIPLES OF SYMPATHETIC AND APOTROPAIC MAGIC IN EGYPT | 186 |
| 7.3.1 The Uraeus and Ra’s solar barque | 186 |
| 7.3.2 Mummification, the afterlife and the legend of Isis and Osiris..... | 187 |
| 7.3.3 Pharoah Tutankhamun’s ceremonial sandals..... | 187 |
| 7.3.4 Egyptian Principles of apotropaic magic that may apply to the Nehushtan... | 187 |
| 7.4 PRINCIPLES OF SYMPATHETIC AND APOTROPAIC MAGIC IN GREECE AND ANATOLIA | 188 |
| 7.4.1 The snake healing symbol | 189 |
| 7.4.2 Sympathetic magic..... | 189 |

| | | |
|-------|---|-----|
| 7.4.3 | Greek principles of apotropaic magic that may apply to the Nehushtan | 191 |
| 7.5 | THE CANAANITE CONTEXT OF THE NEHUSHTAN | 191 |
| 7.5.1 | Remnants of a snake cult in Canaan | 192 |
| 7.5.2 | The ancient copper mining, smelting industry at Timna and Feinan | 193 |
| 7.5.3 | The Hathor shrine at Timna | 194 |
| 7.5.4 | YHWH and the Canaanite god of metallurgy..... | 195 |
| 7.5.5 | The Nehushtan in the Solomonic temple..... | 197 |
| 7.6 | SYMPATHETIC MAGIC IN THE HEBREW BIBLE, THE BABYLONIAN AND JERUSALEM <i>TALMUDIM</i> AND <i>MIDRASHIM</i> | 198 |
| 7.6.1 | Sympathetic magic in the Hebrew Bible | 198 |
| 7.6.2 | Sympathetic magic in the Babylonian and the Jerusalem <i>Talmudim</i> and <i>Midrashim</i> | 200 |
| 7.7 | CONCISE INTERPRETATION OF THE NARRATIVE | 201 |
| 7.8 | AREAS FOR FURTHER RESEARCH..... | 203 |
| | REFERENCES | 204 |

LIST OF FIGURES

| | |
|---|----|
| Figure 2.1: Hollow gold Roman <i>bulla</i> pendant with detachable chain..... | 21 |
| Figure 2.2: A <i>tallit</i> showing the <i>tzitzit</i> on one of the corners..... | 23 |
| Figure 2.3: Gold amulet for Arsinoë (A)..... | 26 |
| Figure 2.4: Aramaic inscription on gold amulet for Arsinoë (A)..... | 26 |
| Figure 2.5: Silver amulet for Arsinoë (B)..... | 27 |
| Figure 2.6: Aramaic inscription on silver amulet for Arsinoë (B)..... | 28 |
| Figure 2.7: Incantation bowl acquisition housed in the British Museum..... | 30 |
| Figure 2.8: Incantation bowl 13, housed in the Iraq Museum..... | 31 |
| Figure 2.9: A bracelet amulet to ward off the evil eye..... | 34 |
| Figure 2.10: A <i>hamsa</i> amulet to ward off the evil eye..... | 36 |
| Figure 2.11: An African mask from the people of Dan, Liberia..... | 39 |
| Figure 2.12: Eurasian Stone Curlew (<i>Burhinus oedichemus</i>)..... | 48 |
| Figure 2.13: Lead curse tablets with a curse inscription..... | 53 |
| Figure 2.14: Nude female poppet in kneeling position..... | 54 |
| Figure 2.15: A tulip shaped urn with a smaller one inside..... | 57 |
| Figure 2.16: Child burial urns in the Tophet, Carthage..... | 57 |
| Figure 3.1: A beaded skullcap depicting the <i>ureaus</i> | 68 |
| Figure 3.2: A priest as Anubis mummifying the body of King Tutankhamun..... | 72 |
| Figure 3.3: An image showing the ceremonial sandals of Pharaoh Tutankhamun..... | 73 |
| Figure 3.4: Glazed pottery scarab beetles..... | 75 |
| Figure 3.5: Photograph of the two-finger amulet, 664-332 BCE..... | 77 |
| Figure 3.6: Photograph of the Headrest amulet, 664-332 BCE..... | 78 |
| Figure 3.7: Example of a Wadjet-eye amulet, 664-332 BCE..... | 78 |
| Figure 4.1: The rod of Asklepios depicting a single, entwined serpent..... | 82 |
| Figure 4.2: An artist's depiction of the Nehushtan, a single serpent on a pole..... | 83 |
| Figure 4.3: Asklepios with a snake coiled around his staff..... | 89 |
| Figure 4.4: Anatomical votive offerings found in the museum at Corinth..... | 92 |
| Figure 4.5: Bronze eye: votive offering from a patient in ancient Messene..... | 94 |

| | |
|---|-----|
| Figure 4.6: Bronze genital votive, Anatolia, Harvard Art Museum..... | 98 |
| Figure 4.7: A stela depicting a carving of the snake healing symbol..... | 99 |
| Figure 4.8: Bronze surgical instruments. | 99 |
| Figure 5.1: The bronze serpent of Megiddo..... | 104 |
| Figure 5.2: A bronze serpent found at Megiddo..... | 104 |
| Figure 5.3: A bronze serpent found at Tel Mevorakh..... | 105 |
| Figure 5.4: Two bronze serpents found at Gezer. | 107 |
| Figure 5.5: The locations of Faynan (Feinan) and Timna. | 110 |
| Figure 5.6: Copper smelter barrel pouring molten copper casts. | 112 |
| Figure 5.7: Location map of the Timna Valley, Faynan, and Umm Bugma | 114 |
| Figure 5.8: Copper carbonate ore from Timna, Israel. | 115 |
| Figure 5.9: Egyptian depiction of the copper smelting process..... | 116 |
| Figure 5.10: The ruined remains of the Egyptian temple of Hathor..... | 120 |
| Figure 5.11: A faience plaque of the beautiful goddess Hathor. | 121 |
| Figure 5.12: Midianite image on a pottery shard found in the Hathor shrine. | 122 |
| Figure 5.13: Figures carrying swords. | 123 |
| Figure 5.14: Copper serpent with gilded head, Egyptian/Midianite tented shrine..... | 124 |
| Figure 5.15: Egyptian tented shrine (Tabernacle) at Timna..... | 126 |
| Figure 5.16: Ancient Midianite stone tools used in the copper mining process. | 134 |
| Figure 5.17: A sketch of the Nimrud bronze bowl fragment. | 138 |
| Figure 6.1: The Ketef Hinnom amulets..... | 153 |
| Figure 6.2: Furious rabies: Late stage..... | 157 |
| Figure 6.3: Moses and Nehushtan: Stained glass window at St Marks Church, | 162 |
| Figure 6.4: This photograph illustrates ‘a plague of snakes’ on Snake Island,..... | 165 |
| Figure 6.5: <i>Echis colorathis</i> , a copper-coloured snake | 170 |
| Figure 6.6: A stylised depiction highlighting the similarities | 174 |

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

In 2009, I completed my MA dissertation in which I explored Talmudic perspectives on Old Testament diseases, physicians, and remedies. My interest was piqued at the time by the strange story of the Nehushtan, a 'magic'¹ copper or bronze snake, mentioned in the book of Numbers (21:4-9, *JSB*). This effigy was used as a type of healing tool by Moses to cure the Israelites, who had been bitten by venomous (fiery) serpents (Nm 21:6, *JSB*) during their desert journey to Canaan.

The Biblical account follows below:

They set out from Mount Hor by way of the Sea of Reeds to skirt the land of Edom. But the people grew restive on the journey, and the people spoke against God and against Moses. "Why did you make us leave Egypt to die in the wilderness? There is no bread and no water, and we have come to loath this miserable food." The Lord sent seraph² serpents against the people. They bit the people and many of the Israelites died. The people came to Moses and said, "we sinned by speaking against the Lord and against you. Intercede with the Lord to take away the serpents from us". And Moses interceded for the people. Then the Lord said to Moses, "Make a seraph figure and mount it on a standard. And if anyone who is bitten and looks at it, he shall recover." Moses made a copper serpent and mounted it on a standard, and when anyone was bitten by a serpent, he would look at the copper serpent and recover (Nm 21:4–9, *JSB*).

According to the biblical narrative, the Israelites complained bitterly; a natural human reaction when unexpected obstacles confronted them during their wanderings in the wilderness. The people also complained that the water at Marah was bitter and undrinkable (Ex 16:17) and God healed it for them (§6.2.1.2). When the people were unhappy and wanted meat, God provided quails for them for a month until they were sickened on it (Ex 16:13). When the people demanded water, God provided it (Ex 15:22–27).

¹ There are two primary types of magic: apotropaic and sympathetic (see Chapter Two). Apotropaic magic having or believed to have the power of averting evil influence or bad luck (Coulson 1980:33). Sympathetic magic (imitative or homeopathic magic, two words that mean the same thing). It is magic in which it is sought to destroy, injure, or inflict harm on one's enemy by damaging an image of that person (Frazer 1954:12).

² There are two meanings of the word *seraph*, the one is snake or fiery, while the other one is angel (Alcalay 1990:2723).

They had also grown weary of their God-given *manna*³ collected each day and a double portion for the Sabbath (Nm 16:4–5) – in fact they said they loathed it (Nm 21:5, *GNB*). The author of Numbers narrates that God punished them for their ungrateful behaviour by sending venomous snakes ('fiery serpents', Nm 21:6, *NKJV*) among the people: many Israelites were bitten, and many died (Nm 21:6). The Israelites, realising that they had pushed God too far, beseeched Moses to remove the snakes as they had repented (Nm 21:7). God, in answer to Moses' prayer, ordered that a bronze snake (Nm 21:8, *NKJV*) be made and placed on a pole so that *anyone who had been bitten would be cured by merely looking at* the Nehushtan (Nm 21:9, *GNB*). This command encourages the idea that the Nehushtan performed a particular role, that of a 'healing tool' in this narrative. It will therefore be examined.

Nachmanides⁴ (1194–1270 CE; Fishbane 2004:325) points out that Moses fashioned the fiery serpent out of copper or bronze, and also notes the semantic similarity between *nahash* ('snake') and *nakhoshet* ('copper' or 'bronze') and postulates the wordplay on the Hebrew word *nihesh* ('to practise divination') (Chavel 1975:235).⁵

It is clear from the narrative that the people were healed by looking at the Nehushtan, but what exactly happened, or the symbolic meaning of the event remains unclear. Rather than simply asking whether or not magic was involved, it is necessary to understand the mechanism of healing within the context of apotropaic and sympathetic magic, and whether this new insight would have any effect on our understanding of this biblical narrative in Numbers 21 (cf. Fishbane 2004:325).

It is also unknown what purpose this narrative served. Dunn and Rogerson (2003:146) believe the story explains the Nehushtan's Mosaic origin as it is mentioned in the second book of Kings (18:4) that the Nehushtan was worshipped. Dunn and Rogerson

³ Hebrew: *man hu?* Literally 'what is it'?

⁴ Also known as Ramban which is an acronym of his name – Rabbi Moses Ben Nachman (sefaria.org/Ramban_on_Numbers.21.9?lang=bi)

⁵ The Hebrew word *nahash* means 'snake' (Alcalay 1990:1619), while *nakhoshet* means either 'copper' or 'brass' (Alcalay 1990:1621). Brass is an alloy of copper and zinc, while bronze is an alloy that consists mainly of copper and tin (12.5%) (<https://www.sequoia-brass-copper.com/blog/brass-vs-bronze/>). Due to the prevalence of bronze during the period under study, the Nehushtan will be referred to interchangeably as a copper or bronze serpent. It is unlikely that the Nehushtan was made from brass, as this alloy is not attested during the LB-IA

(2003:146) suggest that pilgrims, seeking healing, visited it in later times to justify its presence in the Jerusalem temple. King and Stager (2001:84) postulate that it was housed in the temple's garden sanctuary, which was the Temple Court. Joines (1968:256), however, is of the opinion that the Nehushtan may have been placed in the sanctuary at a later stage by King Solomon.

The statement in the Biblical narrative that ...*Moses made a serpent of bronze...* (Nm 21:9, *NKJV*) seems to imply that the manufacture of the Nehushtan was a speedy process. If we are to take this narrative seriously, it might be of value to investigate whether anyone in the Exodus group had the special skills to make such an object or to cast and smelt copper.⁶ This is completely in accordance with the Exodus narrative, which relates how the portable sanctuary was constructed, complete with copper/bronze implements. As there were people with these special skills, we might wonder what evidence has come to light in this regard. It would also be interesting to ascertain whether any objects similar to the Nehushtan have come to light in Canaan.

Milgrom (1990:173) states that in the vicinity of Punon (modern Feinan) there was an ancient Egyptian copper-mining and smelting centre dating from 1200 to 900 BCE (cf. Rothenberg 1990a:8). A copper industry has existed in Timna in western Arabah and Feinan (biblical Punon) in eastern Arabah since the fourth millennium BCE.⁷ The questions to be answered in this regard are as follows: Is there any evidence of similar objects found in this area or in Egypt, where they supposedly originated? Were there similar objects or uses (as in the case of the Nehushtan) found elsewhere in the Ancient Near East? Is there evidence of Egyptian activity in the south of Canaan during that time? Also, is there any indication of Egyptian use of an object like the Nehushtan in the south?

⁶ It is not the intention of this study to determine whether this event really took place or not but is merely of interest how the Nehushtan functioned in this ancient narrative or in its Ancient Near Eastern context.

⁷ Rothenberg (1990a:1) has been engaged in excavating copper mining sites in the Arabah Rift Valley from 1964-1988 and numerous smelting sites were discovered. King and Stager (2001:165) maintain that copper was the first metal used in antiquity while Hauptmann, Begemann and Schmidt-Streeber (1999:5) maintain that smelting operations have taken place in Timna and Feinan since the Chalcolithic period (4000–3150 BCE). This, however, is not the focus of this research.

Plaut (2006:1030) considers the story of the Nehushtan as reminiscent of the healing stories found in the much later Greek culture where Asklepios,⁸ the Greek god of healing (the physician's god), would appear in the abaton (an inaccessible religious building) with a serpent (Angeletti et al 1992:223). Shanks (2007:63) believes that the Nehushtan operated in much the same way as the *uraeus* guarding the royal mummies from the serpents of the underworld in Egypt. Williams (1962:534) and others maintain that it originated from Canaan, but McCasland (1939:222) opines that the Phoenician god, Eshmun, was a healing deity worshipped at his temple on the Bostrenus River near Sidon in present-day Lebanon (Salem & Salem 2000:168). The cult of Eshmun was incorporated into that of Asklepios in ancient Palestine during the first century CE (McCasland 1939:223).

1.2 PROBLEM STATEMENT

The narrative does not mention what the symbolic meaning of the event was, whether some type of magic (apotropaic or sympathetic) took place, which materials were in use in its production, who possessed the skills to craft such an object, or even what the purpose of the narrative was. It also remains unknown whether existing traditions, or the presence of similar objects throughout the Ancient Near East, influenced the creation of the Nehushtan during the Exodus.

Without these details, our understanding of the biblical narrative surrounding the creation and function of the Nehushtan, and the symbolic meaning of the narrative, will remain clouded. It will also remain unclear how and why the Nehushtan continued to be worshipped, making it all the way to the Temple Court.

1.3 RESEARCH QUESTIONS

My main research question is: What was the role and significance of the Nehushtan as a 'healing tool' in the context of the Ancient Near East, and did it serve a purpose similar to apotropaic (§ 2.2.1) or sympathetic magic (§ 2.3.1).

⁸ Eshmun was known as Asclepius in Rome (Jackson 1988:140).

Further questions are:

- Why was it necessary for the early Israelites to *look at* the Nehushtan for them to be cured from their snakebites?
- What are the main principles of apotropaic or sympathetic magic?
- Could the principles of apotropaic or sympathetic magic be applied to obtain a better understanding of the role of the Nehushtan?
- Are there any examples of apotropaic and sympathetic magic in Egypt, Greece, Anatolia, and Canaan?
- Is there any archaeological evidence of snake images and snake cults in Canaan and the rest of the Ancient Near East?
- Is there any evidence of copper mining in Canaan that could be connected to the production of a copper/bronze snake?
- Is there a link between YHWH and the Kenites and perhaps between YHWH and the god of metallurgy?
- What can a reassessment of King Hezekia's reforms tell us about the Nehushtan in the Temple in Jerusalem?
- Are there any examples of similar stories in the Hebrew Bible, the Babylonian and Jerusalem *Talmudim* and in the *Midrashim*?

1.4 AIMS AND OBJECTIVES OF THE STUDY

The main aim of this study is to evaluate the origin and significance of the copper serpent as a possible healing tool in the context of the Ancient Near East in order to enrich our understanding of the Nehushtan's role in the biblical narrative.

In order to address the research questions listed above, my objectives are to:

- investigate the main principles of apotropaic and sympathetic magic, and to explore examples of both practices throughout Egypt, Greece, Anatolia, Canaan, and the rest of the Ancient Near East, to ascertain which of the two purposes the Nehushtan fulfilled.
- examine existing archaeological evidence relating to ancient metallurgy (mining, smelting, and production) that may support the production of snake effigies/images and by extension, the existence of snake cults in Canaan.

- study textual examples of apotropaic and sympathetic magic in the Hebrew Bible, the Babylonian and Jerusalem *Talmudim* and the *Midrashim*, to gain a better understanding of the different attitudes towards, and prohibitions against, magical practices, which could shed light on the Nehushtan as a curative tool.

1.5 HYPOTHESIS

An anthological approach might illuminate the significance and role the Nehushtan played as a possible healing tool in Numbers 21. The use of the principles of apotropaic and sympathetic magic as a theoretical framework might also add to a better understanding of the functioning of the Nehushtan in the context of the Ancient Near East.

1.6 SOURCES

1.6.1 Primary sources

In this study, the primary sources used are various Bibles: translations and interpretations of the Hebrew Bible; *The Holy Scriptures according to the Masoretic Text* (MT); *The Good News Bible: Today's English Version* (GNB) (2004); *The New King James Version of the Holy Bible* (NKJV) (1982), and *The Holy Scriptures – Hebrew and English* (A Translation of the King James Version) (2004).

Extra-Biblical sources such as the *Talmud* taken from Soncino's translation of the *Babylonian Talmud* (CD Rom version 2004) and Epstein's printed version of the *Babylonian Talmud* published in 1952. A CD Rom version in English of the *Jerusalem Talmud*, edited and translated by Jacob Neusner.

The Talmudic sages refer to apotropaic magic in many tractates in the *Babylonian Talmud*: *Tractates Shabbath* 66b; 74b and 111b; *Tractate Gittin* 57a; *Sanhedrin* 101a; *Berachot* 55b and *Pessachim* 110a. Many of these references are duplicated in other tractates.

As for the references to sympathetic magic, they appear in *Babylonian Talmud – Tractates Shabbath* 66b, 121b, *Tractate Yoma* 84a, *Berachot* 55b; *tractates Mo'ed Katan* 25b and *Sanhedrin* 56b. The same account appears in several tractates. The

Jerusalem Talmud was also consulted and added to the knowledge gained from the *Babylonian Talmud*.

The *Edwin Smith Papyrus* is an ancient medical papyrus dating back to 1501 BCE. It has been located at the New York Academy of Medicine since 1948 and deals with military surgery and trauma. It is important for my study because it explains that the ancient Egyptians used copper pieces in the dressings of battle wounds to prevent them from becoming infected (cf. Forrest 1982:200; Grass et al 2010; Keevil 2017).⁹ The *Edwin Smith Papyrus* (translated by Breasted in 1930) therefore provided much insight on the medicinal use of copper in antiquity.

The following ancient sources are most insightful because they shed valuable light on various magical and medicinal practices from antiquity:

Tabula defixiones translated by Craffert, 1998.

Scholia in Euripidem, Ad Alcestium, I, translated by Edelstein and Edelstein, 1975.

Clemantina Homilia VI; translated by Edelstein and Edelstein, 1975.

Hyginus; Fabulae, CCXXIV, 5; translated by Edelstein and Edelstein, 1975.

Apollodorus, Bibliotheca, III, 10, 3, 5–4, 1; translated by Edelstein and Edelstein, 1975.

Ovid, Metamorphes, II, 542–648, translated by Brookes More.

Scholia in Pindarum ad Pythias, III, 52b; translated by Edelstein and Edelstein, 1975.

Lactantius Placidus, Commentari in Statium, ad Thebaidem, III, 506; translated by Edelstein and Edelstein, 1975.

Ovid, Metamorphoses Book 15, 680–745, translated by Brookes More.

Pindarus, Nemeae, III 54–56; translated by Edelstein and Edelstein, 1975

Inscriptiones Graecae iv, I, translated by Edelstein & Edelstein 1975:233 *Homer, Iliad, Book 8,306*, translated by Carod–Artal, 2013.

Plutarch, De Superstitiones, 13, translated by Pearse, 2012.

Diodorus Siculus, History 20, 14, 4–6, translated by Plaut, 2006.

Tertullian Apologeticum, 9, 2–3, translated by Pearse, 2019.

Justinius Epitome of Pompeius Trogus, 18, translated by Pearse, 2012.

⁹ Interestingly, the practice of using copper in wound treatment and preventative medicine has become important in preventing modern-day hospital superbugs. This is because copper exhibits broad biocidal properties, preventing wound contamination and aiding the healing process (Borkow, Okon-Levy & Gabba 2010).

The Antiquities of the Jews, 12:5; 18.5, Flavius Josephus, translated by Whiston, 2017.
Curse tablets, British Museum, translated by the British Museum, 1934.
Cuneiform tablets from ancient Babylon, translated by Day, 1950.
The Harris Papyrus I.
The Taylor clay prism.

1.6.2 Secondary sources

Dictionaries such as those by Coulson *et al*, *The Oxford Illustrated Dictionary* (1980); Alcalay, *The Complete Hebrew-English Dictionary* (1990); Bahn, *Collins Dictionary of Archaeology* (1992) and Jordan's *Dictionary of Gods and Goddesses* (2004), all proved most useful as did Culpepper's *Herbal* (1789).¹⁰

Golding's Masters' dissertation, *Perceptions of the serpent in the Ancient Near East: It's Bronze Age role in apotropaic magic, healing, and protection* (2013), is very important to this thesis as it addresses a similar topic. Rothenberg's, *The Ancient metallurgy of copper: Archaeology, experiment, theory* (1990) proved to be an important source on ancient metallurgy in the Arabah. After reading Amzallag's article, 'Yahweh, the Canaanite God of metallurgy' (2009) a link was observed between YHWH, copper mining and the Nehushtan, and this was further strengthened by an article in 'Encyclopaedia Judaica' by Aharoni and Sperling (2007) on the ancient Kenites. Sawyer and Clines *Midian, Moab, and Edom: The history and archaeology of the Late Bronze and Iron Age Jordan and NW Arabia* (1983) added further perspectives.

Biblical commentaries by Gray, *A critical and-exegetical commentary on Numbers* (1976) Milgrom, *JPS Torah Commentary – Numbers: The Traditional Hebrew Text with the Jewish Publication Society [translation]* (1990) and those by Brown, Fitzmyer and Murphy, *The New Jerome Biblical Commentary* (1990) have proved helpful. Barton and Muddiman, *Oxford Bible Commentary* (2000); *The Hebrew commentaries on the Tanakh, by Rashi (Solomon ben Isaac (1040–1105); Rashbam (Samuel ben Meir circa 1080/85–1174); Ralbag (Levi ben Gershon, 1288–1344) and Malbim (Meir Loeb ben*

¹⁰ It was very difficult for me to obtain library books and other sources during the Covid 19 lockdown (the pandemic). As a result, I had to rely on available online sources.

Jehiel Michael 1809–1897) are to be found on the CD Rom version of *Judaic Bookshelf Master Library* (1998).

Biblical commentaries by Gray, *A Critical and Exegetical Commentary on Numbers* (1976) Milgrom, *JPS Torah Commentary – Numbers: The Traditional Hebrew Text with the Jewish Publication Society [translation]* (1990) and those by Brown, Fitzmyer and Murphy, *The New Jerome Biblical Commentary* (1990) have proved helpful. Barton and Muddiman, *Oxford Bible Commentary* (2000); Dunn and Rogerson, *Eerdmans Commentary on the Bible* (2003); Adeyemo, *Africa Bible Commentary* (2006); Pearl's translation of Rashi's *Commentaries on the Pentateuch* (1970); Plaut's, *The Torah – A Modern Commentary* (2006) and *The Jewish Study Bible Translation with commentary by Plaut* (2006) called 'The Copper Serpent', have proved invaluable. *The Lion Handbook of the Bible* by Alexander and Alexander (1999), *The Soncino Chumash* by Cohen (1983) and *The New Bible dictionary* by Douglas (1982) have added to my knowledge of the Nehushtan. *Unlocking the Bible* by Pawson (2003) and *Handboek: Bybelse geskiedenis: Die Ou testament* (1969) by Kroetze and Groenewald, proved the most informative one. Sources that were vital in Chapter Two were Hildburg (1951) *Psychology underlying the employment of amulets in Europe* which explains why people use amulets, Posner (2007) who provided insight on amulets and Levene (2002) who supplied information on magic bowls.

Hawass, *Discovering Tutankhamun: From Howard Carter to DNA* (2013) proved very insightful on Egyptian amulets and sympathetic magic. Geddes and Grosset's *Ancient Egypt: Myth and history* (2001) sheds some light on snake symbolism, and articles such as those by Rowley, *Zadok and Nehushtan* (1939) provided important perspectives on the Nehushtan's history. The following books: Desroches-Noblecourt's *Tutankhamen: The life and death of a Pharaoh* (1972) and Muntner's *Treatise on poisons and their antidotes*, in addition to Mayor's *The poison King: Life and death of Mithridates the Great of Pontus: Rome's deadliest enemy* (2010), provided further insight and a wealth of information on theriacs and imitative magic.

The Asklepios cult in Palestine (1939) by McCasland was most informative regarding Eshmun, the healing god of Sidon, while an article by Angeletti et al (1992), *Costantini's healing rituals and sacred serpents*, provided information on Asklepios,

the Greek healing god. Edelstein and Edelstein's 1975 combined book on the testimonies, stelae and Asklepieia/Asklepions that existed in ancient Greece was very informative. I found Guner et al (2019) *Understanding the genital diseases of ancient Anatolia in the light of the inscribed male genital offerings presented to gods* very informative on sexually transmitted diseases, while Konuk (2020) *Hidden gems of Anatolia: Asklepiion, the health and wellness retreat of ancient Greece and Rome* had much to say about the asklepions in Anatolia, and Kirkpatrick (2010) *Do snakes drink water?* describes how snakes drink water with modified mouthparts. This was very enlightening regarding snakes which could be found in Bergama (present-day Pergamon), Anatolia (ancient Turkey).

Sir James George Frazer's, *The golden bough: A study of magic and religion* (1954 edition) has been a constant and valuable guide for the principles of sympathetic magic (imitative/homeopathic). Another article for sympathetic magic is Wiggington's (2019) *What is Sympathetic Magic?* Frazer (1954) describes the theory of sympathetic magic and the ultimate source on the subject.

Stager and Wolff's 1984 article, *Child sacrifice in Carthage: Religious rite or population control?* provided invaluable information about child sacrifice in ancient Carthage. Lang's book *Cure and cult in ancient Corinth* (1977) described anatomical votive offerings found in the sanctuary and provided insightful descriptive information on sympathetic magic in ancient Corinth. Much information about the use of *tamata* as sympathetic magic devices was obtained from an internet article, as I was unable to find a dedicated book on this practice in the modern Greek Orthodox Church.

Information regarding apotropaic magic was sourced from Rosner's *Encyclopaedia of Medicine in the Bible and the Talmud* (2000). Articles used were: *Knots and knot lore*, by Day (1950), *The evil eye: A cautious look*, by Berger (2013), *Did Cain get away with murder?* by Byron (2014) and *Two inscribed Jewish amulets from Syria*, by Kotansky and Kotansky (1991). *Egyptian treasures from the British Museum*, by Andrews (2000), although very rich in information about various types of amulets, did not provide the detailed information required for an in-depth discussion or where some knowledge of Egyptian mythology was vital. Kovacs' work *Ancient mythologies: India, Persia, Babylon and Egypt* (1999) was invaluable.

Ancient Near Eastern myths in classical Greek religious thought (1995) by West, sourced in *Civilizations of the Ancient Near East* Vol. 1, by Sasson, provided much insight into some aspects of Greek snake mythology as did Salem and Salem's book, *The Near East, the cradle of Western civilization* (2000). By studying Rabbi Trepp's work, *Jewish observance* (1980), I obtained much-needed insight into Jewish traditions and how some are linked to imitative magic.

Münnich (2008) *The cult of bronze serpents in ancient Canaan and Israel* was key to my information regarding the bronze snake figurines found in Megiddo, Tel Mavorakh and Hazor. The magic of copper smelting was described by Finley's (1970) *Metals in the ancient world*. Rotea et al (2018) *Bronze Age metallurgy in Transylvania: Craft, art and ritual magic* gave much insight into copper smelting in Romania during the Late Bronze Age

1.7 METHODOLOGICAL CONSIDERATIONS

1.7.1 Approach

This is a qualitative study, with qualitative being defined as follows: Selective issues are studied to understand the various categories of information that emerge from the collection of data obtained. The data is then used to answer the research questions (Terre Blanche, Durrheim & Painter 2006:47–48; Mason 2002:226). The research is subjective, as it 'seeks to understand human behaviour and reasons that govern such behaviour'.¹¹

The study is inductive rather than deductive, in that it 'aims to develop a theory' rather than 'testing an existing theory'.¹² The principles of apotropaic and sympathetic magic will be used as far as possible as a theoretical framework to apply to the narrative of the Nehushtan in Numbers 21.

An anthological approach will be applied, which will utilise Judaica, archaeology, anthropology, historiography, and studies of homeopathy. As well as textual sources

¹¹ <https://explorable.com/quantitative-and-qualitative-research>

¹² <https://www.scribbr.com/methodology/inductive-deductive-reasoning/>

with special emphasis on the Hebrew Bible, the *Talmudim* and *Midrashim*.¹³ In following an anthological approach, the reader is presented with an experience of ‘exploring a range of different stories that are all closely related by one subject, topic or theme,’¹⁴ with the theme in this instance being the multi-cultural (early Israelite, Canaanite, Egyptian, Greek) and multi-regional (the ANE, Greece, and part of Asia, Africa and America) application of both sympathetic and apotropaic magic.

By investigating the application of sympathetic and apotropaic magic as a topic across different cultures, regions, and timeframes, we should be able to identify similar patterns of human behaviour (or commonality) that span these parameters (culture, place, and time).

What we hope to find is that the application of magic, whether apotropaic or sympathetic, is a common behavioural response that is more closely related to the shared human experience, than it is differentiated by a specific culture, region, or time. What is proposed here is that, when people (across different cultures, space, and time) experience the same challenges (death, disease, other afflictions), human behaviour dictates similar responses (i.e., the application of sympathetic or apotropaic magic). This type of approach is commonly applied within the field of Social Anthropology.

1.7.2 The structure of the thesis

I made the decision to first discuss the principles of sympathetic and apotropaic magic and its Ancient Near Eastern context before I identify such examples in the Hebrew Bible, *Talmudim* and *Midrashim*. In this way I will then be able to apply the relevant principles to the examples and more specifically the Nehushtan narrative in these sources. If the examples from the Hebrew Bible, *Talmudim* and *Midrashim* would be added to Chapter Two, then Chapter Six – with the application of ‘magic’ principles to the Nehushtan narrative - becomes too short.

Chapter Two: Principles of apotropaic and sympathetic magic explains both sympathetic (imitative or homeopathic) as well as apotropaic magic. The objective will

¹³ The *Talmudim* (Palestinian – circa 375 CE and Babylonian – circa 500 CE) and *Midrashim* (third century CE) do post-date the Nehushtan narrative but do provide some commentary on some parts of the Hebrew Scriptures (Lieberman & Person 2017:428).

¹⁴ <https://www.twinkl.co.za/teaching-wiki/anthology>

be to analyse the principles of apotropaic and/or sympathetic magic to be used as a theoretical framework. Both types of magic will be investigated, and both these practices will be elucidated with reference to various and varied examples.

Chapter Three: Sympathetic and apotropaic magic in Egypt will focus on examples of sympathetic (imitative or homeopathic) magic and apotropaic magic as well as snake and staff symbolism in ancient Egypt. Ancient mummification methods and their relationship to imitative magic are outlined. Thereafter, Pharaoh Tutankhamun's ceremonial slippers will be discussed as a form of imitative magic. It will be investigated how cosmic order was maintained during antiquity. The dung beetle amulet, the meaning and purpose of the *uraeus*, and how Ra's solar barque was viewed by the ancient Egyptians, will be discussed.

Chapter Four: Sympathetic and apotropaic magic in ancient Greece and Anatolia will discuss examples of sympathetic and apotropaic magic in Greece and Anatolia, including the role and practices of Asklepios, anatomical votive offerings, healing plaques, and the evil eye amulet will be explored to illuminate our understanding of the principles applied.

Chapter Five: The Canaanite context of the Nehushtan will examine the possible evidence of a snake cult in Canaan at Megiddo, Tel Mevorah, Hazor, Tel Dan, Gezer, and examine the Canaanite god Horon. Copper mining and smelting at Timna and Feinan will be elucidated, and I will discuss how the coppersmiths were perceived as 'magicians' by others. Examples of bronze serpents from Megiddo, Gezer and Tel Mevorakh will be discussed, as will the copper snake that was unearthed inside the ruined shrine of Hathor at Timna, where the remelting of copper took place. The question of whether YHWH could be associated with the Canaanite god of metallurgy will be investigated and discussed. The Kenites, Midianites and Jethro, the father-in-law of Moses, will also be mentioned as possible influencers or role-players in the creation of the Nehushtan. The Nehushtan in the Solomonic temple as well as Hezekiah's reforms will be mentioned.

Chapter Six: Examples of sympathetic and apotropaic magic in the Hebrew Bible, the Babylonian and Jerusalem Talmudim and Midrashim will focus specifically on the Nehushtan.

I will explore the copper snake as a possible 'healing' tool by applying the principles of apotropaic and sympathetic magic gained from the above chapters to determine whether they add any further knowledge to our understanding of the Nehushtan or not.

Chapter Seven: Conclusion.

1.8 LIMITATIONS OF THE STUDY

The purpose of this study is not to provide intensive exegetical study of certain Old Testament passages, neither is it to determine the historicity of certain narratives or customs. It is rather to determine what early Israel's experience regarding certain customs and rituals was and how it affected their communities and those of the Ancient Near East. When dealing with biblical texts in this thesis, I employ elements of the historical-critical maximum approach by utilising biblical texts to highlight the way in which particular social or religious practices function, but not to provide a complete exegesis.

The so-called 'Israelite Exodus' from Egypt will be mentioned since the Biblical narrative describes the origin of the *Nehushtan* in the wilderness during that time. The question of whether the Exodus took place, and the views of modern scholars in that regard, falls outside the parameters of this study and will not be discussed.

1.9 THE SIGNIFICANCE OF THE STUDY

The story of the Nehushtan is a puzzling and mysterious account in Numbers 21, where it is very briefly mentioned. It deals with Moses fashioning a copper, bronze, or brass snake to be used as a healing tool. It later resurfaces as part of Hezekiah's cult reforms, where it is criticised as contravening the second commandment (Ex 20:3-6, according to the Jewish method of counting the Decalogue) through its presence as an object of worship in the Temple of Solomon

As it remains unclear from the narrative exactly what transpired, or what the symbolic meaning of the event was, further investigation of this account, within the broader ancient historical context, is required to ascertain whether some type of magic took place.

In this light, the thesis will provide further information that will clarify sympathetic and apotropaic magic in the religious life of the people of the Ancient Near East and early Israelites and their magical practices. By exploring apotropaic and sympathetic magical practices it may be seen that the early Israelites could have been familiar with the magical practices of their Ancient Near Eastern neighbours through a process of enculturation. Enculturation between different groups is common, and an understanding of this phenomenon can lead to a better understanding of similar practices by different cultures. Even though a familiarity with the practices of their neighbouring cultures is not essential to our understanding of early Israelite practices, it will be interesting to consider which neighbouring practices could have influenced those of the early Israelites.

CHAPTER TWO

PRINCIPLES OF APOTROPAIC AND SYMPATHETIC MAGIC

2.1 INTRODUCTION

The main objective of this chapter is to find a proper definition and understanding of the principles of apotropaic and sympathetic magic in various sources.

This chapter explores the principles of sympathetic and apotropaic magic, both of which might be pertinent to the story of the bronze serpent, Nehushtan. I will examine the concepts of both sympathetic (imitative/homeopathic and contagion magic) as well as apotropaic magic with reference to examples of the two, to determine whether the Nehushtan may embody apotropaic or sympathetic magical functions (Chapter Six).

The account of the copper snake clearly refers to a kind of a healing tool that Moses used to cure snakebite after God had sent a plague of snakes to punish the early Israelites during their wilderness journey to Canaan (Nm 21:4–9). The principles gained from sympathetic and apotropaic magical practices will serve as a framework that will be applied to the role that was played by the Nehushtan in the Biblical narrative – where applicable.

2.2 APOTROPAIC MAGIC

2.2.1 Definition of apotropaic magic

Coulson et al (1980:33) define apotropaic magic as ‘having or reputed to have the power of averting evil influence or ill luck’. The governing theory or philosophy of apotropaic magic is the use of an object to repel evil forces. According to Faraone (Faraone 1992 in Darby 2014:6), the Greek term *apotropaion* is ‘related to two words – *apotrepein*, “to turn away or revert,” and *apotropaios*, “that which averts”’.

Golding (2013:25) explains the two characteristics of apotropaic magic are: 1) the protective aspect or tutelary, which is to repel harm or evil, and 2) the prophylactic or pre-emptive one against illness. Golding (2013:25) notes that both characteristics are present in apotropaic magic.

Apotropaic magic is therefore a ritual observance that is intended to 'turn away' evil. It can be as elaborate as the use of magical ceremonies or spells, or as simple as the vaguely superstitious carrying or wearing of a 'good luck charm' (possibly on a charm bracelet or amulet), crossing one's fingers, or knocking on wood.¹⁵ The word apotropaic means to ward off evil or to avert or deflect evil and commonly refers to objects such as amulets or other symbols. The word is of Greek origin: *Apotrope* literally means 'turning away or averting the evil eye' (cf. Shayne 2019).¹⁶ Apotropaic magic is therefore 'a type of magic intended to turn away harm or evil influences'.¹⁷

The objects utilised as amulets for apotropaic magic could take varying forms, as is illustrated by the examples from various sources in the Ancient Near East and from the *Talmudim* and *Midrashim*. I will explore these to determine whether apotropaic principles could possibly be applied to the Nehushtan narrative or not.

Golding (2013:25) explains the two characteristics of apotropaic magic as: 1) the protective aspect or tutelary, which is to repel harm or evil, and 2) the prophylactic or pre-emptive protection against illness.

2.2.2 Amulets

Burnett (2019:73) notes that 'amulets and amuletic plaques played an important role in apotropaic and healing contexts', as 'protection against illness, foreboding circumstances, malevolent magic, spirits, or deities was sought through magico-religious means'. This practice of using amulets to repel evil influences has been in use since archaic times (Bar-Yosef Mayer & Porat 2008:8548) and continues till this very day. Again, there is a great variety in the kind of objects utilised as amulets but the commonality in their function to repel evil influences is clear and aligns with the governing principle of apotropaic magic, which is to protect the wearer from catastrophe and disease, or to prevent such occurrences. Sometimes the amulets are even believed to cure an illness (Rosner 2000:18), so amulets can be both *preventative* and *curative* in their magical workings.

¹⁵ Apotropaic magic: artandpopularculture.com/apotropaic_magic

¹⁶ For a full discussion on the origins of the evil eye, refer to Elworthy (1958).

¹⁷ Apotropaic: merriam-webster.com/dictionary/apotropaic.

Rosner (2000:17) describes one type of amulet¹⁸ as ‘a written parchment, or an object made of roots placed into a tube and suspended on a cord around someone’s neck’. Schrire (1966:5) adds that wreaths of sprouted corn, jawbones of one’s ancestors, or a king’s hair, teeth, or bones, were also in use as amulets since earliest times. Posner (2007:121) notes that humans have worn amulets around their necks, or carried them on their person, since archaic times. According to Berger (2013:785–786) they regarded these amulets as magical or sacred items to protect themselves against evil spirits, especially the evil eye, whose malign effects are still held in modern times to be very potent and very real. Rosner (2000:17) believes that amulets were efficacious owing to their placebo effect.

Posner (2007:121) insists there is a great likelihood that jewellery also functioned apotropaically. Rincon (2006) confirms that shell beads found in the Skhal Cave on Mount Carmel in Israel is the oldest jewellery in the world. The two beads are between 90,000 and 100,000 years old and were worn as amulets judging by holes in both beads to enable them to be strung and worn as a necklace. Posner (2007:121) continues to say that it was a widely held belief that demonic forces would not dare to attack such a guarded human. Many amulets consisted of parchment or metal discs, and these were often inscribed with magical words, safeguarding formulae, or spells, as potent power was imbued in them. He adds that these words were powerful (Posner 2007:121).

The amulet worn to protect against the evil eye, is purely for protection but some knotted amulets could cure an illness (§ 2.2.2.1 [b]). It is McDaniel’s opinion that eye abnormalities such as a double pupil or even a cataract were regarded as an evil eye (McDaniel 1918:335, (§ 2.2.2.1 [e])).

2.2.2.1 Specific amulets

(a) The preserving stone (eagle-stone) or *aetites*

According to Podgorny (2017:195), an eagle-stone is an ancient remedy of Asian origin that was used in early modern Europe to prevent abortion and as a charm to

¹⁸ An *amulet* is termed a *kamiya* in Hebrew (Alcalay 1990:127), *amuletum* in Latin (Kidd 1984:378) and *phylakto* in Greek (Pring 1995:223).

assist obstetric delivery. Rosner's view (2000:25) is that a 'preserving stone' was worn by a pregnant woman to prevent her from miscarrying her unborn baby. Drake (1940:128) describes an eagle-stone, which was discovered in Ireland dating from the 17th century CE, as 'a reddish-brown stone', set in a silver pendant with silver loops at either end. An 18th century CE label describes it as an *aetites* or eagle-stone (Loomis 1944:321). It was believed that an eagle-stone is formed in the nest of an eagle (Drake 1940:129).

As mentioned above, these amulets have been in use since ancient times. Pliny the Elder (1855, *Nat. Hist.*10.4)¹⁹ refers to an eagle-stone as an *aetites* ('eagle-stone')²⁰ and describes it as being 'pregnant' because a smaller stone is enclosed within it and rattles when the larger one is shaken. Therefore, it is a direct parallel to a pregnant woman. Pliny also adds that the *aetites* is believed to safeguard a woman against miscarriage (*Nat. Hist* 36.39; cf. Wright 1857).²¹

Diocorides (5.161) also refers to *aetites* stones as eagle-stones and confirms Pliny's view that if it is worn around the left arm during pregnancy, it will prevent a miscarriage, and if worn around the thigh during labour, it will guarantee a painless birth. This amulet also has an *imitative function* in that the bigger stone may symbolise the infant within the womb of the mother.

Principle: The eagle-stone had a *protective or preventative function* and was worn to safeguard a pregnant woman from a spontaneous miscarriage. This amulet also served an *imitative magical* function. In the same way as the eagle-stone protected the smaller nodule within it, so would the eagle-stone protect the embryo within the mother's womb.

¹⁹ Pliny's Natural History (*Naturalis Historia*, in Latin) was published in the 1st Century CE. A translated version of the work, published by Bostock (1855) was used for the purposes of this research.

²⁰ This word is derived from the Greek word *aetos* meaning eagle (Pring 1995:304).

²¹ <https://archive.org/details/dictionaryobsol00wriggoog/page/n7/mode/2up.->

(b) Knotted amulets

Knots,²² and the tying thereof for securing bundles with twine, are possibly one of humankind's oldest tools and date back to the cave dwellers of the Stone Age.²³ Knots were also believed to possess healing powers (Day 1950:234).

Cuneiform tablets from ancient Babylon, originating from the ninth century BCE, contained a popular headache cure that utilises knots to 'unknot' headaches (*Tablet Nine* displayed in the British Museum; Day 1950:235):

Take cedar ... and
Plait a triple cord ... and
Tie twice seven knots and
Perform the incantation of Eridu and
Bind the head of the sick man,
That the evil Spirit, the evil Demon may stand aside,
And a kindly Spirit, a kindly Genius be present.

Day (1950:236) believes that a Babylonian cure for ophthalmia (inflammation of the eye) was affected by twisting black and white hairs together to form cords while droning incantations. The black cord was attached close to the injured eye, while the white one was placed near the healthy eye. Day (1950:236) reminds his readers that in recent times in the Scottish Highlands, black and white threads were wrapped around a sick animal to neutralise the effect of misfortunes conferred upon it by the evil eye (§ 2.2.2.1 [e]). Day explains that the colour black represents death and corruption, while white denotes health and vitality. A red cord was thought to represent the blood of life (Day 1950:236).

Knots are also used prophylactically as amulets (as will be explained below). In ancient Rome, a *bullā* (or *bullae*, plural) or pendant (Figure 2.1) was worn around the necks of all freeborn Roman boys until they reached manhood (Day 1950:243).²⁴ Day

²² For a discussion on knots in Hebrew literature, refer to Gandz (1930).

²³ Blombos Cave, South Africa, boasts evidence of personal ornament use in the form of shell necklaces and pendants from the Middle Stone Age. It is believed that knots in the strings were used to keep the shells in place (Vanhaeren et al 2013:503).

²⁴ Porto (2020:498) refers to bullae as 'enigmatic lead objects, sometimes covered with gold leaves if the family could afford it'.

(1950:243) adds that a child of wealthy parents would have a gold *bullā*, while a youth of indigent parents would possess a knotted cord (Figure 2.2). Phippen (2010) notes that the purpose of a *bullā* was to protect the wearer against demonic spirits. Another purpose of a *bullā* was to indicate the status of a boy as a freeborn Roman child. Phippen (2010) believes that the Romans borrowed this custom from the Etruscans, who like the Romans, realised that their children were very vulnerable and required extra protection.

In my view, the use of this amulet is not surprising because of the high infant mortality rate in antiquity. The baby was given this amulet on the eighth day after birth, which was also his naming day (Phippen 2010). The festivities that took place on this day were symbolic of the new baby's reception into the family. Phippen (2010) posits that the boys wore their *bullae* only when they attended social events away from home that brought them into contact with strangers. Most of the knots depicted in ancient Egyptian art are square knots (Day 1950:240). The Greeks and Romans called this knot *nodus Herculis* or 'knot of Hercules' due to its strength.



Figure 2.1: Hollow gold Roman *bullā* pendant with detachable chain.
(British Museum No. 1814, 0704. 1174, second–third century CE)²⁵

Day (1950:243) tells his readers that while a little Roman infant wore his *bullā* for protection, Jewish children in Talmudic times would also wear a knotted cord around their necks. This could well have been an amulet in earlier times. It is interesting to note that modern-day Jews wear a prayer shawl called a *tallit* that features knotted

²⁵ https://www.britishmuseum.org/collection/object/G_1814-0704-1174. This photo is from the British Museum and closely resembles Day's 1950 description of Roman *bullā*.

tassels (in Hebrew, *tzitzit*) on its four corners (Nm 15:38–40; see Fig 2.2). These tassels remind the wearer to observe God’s commandments and not to follow their base desires. This can be construed as apotropaic magic because the sight of the *tzitzit* prevents the worshipper from acting on their sinful thoughts. Thus, the *tzitzit* can be viewed as an apotropaic amulet that protects the wearer from committing a sinful deed based on their lustful urges. The *tallit* with its *tzitzit* date back to Biblical times (Numbers 15:38–40) when they were worn as a ‘robe of responsibility’ (Trepp 1980:27). Jews still observe this command when a *tallit* is worn in the synagogue during morning prayers (Nm 15:38–40, *JSB*):

The Lord spoke to Moses saying: Speak to the children of Israel and enjoin them to make for themselves tassels²⁶ [*tzitzit*] on the corners of their garments, throughout the generations, let them attach a cord of hyacinth-blue to the *tzitzit* at each corner. That shall be to your *tzitzit*; look at them and recall all the commandments of the Lord and observe so that you do not follow your heart and eyes in your lustful urge. You shall be reminded to observe all My *mitzvot* and be holy to your God.

Today, in the three South African Reform Jewish congregations, the *tallit* is worn by everyone who has celebrated their *benei mitzvah*,²⁷ while in South African Orthodox congregations only men are permitted to wear a *tallit*.²⁸

Some Jews wear a small *tallit* called a *tallit katan* or *arba kanfot* (Shulchan Arukh, *Orach Chayim* 13:3; Trepp 1980:239). This is worn under their shirts with *tzitzit* attached to all four corners, which may be observed hanging out below it. A *tallit* may vary considerably in size from the ones that form the wedding canopy, to that of a 1950s ladies’ evening stole. The *tzitzit* must be white in colour and each one comprises four strands that are threaded through a hole in the *tallit*. According to the Torah (Nm 15:38), one of the four strands had to be a hyacinth blue colour. The white stood for purity and the blue for God’s heavenly realms (Trepp 1980:28). Trepp believes that the *tzitzit* confers a distinction of nobility on the wearer, and notes that only princes

²⁶ A tassel or *tzitzit* is always knotted but not every *tallit* has a fringe at the bottom.

²⁷ *Benei Mitzvah* is the plural of *Bar Mitzvah* or *Bat Mitzvah*, and Bar Mitzvah means son of the commandments, and Bat Mitzvah means daughter of the commandments. When a child turns 13 years old, they become responsible for fulfilling the precepts of Judaism. https://en.wikipedia.org/wiki/Bar_and_bat_mitzvah

²⁸ This information was provided to me by Rabbi Emma Gottlieb of the Cape Town Progressive Congregation. However, it must be noted that there are varying trends in terms of *tallit* use across the globe. For example, some Reform congregations in Europe bar women from wearing the *tallit*, while there are Orthodox congregations where anyone (irrespective of gender) is welcome to wear one.

were permitted to wear the colour royal blue. Modern fringes do not include the blue thread because the precise shade of blue is no longer known (Trepp 1980:29). Figure 2.2 shows a *tallit* with a *tzitzit* on one of the corners.



Figure 2.2: A *tallit* showing the *tzitzit* on one of the corners.
(Photograph: Gillian Williams 2017).

Ngo (2022) explains that there has been much scholarly debate as to the exact shade of blue that the Hebrew word *tekhelet* referred to. It was argued that the *tekhelet* dye was obtained from a marine snail (*Murex trunculus*). Initially, the colour was most popular and worn by many but by the Roman period, only the emperor was permitted the luxury of wearing it. Ngo (2022) adds that by the seventh century CE, the art and method of the dyeing process was no longer known. Sagiv (2015:286) concurs with this and further states that the Rabbinic authorities considered *tekhelet* to be lost or hidden (*ganuz*). This proclamation makes it incorrect to use any blue dye in the *tzitzit* of the *tallit* according to Jewish ritual law. There was also much speculation regarding the colour, whether it was blue or violet. An interesting archaeological discovery made at Masada was able to shed light on this question. A blue woollen swatch came to light, which was proved to have been dyed using the secretions of murex snails. Horowitz (1998) also explained that the Sumerian word for the lapis lazuli stone was used to designate the colour, *tekhelet*, a sky blue.²⁹

The *tzitzit* are knotted in a particular fashion. Four holes are formed in the *tallit*, one at each corner (Trepp 1980:30). Each hole is threaded with four threads, one of which is very much longer than the other three. This longer thread is wound round the

²⁹ It is interesting to note that a *tekhelet* “renaissance” took place during the 1980s, a trend which raised objections from many Orthodox communities. This topic is discussed in detail by Sagiv (2015).

remaining three between knots so that the total number of spirals equals the numerical value of the Tetragrammaton (God's ineffable name; Trepp 1980:30).

In the *Babylonian Talmud (Tractate Shabbath 66b)*, Rabbi Judah the Prince taught that the flowers of the Dyer's Madder plant (*Rubia tinctorum*) could serve as an approved knotted garland amulet when worn around a person's neck. The sixteenth century CE medical herbalist, Culpepper (1789:220) and a medical doctor, Phelps Brown (1867:110), also list the curative power of the Dyer's Madder plant. Rabbi Abaye states (*Babylonian Talmud – Tractate Shabbath 66b*) that, according to his mother, three garlands of the Dyer's Madder plant would stop an illness immediately, while five had the power to cure it. Seven garlands were regarded as extremely efficacious, being sufficiently powerful to overcome the forces of evil. The Dyers Madder flower was used as a prophylactic and therefore an example of apotropaic magic. Culpepper (1789:220) notes that the Madder plant is an effective cure for yellow jaundice, blockage of the spleen, depression and melancholy humour, palsy, sciatica contusions, and amenorrhea. Phelps Brown (1867:101), a more recent medical practitioner, believes most strongly that Dyer's Madder blossoms stimulate both the menstrual cycle and the urinary system, but warns his readers that excessive ingestion of Dyer's Madder will colour their bones red.

Principle: Knots were believed to have healing powers and to *protect the wearer against demonic spirits and from committing sinful acts*. The knots used to cure headaches have an imitative character, as knots are held to 'unknot' headaches.

(c) Medical amulets for Arsinoë

The amulets of Arsinoë were made of tiny foil sheets and engraved in Aramaic dating from the 1st century CE (Figure 2.3). One was made of gold and the other of silver (Kotansky & Kotansky 1991:267). The names of angels and apotropaic incantations were engraved on the amulets to *save or protect the wearer* – a Greek woman named Arsinoë,³⁰ whose further particulars are unknown – from various *ailments or malevolent spirits*. Kotansky and Kotansky (1991:272) prefer to date these amulets to

³⁰ This name of Greek origin means 'a woman with an uplifted mind'
<https://www.meaningofthename.com/arsinoe>

the time between the Roman and Byzantine era but admit that they could date it as far back as the first century CE.

Kotansky and Kotansky (1991:272) note that the name Arsinoë is common in Hellenistic inscriptions from Egypt. The reference to 'strange, difficult, and frightening' refers to the destroyer-demon or even to God himself (Kotansky & Kotansky 1991:273). Kotansky and Kotansky (1991:277) refer to the amulet that mentions that Arsinoë is a daughter of Eve. This, in their opinion, implies that Arsinoë may have suffered from a gynaecological disorder, was struggling with a 'difficult' pregnancy, or even suffered a miscarriage. Arsinoë might have lost a baby; a tragedy that was unfortunately common in antiquity, given the high infant mortality rate (Kotansky & Kotansky 1991:277).

Egyptians and Phoenicians wore foil amulets, like those described above, from the fifth to seventh centuries CE, and no earlier than the first century CE (Kotansky and Kotansky 1991:268). Both the small foil amulets were made for the same client; Kotansky and Kotansky (1991:268) affirm this, because the writing is similar. Perhaps the two small amulets for Arsinoë were grave goods. Kotansky and Kotansky prefer to date these amulets to between Roman and Byzantium times but admit that they could date as far back as the first century CE.

Of the amulets for Arsinoë referred to below, the first gold amulet's (A) provenance is Syria (Figures 2.3 and 2.4). It is to be found in the Paul Getty Museum, Los Angeles, United States, where it was acquired in 1980 (Accession No. 80.AM.55.1). Its height is 2.3cm, and the width is 3.2cm.



Figure 2.3: Gold amulet for Arsinoë (A).
(Kotansky and Kotansky 1991:271).

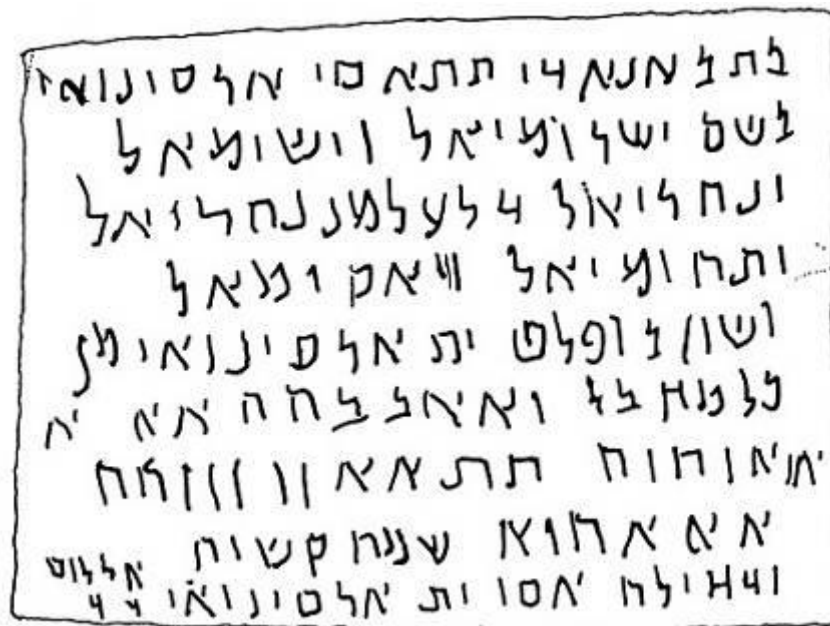


Figure 2.4: Aramaic inscription on gold amulet for Arsinoë (A).
(Kotansky and Kotansky 1991:271).

English translation of Aramaic inscription (Kotansky & Kotansky 1991:271):

- 1 I am writing (this) so that Arsinoë will be healed.
- 2 in the name of Yesumiel and Yesumel
- 3 and the man, Gabriel, master of healing and Angel

4 who answers [the prayers of] the daughter of Eve.
Sadqiel, Uriel, Nahariel,
5 Seraphiel, Ramiel, Yakonel, Suriel, Suriel,
6 Ranabiel, Ramiel, Harbiel, Satqiel, Daliel,
7 and Yahobel, Sitmel, 'Azazel,
8 Yehezqel, Maqtiel, 'Amsiel and Uzziel, Nuriel,
9 and 'Am(a)tiel and Amoriel, and Emuniel, and Anaqiel. I pray
10 of you, heal Arsinoë from every evil spirit.
11 For Thy loving-kindness and truth.

The second silver amulet's (B) provenance is Syria. It is also to be found in the Paul Getty Museum (Accession No. 80.AM.55.1). Its height is 2.1cm, and the width is 4.8cm (Figures 2.5 and 2.6).

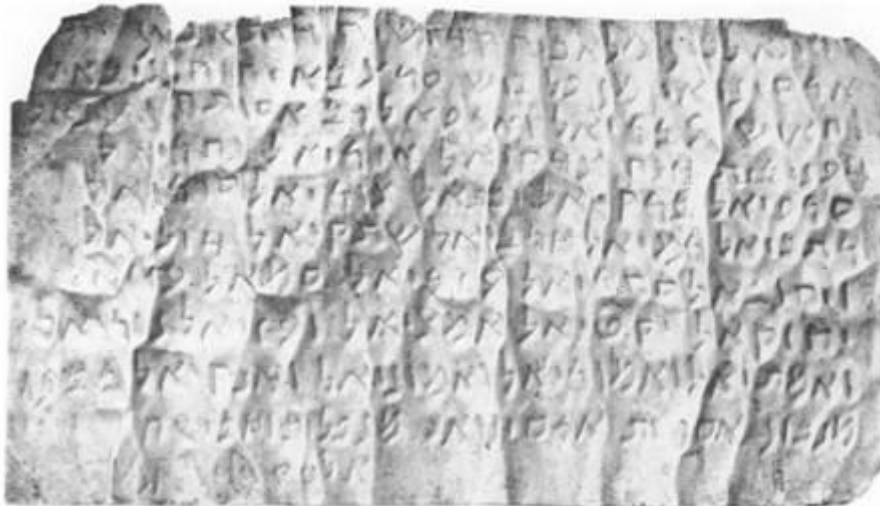


Figure 2.5: Silver amulet for Arsinoë (B).
Kotansky and Kotansky (1991:274).

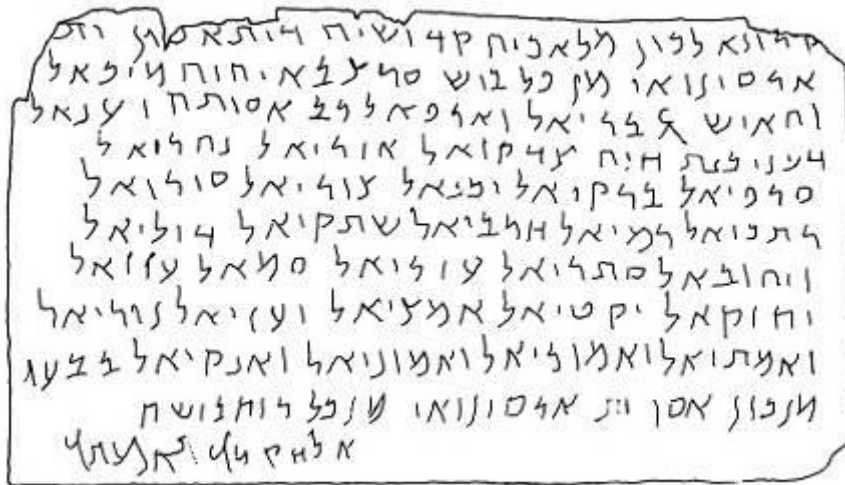


Figure 2.6: Aramaic inscription on silver amulet for Arsinoë (B).
Kotansky and Kotansky (1991:274).

English Translation of the Aramaic inscription appears below (Kotansky & Kotansky 1991:275):

- 1 I call upon you Holy Angels that you heal
- 2 Arsinoë from every illness: 'Prince of the hosts of YHWH' (Jos 5:14–15), Michael,
- 3 'and the man, Gabriel', (Dn 9:21) and Raphael, master of healing and Anael,
- 4 who answers (the prayers of) the daughters of Eve; Sadqiel, Uriel, Nadhaniel,
- 5 Seraphiel, Barqiel, Yakonel, Suriel,
- 6 Rahabiel, Ramiel, Harbiel, Surqiel, Doliel,
- 7 and Yahobel, Sitriël, Asriel, Sammael, Azazel,
- 8 Yehezqel. Yaqtiel, Amsiel, and Uzziel, Nuriel
- 9 and Am(a)tiel, Amariel, and Emuniel, and Anaqiel. I pray
- 10 of you, heal Arsinoë from every evil spirit.
- 11 'For Thy loving kindness and truth'. (Ps 138:2).

Kotansky and Kotansky (1991:268) are of the opinion that these amulets for Arsinoë protected her against evil forces. Thus, both amulets are examples of apotropaic magic.

Principle: *Medical amulets safeguard or protect the wearer against evil spirits that cause her to develop gynaecological disorders during pregnancy.*

(d) Magic incantation bowls

Levene (2002:5) notes that several thousand magic bowls have come to light; one hundred of which were found during excavations in Nippur during 1888–1889 (Avery-Peck nd). Of these, a mere five hundred have been deciphered and published. The one that is being discussed here, dates from between the fifth and eighth centuries CE, which is rather late for the purpose of this study.³¹

Written in Aramaic, the language of the Ancient Near East, these dome-shaped earthenware bowls were amulets, made by professional amulet-makers who were well-known in their trade (Levene 2002:6). Darby (2014) explains that clay was an important medium used in apotropaic ritual in ancient Israel. Each bowl was custom-made, and the client's name appeared in it (Levene 2002:7, 9). Their purpose was to assist people in dealing with their problems, such as illness, bad luck, and the vicissitudes of everyday life, maintains Levene (2002:9). The Aramaic script began inside the bowl at its base, spiralling upwards to end at the lip of the vessel (Fig 2.7). They were buried under the floors of houses, at the entrances to rooms such as the bedrooms and living areas (Levene 2002:11). Most of the bowls vary in size from that of a modern-day cereal bowl to a large salad dish (Levene 2002:12). At the base of the inside of the bowl there may be a crude illustration of a male or female demon³² or a shackled animal-demon hybrid. This is an example of apotropaic magic that was believed to *render the evil demon harmless and unable to make mischief* (Levene 2002:13).

Figure 2.7 is an example of such a bowl described by Segal (2000a:122-3) in a British Museum catalogue. The provenance of the bowl (Museum Number 91765), which was made of clay in Iraq and discovered at Tell Ibrahim (Kutha) in 1881, is that it was wheel-made and dates from between the fifth and eighth century CE.

³¹ Although items and texts prior to or contemporary with the biblical material will present us with the strongest contextual information, this thesis was carefully planned so that examples of imitative/homeopathic magic examples from many different cultures and belief systems, spanning different time periods, were taken to illustrate how magic operated in the ancient world. Examples from the ANE as well as the Mediterranean Basin were taken to show that this type of magic is well-known. This was confirmed in Jewish literature and confirmed in the examples from the Hebrew Bible.

³² For a definition of the terms 'angel' and 'demon', and the differences between the two, see Fredericksen (n.d).

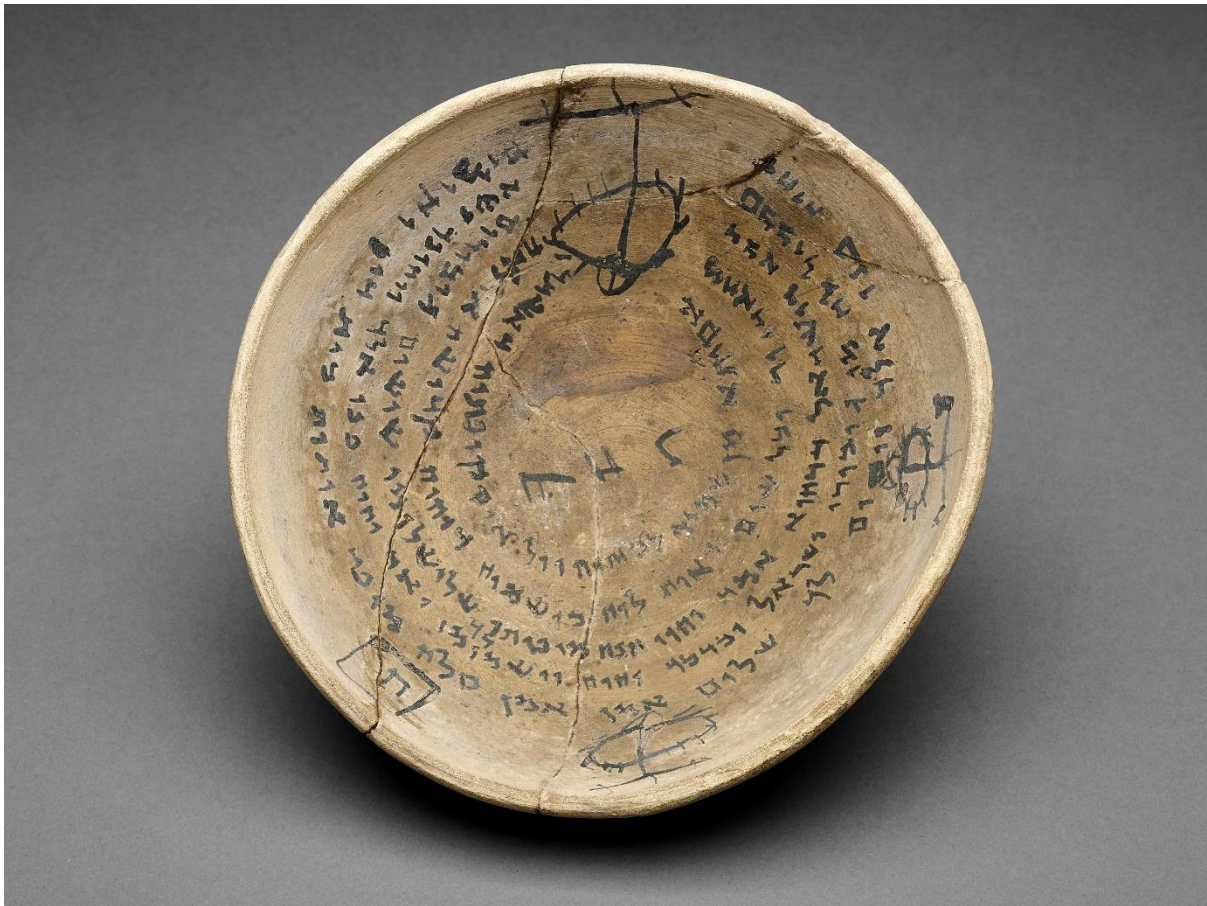


Figure 2.7: Incantation bowl acquisition housed in the British Museum, but not on display.
British Museum Accession Number 91765.³³

The incantation bowl above has a diameter of 16 cm and a depth of 5.4 cm. The English translation follows below:

Health from heaven for the house and for the threshold of Astad Marduk and everything that belongs to him in the name of the holy Yahweh the Great God of Israel. He that said and it was.

Behold the bed of Solomon. Three score mighty men are about it, of the mighty men of Israel. May Yahweh bless you and keep you. May Yahweh cause his face to shine towards you and grant you peace.³⁴ Amen Amen Amen |Selah (He) annuls the signs of the court and diviners (Segal 2000).

I have added another bowl because the provenance may be rather late. The second example is that of bowl 13 (Figure 2.8), housed in the Iraq Museum in Baghdad (IM 41382). It measures 18 cm in diameter and 5 cm in height. It dates from between the fourth and seventh century CE. It is in good condition and made of clay in Iraq.

³³ https://www.britishmuseum.org/collection/object/W_1881-0714-12

³⁴ This is based on the priestly benediction found in the book of Numbers 6:23-27.



Figure 2.8: Incantation bowl 13, housed in the Iraq Museum.
Iraq Museum Accession Number IM 41382³⁵ (cf. Moriggi 2014).

The English translation (Moriggi 2014) follows below:

Prepared is this mystery for the sealing of *br šhd'* son of *'myn* the servant of *ḥwrmwyz* son of *mḥlpt'* who is called *bt nwkr'*. In the name of the angel *'sry'y/l* who binds and does not untie and in the name of *sbḥ qdws' lh'lh* [...], whose Divine Presence dwells (?) upon cherubs of fire and His throne is established in the supreme heights [...] before him, and they bind the slaves into the hand of their lord and they rebuke the sons in front of their father and they subdue the powerful sons of sons and the slaves who perform (magic acts) in front of their lord, and they sit on the door of *ḥwrmwyz* son of *mḥlpt'* and on the threshold and on the roof of *ḥwrmwyz* son of *mḥlpt'* and they subdue the slave of *ḥwrmwyz* son of *mḥlpt'*, *br šhd'* son of *'myn*, and his hired-man and his sons and they do not allow (them) to flee. And the one who flees and the hired-man and the son who flee, they are let loose upon them the seven holy angels: *'sry'y/l* who binds their feet and *nqṭy'y/l* who gathers them (in sheaves) ^[...]^ and *kbšy'y/l* subdues them in front 12 of their lord, *mšmšy'y/l* makes their hearts serve him ^and *skry[y/l]^*, [...] (...) in front of them, *blmy'y/l* muzzles their tongues for him, *'dwm 'dwny 'dwm 'dwny yh* issues an oracle about them (?). And which 13 slave and the son and the hired-man who flees, *skry'y/l* shuts up their mouth for him and until not (according to) his will (will be) his coming (back) (?). You (are) the holy angels 14.

³⁵ <https://www.theiraqmuseum.com/antiquities.html>

Principle: Magic bowls, featuring dedicated inscriptions, *render evil demons harmless and unable to enter the home to make mischief*. In this way, an object is used to *repel evil forces, or to turn away evil*.

(e) The evil eye

The function of the evil eye is twofold: firstly, it can be a jealous or envious glance or a long stare from one person to the next, and secondly, it can take the form of an evil eye amulet, believed to avert, deflect, or cast off the evil intent of the covetous ones.

The Oxford Dictionary defines the 'evil eye' as a malicious or envious look superstitiously believed to do material harm, while (Coulson et al 1980:289) add that it is also a supposed faculty of *inflicting injury by a look* (my emphasis). The belief in the 'evil eye' was very widespread in antiquity (Rosner 2000:119) and even beyond that to the seventh century BCE (Berger 2013:786). The evil eye or the evil inclination, *ayin hara* (in Hebrew), is taken very seriously by its adherents. It is equated with negative emotions such as greed, jealousy, and spite. Kotze (2013:268) notes that belief in the evil eye dates to ancient Sumerian times.³⁶

Berger (2013:786), a social psychologist, posits that the basis of the belief in the evil eye is *envy*. Someone's good fortune may cause others to envy him or her. Berger explains that most of us experience jealousy, as it is 'wired into our brains', and results in competition to attain success, which most people would experience at times. The evil eye is more than ordinary jealousy, expounds Berger (2013:786), it is a deep-seated insidious resentment or extraordinary covetousness, and includes feelings such as lust, greed, and malice (Berger 2013:786). Berger (2012:1101) mentions that blue-eyed people are rare in the Mediterranean area, and that this feature would make those who possess it stand out in a crowd. These individuals were often suspected of being magicians in the Middle East because they were physically different.

Belief in the evil eye is very prevalent in the areas around the Mediterranean Sea, especially Italy, France, Greece, Spain, and Portugal, but also in Brazil, North Africa, and the West Indies in present times. Lykiadopoulos (1981:223) notes that both men

³⁶ The account of the evil eye in ancient Sumeria is based on witchcraft or contagion magic, which is not applicable to the Nehushtan, so it will not be pursued further.

and women can possess the evil eye and that it may be cast consciously or unconsciously. However, according to Lykiadopoulos (1981:223), the Italians are inclined to blame the menfolk. In the Macedonian rural areas, people with blue eyes are regarded as being capable of casting the evil eye, *matiasma* or *mati* (Hardie 1923:161).

An extreme example of the effects of the evil curse is taken from a story in which a baby of Kastoria in Macedonia was taken to visit its grandmother. As the baby was unwrapped, perhaps to show the grandmother, a neighbour decided to view the infant. She remarked on the beauty of the young one, thus tempting the evil eye. Because of this remark, the infant fell ill almost immediately. Despite the remedies and care of the parents, the child died within twenty-four hours (Hardie 1923:161).

There are numerous protective charms, amulets, and gestures such as spitting three times (Alt Miller 2018; Kaplan 2019), that are intended to counteract the negative effects of the evil eye. It is a 'quiet symbolic spit', not unlike trying to remove something stuck on the tip of the tongue and is often performed unconsciously. An example of a typical evil eye bracelet appears below (Figure 2.9).

The evil eye is not specially mentioned in the Hebrew Bible, but there is much mention of the evil eye in the Babylonian *Talmud* and the sages were aware of it. They gave some advice to a man who feared the evil eye upon entering a new town. He was to perform a gesture of placing his right thumb into his left hand and the left thumb into his right hand while uttering the following words: "I so-and-so, son of so-and-so, am a descendant of Joseph over which the evil eye is harmless" (*Babylonian Talmud – Tractate Berachot 55b*).



Figure 2.9: A bracelet amulet to ward off the evil eye.
(Photograph: Gillian Williams 2017).

The belief that the descendants of Joseph are impervious to the evil eye is based on an interpretation of two passages in Genesis. In the first passage, Jacob gives the following blessing to Joseph: Joseph is a fruitful bough, a fruitful bough by a spring (Hebrew, *alei ayin*), where its branches run over a wall (Gn 49:22).³⁷

The *Talmud* does not read *alei ayin*, but *olei ayin*, which means ‘rise above the [evil] eye’ (the Hebrew word *ayin* means both ‘spring’ and ‘eye’ (*Babylonian Talmud – Tractate Baba Metzia* 84a)).

In the second passage (Gn 48:16), Jacob blesses Joseph’s sons, Ephraim, and Manasseh: “...and let them grow [like fish] into a multitude during the earth” (my insertion). The Hebrew word used for ‘grow into a multitude’ is *veyidgu* from which the word *dag*, meaning ‘fish,’ is derived. In the same way as fish are submerged in water, and the evil eye has no power over them because they cannot be seen, so too the evil eye has no influence over the descendants of Joseph (*Babylonian Talmud – Tractate Berachot* 55b). This may be rather far-fetched but may have been influenced by the Babylonian context. In the Biblical commentary, Jacob blesses his grandsons (Fishbane 2004:97) so that they will become senior members of their tribe.

The sages of the Jerusalem *Talmud* believed so strongly that the evil eye could endanger life, that Rabbi Akiva was treated for an ailment (the nature of which is

³⁷ This is a Talmudic interpretation of the two Biblical verses in Genesis, which Fishbane (2004:38) interprets merely as Joseph blessing his sons.

unclear) believed to be caused by the evil eye on the Sabbath but does not explain this idea. Only life-saving treatments are permitted to be performed on the Sabbath (*Jerusalem Talmud – Tractate Shabbath 14:3*). Rav and Rabbi Hiyya taught that ninety-nine percent of people died on account of affliction by the evil eye while a mere one percent died of natural causes (*Jerusalem Talmud – Tractate Shabbath 14:3*). This belief that the evil eye caused so many deaths clearly suggests how seriously it was regarded at the time.

The evil eye is believed to hinge on negative feelings of jealousy, avarice, and misfortune. Belief in the evil eye is a constant one coupled with a simultaneous belief in other demons, such as the *Jinn* (Abu-Rabia 2005:241).³⁸ Those susceptible to the evil eye are usually wealthy, good looking, fortunate, or small children (Abu-Rabia 2005:241, 243). The evil eye may pass to others, with or without intent on the part of the perpetrator, *merely by a gaze, a touch, or words* (Abu-Rabia 2005:246). People thought to possess the evil eye are sterile women or those with blue eyes or eye defects, such as a squint or strabismus (Abu-Rabia 2005:246). Maloney (1976:8) adds that permanently bloodshot eyes are also suspect. The community fears them (Abu-Rabia 2005:246) and pregnant women are especially susceptible, thus promoting the wearing of veils and flowing clothing to hide their beauty (Abu-Rabia 2005:247).

Belief in the evil eye by the Bedouins (the semi-nomads, who have lived in the Negev desert for thousands of years in villages, some of which are not found on maps of Israel; Raanan [n.d]), is an important aspect of their culture (Abu Rabia 2005:241–243). Bedouins adhere most firmly to a belief in fate. They believe that everything that befalls them is the will of Allah, who sends illness as punishment for their sins. Allah also punishes those who confer the evil eye on others because of their discontent with their lot in life (Abu-Rabia 2005:247).

Symptoms of affliction with the evil eye can vary from gastric and digestive symptoms to malaise. There may be headaches and convulsions. An infant would be constantly niggly, restless or crying (Abu-Rabia 2005:241). The Bedouin call it *ayn* and maintain that an immediate blessing must follow admiration of a baby. Abu-Rabia, herself a

³⁸ For a discussion on demons and demonology in the Ancient Near East, refer to Rabinowitz (2007)

Muslim, explains that protection from the evil eye may be obtained by utilising amulets, incantations, vows, and sacrifices.

Figure 2.10 is an example of a *hamsa*³⁹ amulet to ward off the evil eye. Jewish people use the *hamsa* amulet to ward off the evil eye because it symbolises the hand of God (Union of Reform Judaism, 2021).⁴⁰ The Hebrew letters spell out the word *maza* which means luck. The blue stone in the amulet represents the evil eye. The reason for it being blue is to deflect the jealous gaze of a blue-eyed individual believed to be a castor of the evil eye. Most evil eye amulets comprise a blue background with an eye in its centre and are employed as amulets to ward off the curse of the evil eye (Abu-Rabia 2005:248).



Figure 2.10: A *hamsa* amulet to ward off the evil eye.
(Photograph: Gillian Williams 2017).

Abu-Rabia (2005:241) postulates that belief in the evil eye stems from the harsh reality of desert life – the droughts, floods, unsanitary living conditions and malnutrition that result in illness and disease. In fact, almost any misfortune can be blamed on the evil eye (Abu-Rabia 2005:244). Protective amulets are pinned to the clothing of an infant *for protection*. Other apotropaic devices would include horseshoes, and it is believed that the burning of incense effectively banishes the evil eye in its smoke trails. The *hamsa* amulet depicted in Figure 2.10, also referred to as the Hand of Fatima, daughter of the Prophet Muhammad, is touted as being most efficacious.

³⁹ Many Jews have adopted the belief in the evil eye (Hebrew *ayin hara*) and utilise the *hamsa* to protect themselves, even using the Arabic word, *hamsa*.

⁴⁰ <https://reformjudaism.org/learning/answers-jewish-questions/what-hamsa-it-specifically-jewish-symbol-middle-eastern-symbol-or>

Animals can also be affected by the evil eye and their owners may adorn them with amulets (Abu-Rabia 2005:251). Abu-Rabia continues to say that blue beads and the tooth of a deceased donkey are hung around a beast's neck or placed between its eyes. This is regarded as most effective, especially if verses from the Quran are chanted over the herd to be protected.

The evil eye may be cured by bathing, for the evil eye is said to resemble a burning torch, which water extinguishes (Abu-Rabia 2005:246). Amulets and charms are worn, passages from the Quran are scrupulously observed, and ancestors' graves will be visited – all of these are believed to 'cure' affliction with the curse of the evil eye. Folklore and Islamic tradition flourish hand in hand amongst the Bedouin, avers Abu-Rabia (2005:246). One such example comes from a Bedouin saying (Abu-Rabia 2005:241):

The evil eye is like a light. You can see it, feel it, be affected by it, or affect others by means of it. It can cause harm or even death in large numbers, but you never succeed in holding it in your hand. This is the will of Allah.

Dickie (1991:18) notes that Plutarch was convinced that the human eye has the capacity to release energy rays powerful enough to cause the demise of small children and animals.

Principle: First, the evil eye has the capacity to afflict injury, by a look, or a lengthy gaze, a word or touch. Secondly, the image of an eye is used to repel the effects of an evil eye.

(f) African masks

Masks have been in use for thousands of years, especially in North America, China west Asia, Africa, Greece, and Rome. The design and form of the mask are prescribed by the tradition of the cultural group (Wingerd 1994). Each mask must conform with a particular design, which is characteristic of the different peoples or groups.

Amulets were made to resemble a mask to serve a particular purpose. Because it is impractical to carry a mask all the time, mask-styled amulets were used in the Western

and Central Democratic Republic of Congo in the early 1990's as a type of 'magical proxy'. Masks are made by professional craft workers, who absorb the power of the mask they are crafting. Masks may incorporate organic materials such as paper, cardboard or animal skins, or inorganic materials such as plastic, tin or other metals. Each mask is believed to embody special powers and can interact with other spirits. In this manner, the mask performs its apotropaic function (Wingerd 1994).

Wingerd (1994) states that masks are utilised as apotropaic devices during times of crisis, for example warfare and epidemics, or to re-enact the group's mythology. Masks are made of wood or shells, cloth, or raffia. Figure 2.11 depicts an example of a mask made of wood with a hinged jaw, covered with monkey skin and made by the Dan people (a Mande ethnic group from the Ivory Coast and Liberia) (Accession No. 2000.38.2 B; Wingerd 1994).⁴¹ The masks were also used to drive away evil spirits, which is explained below.

Wingerd (1994) recalls a story that is often told about the purpose of the very first mask that frightened a young child, who always followed his mother to fetch water from a nearby river or pool. His concerned parent painted a terrifying and grotesque face on the inside of her water pitcher to ensure that the child would get a fright, and thus adhere to her instructions and not loiter or try to swim in the river. The *uglier the image, the bigger the fright*, and the more likely the child would be to obey his mother's instructions. It is also generally accepted that the more hideous the mask, the more likely the evil entities would be to flee the scene.

⁴¹ www.britannica.com/art/mask-face-covering/The-face-covering/The-functions-and-form.



Figure 2.11: An African mask from the people of Dan, Liberia.
Brooklyn Museum. Accession No. 2000.38.2. Photograph: L. O'Hara (2000).⁴²

Tesfaye (2021) proposes that masks have a Stone Age origin. These masks play a role in cultural ceremonies, rituals and celebrations, and their design varies from simple to very elaborate. When a person (mostly men, but also women) places a mask on his face, he is believed to be able to communicate with the forebears of his people as well as other spirits, on behalf of his community. During times of great hardship, such as disease, famine or war, the spirits are consulted to assist and guide the group through difficult times.

Masks are also worn during initiation rituals. In western and central Democratic Republic of Congo, large brightly coloured helmet-shaped masks are worn when the young male initiates emerge from their long period of learning and healing of their painful circumcision wounds, to be presented to their villagers as fully fledged new members of their community. The Pende masks are the most realistic and dramatic.

⁴² <https://www.britannica.com/art/mask-face-covering/Funerary-and-commemorative-uses>

They are designed to fit over the head. This is done to represent the most secretive initiation rites that the boys are exposed to (Augustyn 2001).

Later, the mask is replaced by a small ivory or wooden replica that is thereafter worn as an amulet or charm against misfortune. The amulet is also a symbol of adulthood (Augustyn 2001). Derby (2014) explains that many Palestinian masks have often come to light in sanctuaries in Palestine, believed to have been used apotropaically which are very reminiscent of African masks.

Although the mask is essentially an apotropaic device, it does embody some imitative aspects where the ugly mask is believed to scare away evil forces and serves as a kind of amulet. I have discussed it here because it is difficult to separate them, as they are interconnected and might be relevant to my investigation into the significance of the role of the Nehushtan in Numbers.⁴³

Principle: The mask is believed to expel evil spirits and misfortune. The more hideous the mask the more likely the evil entities would be to flee the scene (imitative aspect). Masks are important because they symbolise the ancestors and regulate their society.

2.2.3 The psychology behind the use of amulets

I have chosen to discuss the psychology of apotropaic magic following my discussion on the various examples of amulets, as it seems logical to discuss the reasons why people have made such extensive use of them for thousands of years. Amulets, incantation bowls, the evil eye and knots are all examples of apotropaic magic (§ 2.2.2).

Hildburgh (1951:231) explains that amulets are kept because they are presumed to have an apotropaic effect on the holder of the device. The owner of the amulet must be secure in the knowledge that the device can produce the magical effect desired or to avert the unwelcome ones. A reason why that object has been selected is often because it has been used for generations for that particular purpose by the family, for example, to repel the evil eye.

⁴³ African masks are also discussed in this chapter, as the University of South Africa strongly encourages its students to include examples from the continent in their research.

Some amulets that are popular in a family group are worn because it has become the norm to perpetuate their family tradition. Hildburgh (1951:234), maintains that this practice may have been enforced from a young age, by example or by chastisement, until the wearing of the amulet becomes the child's norm. One must bear in mind that there are many credulous people who carry apotropaic devices because they believe in the device's protection capability (Hildburgh 1951:234).

Hildburgh, a psychologist, is of the opinion that an amulet may also be viewed as a symbol of hope. A nursing mother would perhaps wear an amulet to enhance her milk flow. Hildburgh (1951:235) suggests that the amulet would give her the confidence to undertake and the expectation that she would be more likely to succeed in her task. In this frame of mind, the breast-feeding mother's tensions and anxieties would perhaps be allayed (cf. Golding 2013:26-7).

With our present worldwide pandemic of the COVID-19 coronavirus, I have read about people in countries all over the world who carry amulets in the hope that they will ward off this devastating and deadly pandemic. Trebay (2020) expresses his view on why people still wear amulets to protect them from 'evil' and disease: The main purpose of everyday superstition is to gain a sense of control in a situation where it is lacking.⁴⁴

2.3 SYMPATHETIC MAGIC

2.3.1 Definitions of sympathetic magic

The next type of magic that I am going to discuss is sympathetic magic, which comprises two parts: homeopathic/imitative magic and contagion magic.

Frazer (1954:11) states that homeopathic magic functions according to the Law of Similars where the magician infers that he can produce any effect he desires merely by imitating it. Homeopathic magic also employs the mimicking of a desired event, such as stabbing an image of an enemy in an effort to destroy him or her or by

⁴⁴ I am a firm believer in positive thought and faith that can see one through a very difficult situation. Some people believe in 'COVERING themselves' or protecting themselves and I refer to a colleague of mine who said that during his examination times, he would pray to the Holy Trinity, Mother Mary and his ancestors because he could not afford to offend any of them.

performing a ritual dance imitative of the growth of food in an effort to secure an abundant supply.⁴⁵

With contagion magic, it is the ‘Law of Contact’ that is at play. As Frazer (1954:11) explains, the magician infers that whatever he does to a material object will affect equally the person with whom the object was once in contact, whether it formed part of his body or not. Rozin et al (1986:703) define contagion magic as: “things that once have been in contact with each other may influence each other through transference of their properties”. This connection may be a permanent one, even after physical contact has been broken. This permanent contact is the basis of sorcery. Some examples would include fingernail and toenail parings, fallen hair, spittle, or other bodily waste products.

Wigington (2019) uses the term ‘correspondence’ to refer to the connections between non-magical items and magical concepts. He adds that the human consciousness causes us to believe in magic based on the connection of an image to the thing or person that it represents. This ‘connection’ is, according to Collier (2014), a ‘psychological force’ with the term ‘sympathetic’ relating to our urge or ability as human beings to enter into another person’s or creature’s mental state —be it that of your best friend’s or of your dog’s — and feel both an affinity with, and a compassion for, the state of their existence.

Aspects of sympathetic or imitative/homeopathic magic will be discussed so that we may identify the various principles of this type of magic that are of possible relevance to the Nehushtan, or at least puts these into perspective. It must be borne in mind that imitative magic is used not only to destroy but also to heal. For example, when the early Israelites were attacked by a plague of venomous snakes, those bitten were reportedly healed by gazing up at the Nehushtan; their (reported)⁴⁶ miraculous healing might have come about by a form of sympathetic magic, and it is necessary to try to understand the significance of the Nehushtan in the narrative (see Chapter Six).

⁴⁵ <https://www.collinsdictionary.com/ko/dictionary/english/imitative-magic>

⁴⁶ It must be kept in mind that while the plague of snakes and the ensuing snake-bite crises is plausible (as an actual historical event), we have no means of proving whether healing (whether magical or medical) actually took place.

As contagion magic does not shed any light on the understanding of Nehushtan, a discussion thereof falls beyond the scope of this study.

2.3.2 Examples of imitative/homeopathic magic

Sympathetic magic is also known as homeopathic or imitative magic. The Collins Dictionary⁴⁷ definition is *magic in which it is sought to produce a large-scale effect, often at a distance, by performing some small-scale ceremony resembling it*, such as the pouring of water on an altar to induce rainfall. Frazer (1954:10) describes this principle as 'like produces like' or 'an effect resembles its cause'. From the magician's point of view, he or she can influence an effect by imitating its cause. This category of sympathetic magic is also termed the 'Law of Similars', otherwise known as homeopathic or imitative magic. I will use these two terms interchangeably in this thesis.

Frazer (1954:12) defines homeopathic/imitative magic as *an attempt to destroy, injure or inflict harm on one's enemy by damaging or annihilating an image of that person* (my emphasis). The image can take many forms: a drawing in the sand; an effigy painted on a stuffed straw doll or log of wood (Frazer 1954:12); even an old sock stuffed with sawdust; or twigs shaped to resemble a human body (Weston 2015); in fact, anything intended to represent the foe can be used. But, in addition to malicious intent, imitative magic also has its positive uses and applications. As demonstrated in this chapter (§2.3.2.1–2.3.2.5), some practitioners of this principle use it in their daily lives for positive, life-affirming purposes such as food harvesting. In this regard, Frazer (1954:12) stipulates that *the maker's intention is the critical element of such a ritual* (my emphasis).

The idea behind destroying the enemy's effigy is that, as the image slowly perishes so will the enemy likewise die (§ 2.3.2.6). The magic practitioner uses a sharp object such as a needle, pin, or arrow to pierce the head or heart of the puppet or human figurine, because the maker believes his victim will experience severe pain in that exact spot. If the magician desires the victim's death, he or she will scorch the puppet over a flame each day for a week (Frazer 1954:12). The maker will burn or bury the image on the seventh day while uttering powerful magical spells to ensure the ritual will be a success

⁴⁷ <https://www.thefreedictionary.com/sympathetic+magic>

(Frazer 1954:12). A witch,⁴⁸ wizard,⁴⁹ or sorcerer⁵⁰ would perform this magic.⁵¹ The difference between imitative and contagious magic both using a puppet, is that in the latter case, the puppet would include the victim's fingernail clippings, hair, teeth, or blood, as these once formed part of the victim's body. Frazer (1954:11) believes the practice of imitative magic is thousands of years old and was well known in ancient India, Babylon, Egypt and Greece. He also informs his readers that this magic methodology is still in use today in places such as West Africa, North America, and Canada, to name but a few. Recent scholars such as Rozin et al (1989:367) and Hong (2022:1), rely heavily on Frazer's 1954 seminal work on sympathetic magic.

2.3.2.1 *Fishing*

Frazer (1954:18) describes how the Nootkas of British Columbia wrest their livelihood from the ocean. To ensure a bountiful catch, the shamans, in accordance with homeopathic principles, place effigies of swimming fish into the sea so that they 'swim' in the same direction as the schools of live fish would when they appear. This ceremony would include a fervent prayer to the fish encouraging them to come. The Nootka shaman⁵² trusts that the fish will instantly appear.

The Haruku fishermen from Haruku Island, Maluku, Indonesia (Frazer 1954:18) also rely on imitative magic to ensure a generous harvest. The fisherman will locate a tree branch that yielded an ample amount of fruit that was eaten by birds and use it to make the mainstay of his fish-trap. He believes that in the same way as the branch laden with fruit enticed the birds, so the same branch will attract many fish into his waiting trap.

⁴⁸ A witch is a woman who is deemed to be skilled in the magical arts and utilises them to help or harm people (<https://dictionary.cambridge.org/dictionary/english/witch>)

⁴⁹ A wizard is a male witch (<https://dictionary.cambridge.org/dictionary/english/wizard>)

⁵⁰ A sorcerer is a person who will intentionally take on the role of magical practitioner, engaging in activity often labelled by others as magic with ill or evil intent (Moro 2018: 1).

⁵¹ Different cultures may use different terms with slight variations in description and meaning, but the above-mentioned terms are commonly recognised by these definitions and will be used as such within the context of this thesis.

⁵² A shaman is a person regarded as having access to, and influence in, the world of good and evil spirits, especially among some peoples of northern Asia and North America. Typically, such people enter a trance state during a ritual, and practise divination and healing (Simpson & Weiner 1989).

Principle: Fishermen and shamans use images of fish to attract more fish; or objects that are known to attract animals (albeit a different species), thus following the principle of 'like produces like'.

2.3.2.2 *Hunting*

The Papuans of Papua New Guinea utilise imitative magic when hunting *dugongs*, also known as sea cows (*Sirenia*) or turtles (*Hydrodamalis gigas*). These animals have been hunted since the early 20th century but are now legally protected.⁵³ Frazer (1954:19) records the belief held by the local people that the coconut rhinoceros beetles (*Oryctes rhinoceros*)⁵⁴ inflict a very painful bite, and that their jaws adhere most firmly to their victim's skin. Because of this, they place a coconut rhinoceros beetle inside their spear shaft before attaching the spearhead onto it. The people believe this practice ensures that the weapon will adhere to the *dugong* in the same way as the beetle cleaves to its prey's flesh.

Principle: The characteristic bite of the beetle is imparted to the spearhead by embedding it into the shaft of the spear during hafting. This follows the 'Law of Similar', as a similar trait is imparted on the imbued object.

2.3.2.3 *Childbirth*

Flack (1947:713) relates how the women of the Dayak or Dayak people in Borneo give birth. When a woman in the birthing hut experiences such difficulty in labour that defies the best efforts and manipulations of the wizard attending her, he will call for an assistant or apprentice (usually the baby's father). A large stone is fastened around the assistant's abdomen with a cloth tie, and the assistant then sets to his task of imitating the child in the birth canal (§ 2.2.2.[a]). The wizard shouts out instructions to the assistant indicating how he should manoeuvre his stone to emulate the progress of the baby's birth (Flack 1947:716; Frazer 1954:22). It is believed that by imitating the mother in labour, the father eases her childbirth by imitative magic.

⁵³ <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/dugong>

⁵⁴ These insects are a type of scarab beetle and completely harmless to humans, but their horns can inflict a mild pinching bite (<https://animalcorner.co.uk/animals/rhinoceros-beetle/>).

Flack (1947:716) also describes how the Hos women of West Africa use homeopathic magic to facilitate the delivery of infants. Again, a magician is summoned to help a woman in hard labour. He informs her that her infant is 'restrained' within her uterus and cannot be born. All the women in the birthing hut beg him to set the baby free and they persuade the magician to perform his magic. Plant creepers from the nearby forest are brought to him. He binds the woman's hands and feet with the creepers, calls her name aloud, and severs her bonds, uttering words to the effect that as he cuts through the mother's ties the baby's fetters within the womb will loosen and free the child. Flack (1947:716) does not indicate whether the imitative magic is efficacious. Perhaps the woman believed strongly that the magic performance was most effective and had been practised regularly by birthing Hos women. This is an example of imitative magic. Flack (1947:716) continues to explain that a woman in labour should not have any knots in items near her body, such as her clothes or shoes. The reason for this, explains Byrne (2006), is that in ancient Greece, around 430 BCE, before a mother started her labour, she was carefully checked for any knots in her garments because the ancient Greeks believed that knots had the capacity to delay or obstruct childbirth. All door locks and window latches must be unfastened to facilitate the child's delivery. Belief and positive attitude can be most powerful 'medicine' indeed and from a psychological viewpoint, it may have helped the woman in labour (Flack 1947:716).

Principle: By imitating the mother's movements in labour, the father 'eases her childbirth' by imitative magic. Uttering words to the effect that as he cuts through the mother's ties, the baby's fetters within the womb will loosen and free the child; 'Law of Similars'; 'like follows like'; and 'an effect resembles its cause'.

2.3.2.4 *Jaundice*

Frazer (1954:15–16) describes how the ancient Hindus used imitative magic to cure jaundice (cf. Radford & Radford 2018). They aimed to expel the yellow colour from the patient's skin and replace it with a healthy red or pinkish hue. A priest would recite the following spell over the sufferer:

Up to the [(yellow)] sun shall go thy heartache and thy jaundice in the colour of the red bull do we envelope thee. We envelope thee in red tints unto long life. May this person go unscathed and be free of yellow colour! The cows whose divinity is Rohini, they who, moreover, are themselves red [*rohini*] – in their every form and every strength we do envelope thee. Into the parrots, into the thrush, do we put thy

jaundice, and, furthermore, into the yellow wagtail do we put thy jaundice (Frazer 1954:15).

Afterwards, the patient drinks the water used to wet the animal's coat and sits on the skin of a red bull while the priest glues strips of bull leather onto the patient's skin (Frazer 1954:15). This reinforces the spell and supposedly enables the red colour to infuse the sick person's body. A paste of yellow turmeric (*Cucuma longa Zingiberaceae*) is smeared over the patient's entire body (Kramer 2006:187). The sick person then lies on a bed and the priest fastens three yellow birds, which Frazer (1954:16) identifies as a parrot, a thrush, and a yellow wagtail, to the patient's foot with a yellow cord. The turmeric paste (*Cucuma longa Zingiberaceae*) is then rinsed off the patient with water (Kramer 2006:187). The Hindu belief is that the yellow colour would pass from the patient's skin to the birds' bodies and thus cure the jaundice (Frazer 1954:16). To conclude this lengthy ceremony and strengthen the cure's efficacy in restoring the patient's normal skin colour, some bull hairs encased in gold leaf are glued to the sufferer's skin (Frazer 1954:16). This complicated spell aims to eradicate the yellow colour from the patient's skin into yellow objects such as the sun or yellow creatures such as the birds mentioned above. The patient is encouraged to throw the water that was poured over the red bull over themselves in the hope of absorbing it in a magical way (Frazer 1954:15–6).

Frazer (1954) is confident that homeopathic magic can cure jaundice when a sufferer and a yellow stone curlew, probably a Eurasian curlew (*Burhinus oedionemus*, Figure 2.12), gaze deeply into each other's eyes. According to Frazer, the bird's hypnotic yellow eyes draw out the sallow colour of the jaundice. Kanwar (2011) explains that in modern-day Chandigarh, India, many people suffering from Hepatitis C, a symptom of which is jaundice, prefer to consult alternative healers instead of visiting a medical practitioner. The patients are advised to eat yellow food dishes, fasten a yellow string around their neck and to cover their faces in mustard oil. Unfortunately, those afflicted with jaundice are in grave danger of their illness developing into cirrhosis of the liver or liver cancer if they do not seek medical treatment (Kanwar 2011).



Figure 2.12: Eurasian Stone Curlew (*Burhinus oedichemus*).

Author: Artemy Voikhansky (2018)⁵⁵

Plutarch⁵⁶ mentions a bird called a *charadrios*, which is a kind of plover or curlew⁵⁷. Plutarch believed that the illness travels via the intense stare of the bird's golden eyes. The illness thus transfers from the patient to the curlew. Pliny the Elder (*Nat. Hist. Book 30, 28, 11*)⁵⁸ spoke of a similar bird called *icterus*, which refers to the strange golden colour of the skin of a jaundiced person.⁵⁹ Pliny relates how an intense gaze between this bird and the sufferer cured a patient of jaundice.

Principle: Illness travels via the intense stare of the bird's golden eyes so that transference of the disease from the patient to the bird occurs; a ceremony to resolve it; 'like produces like; an effect resembles its cause; influencing an effect by imitating its cause'.

2.3.2.5 *Theriacs*

The principles of homeopathy (which underpin the workings of theriacs) go back as far as 5000 years, and are found in ancient Greek, Chinese and Indian medical texts (Mahi

⁵⁵ https://commons.wikimedia.org/wiki/File:Eurasian_stone_curlew.jpg

⁵⁶ Also known by his Greek name Pioutarkhos (45-127 CE; Coulson 1980:650).

⁵⁷ These birds are referred to either as a 'plover' or a 'curlew'.

⁵⁸ His full names were Gaius Plinius Secundus (23-79 CE), a Roman author (Coulson 1980:648).

⁵⁹ The yellow tinged skin is a result of excessive formation of bile due to the destruction of red blood corpuscles (Davis et al 1968:318).

1999:1). According to Mahi (1999:1),⁶⁰ the physician Hahnemann (1755–1843) the inventor of homeopathy (Speight 1986:1) – introduced homeopathy to the Germans. It is possible that Andromachus (the physician to the Roman emperor Nero, discussed below) was using viper flesh homoeopathically or imitatively according to the Law of Similars.

Another example of the use of imitative magic is the use of a theriac. The Oxford Dictionary defines the word theriac as *an antidote to poisons especially the bite of a venomous serpent* (Coulson 1980:882; my emphasis). It was a mixture of herbs, animal body parts, honey, and spices, developed by the Greeks, and was very popular until the 16th century CE (Karaberopoulos, et al 2012). Although it was originally an antidote against poisons, it was employed later as a cure-all for many ills (Karaberopoulos et al 2012).

Pliny the Elder (23–79 CE), Galen (131–201 CE) and Karaberopoulos et al (2012) describe a theriac as an antidote to various venomous animals (cf. Parojcic 2003:28–32). A recipe of such a remedy was found engraved on a stone in the Askleion, on the island of Kos. The ingredients were thyme (*Thymus vulgaris*, Dioscorides D3:36), sweet myrrh (*Commiphora Abyssinia*, Dioscorides D1:73), fennel (*Foeniculum vulgare*, Dioscorides D3:82), and parsley (*Petroselinum sativa*, Phelps Brown 1867:117; Karaberopoulos et al 2012).

This medication seems to have originated during the reign of Mithridates IV (born 134 BCE), King of Pontus, in north-eastern Anatolia. He was terrified of being poisoned (Mayor 2010:239). He realised that snake venom was quite safe to ingest. Thus, he would test the theriac on criminals and slaves (Mayor 2010:238, 240), but he did experiment on himself with these antidotes at regular intervals, taking tiny amounts each day to render himself impervious to snake and scorpion venom (Mayor 2010:238). He was imprisoned after being defeated in battle by the Roman general, Pompey, and tried to kill himself and his two daughters with a poisoned vial. His daughters died but he survived (Mayor 2010:349). Eventually, the king begged his faltering bodyguard, Bituitus, to kill him. Bituitus then assisted the monarch in his

⁶⁰ Cited in Williams (2009:173).

suicide (Mayor 2010:351), leaving all his medical secrets in the hands of the Romans (Karaberopoulos et al 2012).

The physician to the Roman emperor Nero, Andromachus, invented a famous theriac. Andromachus was a native of Crete and, like Dioscorides, lived in the first century CE. Both men collected botanicals for their prescriptions. Andromachus improved on Mithridates' theriac by adding viper meat (*Vipera communis*, Dioscorides D2:18) instead of minced lizard (*Lacertilia*, Dioscorides D2:70) and included a larger quantity of opium poppy seeds (*Papaver somniferum*, Dioscorides D4:65) to increase its potency (Mayor 2010:243). It is unknown why he added viper flesh to his theriac but in my view, Andromachus was following the homeopathic principle of the 'Law of Similars' (Mahi 1999:1) by replacing the lizard with viper flesh in his theriac. Perhaps he realised that by doing so, the patient would be healed from a venomous snake bite. 'The Law of Similars', 'like cures like' or 'what harms can also heal', means that, for example, indigestion or heartburn (acid reflux) is treated with acid, *the same substance that causes the reflux to develop initially* (Williams 2009:338). This notion by analogy is a form of sympathetic magic, the same idea that in certain cultures, eating the heart of a lion will cause a person to become brave (Barrett 2002).

Claudius Galen, born in Pergamon, Mysia, in Anatolia (the site of an Asklepion), became a physician and wrote a voluminous number of medical treatises. Much of his knowledge was gained during his experience as a gladiators' physician (Williams 2009:77). Galen later relocated to Rome, after many years of travelling. His patients included Emperors Marcus Aurelius and Lucius Verus (Karaberopoulos et al 2012). Galen later became physician to Emperors Commodus and Septimus Severus (Nutton 2007:82).

Galen's theriac formula was based on that of Andromachus but added honey, wine, and cinnamon (*Cinnamomum zeylanicum*; Dioscorides D1:13), plus over seventy other ingredients. The theriac took many months to prepare and sometimes several years to mature (Karaberopoulos et al 2012:1942–3; Mayor 2010:243). It is worth noting that Golding (2013) discusses how scientists in modern times are researching the capacity of snake venom to cure diseases such as cancer and autoimmune

diseases and to relieve or alleviate pain (Holland 2013:70, in Golding 2013:167). This, of course, all took place long after the Nehushtan.

Principle: Prevention, protection, cure; ‘what kills can also cure’ an antidote to poisons especially the bite of a venomous serpent. ‘Law of Similars’; use poison to prevent a possible poisoning.

2.3.2.6 *Curse tablets, binding spells, and poppets*

Bond (2016) states categorically that there were five types of ‘curse tablets’ in antiquity: litigation curses to ensure that the opposition would be tongue-tied in court; business or trade rivalry; erotic curses used by a thwarted lover; for those who suffered property loss by theft; and for the charioteers performing in the Circus Maximus, who feared that they might not win the race.

Roman curse tablets are small, inscribed lead or pewter⁶¹ sheets on which curses were written. These were rolled up and thrown into the sacred spring, where it was believed the goddess Sulis Minerva’s spirit lived.⁶² In 1979, a cache of over 130 curse tablets, thought to date from the second to the fourth century CE (a much later period; one of them in the form of a human figurine), were found at an excavation of the sacred spring of the Temple of Sulis Minerva (modern-day Bath, Somerset, UK). A curse tablet or execration text (*tabula defixiones*)⁶³ was used to send messages to ancient gods or spirits beseeching their help in victory over a rival or an enemy. Craffert (1998:78) explains that a curse tablet was intended to influence a person against their will by supernatural means. The victim had to be rendered completely powerless by a spell written on the piece of lead or pewter.

Two examples of curse tablets are discussed below: The first one was written by Docimedis, who had lost property at the bathhouse. The wording is as follows (Killgrove 2018):

⁶¹ Pewter is a malleable metal alloy of mainly tin, antimony and copper, with trace amounts of silver (Britannica.com/technology/pewter). Some pewter is comprised of mostly lead (Coulson et al 1980:632).

⁶² Minerva’s Head: <https://www.romanbaths.co.uk/key-objects-collection>

⁶³ For a full discussion on execration texts as ceremonial writings and examples of ancient Egyptian sympathetic magic, refer to Norman (2014). See 3.3.3.

Docimedis has lost two gloves and asks that the thief responsible should lose their mind and eyes in the goddess's temple.

Killgrove (2018) notes that this curse tablet was found at the sacred spring, in the Roman Bath complex, in the city of Bath, and dates to between the second and fourth centuries CE. The unfortunate Docimedis was possibly only trying to relax in the wonderful hot water. Perhaps he had enjoyed the plunge pool after his massage. When he returned to the change room, he discovered that his gloves were missing and states that this type of crime was rife at the bathhouse. Indeed, we today can empathise with his loss, his anger and disappointment. Almost 2000 years later, the same type of crime continues at public change rooms used by beachgoers and swimmers alike. Docimedis resorts to imitative magic. He writes his curse on a small piece of lead sheet and empowers it by reciting incantations or performing special gestures and throws it into the sacred spring. *Imitative magic operates by similarity*, for example, by 'like' cures 'like' or 'like' follows 'like'. In this instance, Docimedis trusts that the thief will become blind and suffer some sort of mental breakdown at the Temple of Sulis Minerva, like the grief and loss experienced by himself (Killgrove 2018).

McCall (2020) expounds that ancient curse tablets had been thrown down a 2,500-year-old well in Athens, close to the temple of Hephaestus (Agora) in the ancient cemetery of Kerameikos. These tablets were buried near graves with a fervent plea that the gods of the underworld would carry out their dearest supplications.

Figure 2.13 depicts Roman lead curse tablets with a curse inscription, written backwards, cursing by name more than a dozen people who had offended the writer. These were found deposited in a pot with bones and were said to be from Turkey. The tablets date to between the first and third centuries CE, and the British Museum obtained them in 1934.



Figure 2.13: Lead curse tablets with a curse inscription.
(British Museum Accession No 1934, 1121.1)⁶⁴

Sometimes, the curse tablet was fashioned into a human shaped figurine with its hands tightly fastened behind its back to render it helpless (Craffert 1998:81). Often, the ‘voodoo dolls’ had been decapitated and their bodies were badly bent and twisted. This was done intentionally to harm the victim.

It must be noted that although the term ‘voodoo doll’ has been popularised through the media and pop-culture, the term is culturally problematic.⁶⁵ For this reason, we shall use the term ‘poppet’, which refers to ‘a human figurine used in sympathetic magic which is designed in the likeness of an individual in order to represent that person in spells to help, heal or harm’.⁶⁶

Per example, Figure 2.13 depicts a bound, powerless human figurine or poppet, with pins pierced into various parts of the body. O’Neil (2006) explains that the basis of imitative magic, as applied to poppets, is as follows: imitative magic holds that *‘like’ produces or imitates ‘like’*. In other words, the adherents to this type of magic believe that the pins stuck in the human figurine’s head would result in a pain in the victim’s head, and those stuck in the ears, mouth, and eyes of the figurine would cause the victim pain in those areas. This human figurine also has a pin in the heart and the

⁶⁴ britishmuseum.org/collection/object/G_1934-1121-1

⁶⁵ ‘Voodoo’ is a misunderstood religion and way of life that originated in Haiti. Many adherents can be found in Jamaica, Dominican Republic, United States of America but this religious belief has almost nothing to do with ‘voodoo’ (Radford 2013). In addition, ‘voodoo’ is a loaded term, as it is often used to inspire fear of, and disdain for, the ‘magic’ that is commonly associated with African Americans and people of Haitian descent, with ‘imagined voodoo’ serving as an ‘outlet for white racist anxieties’ (McGee 2014: iii).

⁶⁶ Poppet (<https://en.wikipedia.org/wiki/Poppet>).

groin, which would be expected to result in a pain or severe cramp in the victim's chest and groin areas. The figure's feet are also bound, and its knees are bent, rendering it helpless. In the same way as the figurine is thus powerless, the victim is expected to follow suit (O'Neil 2006). Figure 2.14 depicts a naked poppet in a kneeling position bearing a binding spell. It dates to the fourth century CE and is made of clay and bronze. It is housed in the Louvre Museum, Paris, and was acquired in 2014 from Egypt.



Figure 2.14: Nude female poppet in kneeling position.
(Louvre Museum Accession No E27145b)⁶⁷

Golding (2013:213) maintains that protection was also available in the form of sympathetic magic but neglects to say whether it was imitative/homeopathic magic that was being referred to. The example was that of a hieroglyph of an adder, depicted with a scabbard through the reptile's body.

Principle: Curse tablets send messages to ancient gods beseeching their help. These tablets are also intended to influence a person against their will by supernatural means to render the victim powerless and to confirm that the damage that harms the victim is intentional.

⁶⁷ https://commons.wikimedia.org/wiki/File:'Voodoo_dol'I_Louvre_E27145b.jpg.

2.3.2.7 *Spiritual rituals that honour a new birth and a New Year*

Many Hindu, Muslim and Jewish communities follow taste rituals, which incorporate imitative magic.

In the Hindu and Muslim communities, it is strongly believed that the new baby must taste something sweet. The reason for this is that it is hoped that the new infant would thereafter always speak sweetly and kindly to others. The ritual is called *jabakarma* by the Hindus (Kaut 2018) and *tahnik* (Alallah 2019) by the Muslims. The ritual is described as follows: a fresh date is selected, and a small amount of honey is applied to it. A tiny morsel is then applied to the upper part of baby's mouth. In the same way as the sweet taste is placed in the infant's mouth, it is envisaged that only sweet words will emanate from it.

Trepp (1980:104) expounds the practice of dipping a slice of fresh apple into some honey at the close of the *Rosh Hashanah* service to ensure a pleasant new year. The following blessing may be said before eating the apple: 'May it be your will, Lord God and God of our fathers and mothers, to renew for us a good and sweet year'. In the same way as the honey is dipped and eaten by the congregation, it is firmly believed that they will experience a delightful year ahead. This is a further topic for future research (see 7.8).

Principle: Sweetness in the mouth results in kind words spoken. Only sweet words will emanate from it. 'The Law of Similars', 'like follows like', 'sweet follows sweet'.

2.3.2.8 *Child sacrifice in Carthage*

The Canaanite (Carthaginian) practice of child sacrifice took place in Carthage between 800 and 146 BCE when the Roman general, Scipio Aemilianus destroyed Carthage which later became a Roman province called Africa.⁶⁸

Tertullian (ca 155–240 CE), a prolific early Christian author, writes that children in Africa used to be sacrificed publicly to Saturnus (a Punic deity), until the pro-consulship of Tiberius, who crucified the Punic priests responsible. Rives (1994:58) maintains that

⁶⁸ The Third Punic War: britannica.com/event/Third-Punic-War

this criminal practice persisted in secret as it was well established in the Punic religion (cf. DiBenedetto 2012:2). Rives asserts that most Saturnus worship took place in the rural areas, especially after the above incident. Rives (1994:58) also proposes that the sacrificial rite was a type of magic but neglects to name it.

The reason why I am discussing this topic here is because child sacrifice is an example of imitative magic, which I will now discuss.⁶⁹ If Carthage suffered a devastating blow, for example crop failure or livestock losses, the aristocratic parents would promise to sacrifice one of their own children to their chief gods, Baal Hammon and the goddess Tanit (Rives 1994:54). The homeopathic magic principle applicable here is 'like cures like'.

Tertullian, in 197 CE in his work *Apologeticum* (9, 2–3), describes in graphic detail how this was done (Rives 1994:55; Pearse 2012). A few thousand years later, archaeologists Lawrence Stager and Samuel Wolff excavated in modern day Tunis and discovered thousands of small tulip-shaped jars in an area called Tophet, containing within them smaller jars of charred baby bone fragments and ashes. There were also small stelae with the child's name engraved on it that date from as early as the seventh century BCE (Stager & Wolff 1984).

This, to my mind, suggests that child sacrifices were carried out as a vow to appease the gods and is an example of imitative magic. The Carthaginians believed that child sacrifice found favour with the gods, who in return would protect the city⁷⁰ from disasters such as crop failure or defeat in war (Stager & Wolff 1984).

A burial urn from the seventh century BCE (*Tanit I*), depicted in Figure 2.15, shows a tulip-shaped urn and a smaller one inside the urn containing the cremated remains of a child (cf. Kennedy 2014). Stager and Wolff (1984; cf. Felushko 2015:10) explain that before the parents sacrificed a child, they would make a sacred vow to Tanit and Baal Hammon. They would promise to sacrifice their child to those deities if they would protect Carthage against war or disaster, and they would willingly offer their child to

⁶⁹ The purpose here is not to determine whether the early Israelites came into contact with the practice of child sacrifice. In fact, the possible role and place of child sacrifice in Israel, Canaan, and the surrounding cultures is a point of contention and therefore falls beyond the scope of this research.

⁷⁰ These sacrifices could also have been made in fulfilment of personal vows, and not necessarily to secure protection for the city.

be sacrificed. These children, maintain Stager and Wolff (1984), were mostly those of wealthy or aristocratic parents, but White (2012) maintains that the child victims were from both the wealthy and the poor social classes. This fact can be ascertained from the wording etched on the little monuments (Figure 2.16). The word *baal* means *lord* or *master*. When the words *baal mlk* appeared on the monument, this would indicate a noble child, while the words *adam* ('man') *mlk* would indicate a child of a lower social rank. Stager and Wolff (1984) have proved that the number of noble children far exceeded those of a lower rank, and they continue to say that the purchase of peasant children for the purpose of sacrifice was an exceedingly rare occurrence. Figure 2.16 depicts urns in the Tophet at Carthage.



Figure 2.15: A tulip shaped urn with a smaller one inside containing the ashes of a child.
Stager and Wolff (1984).

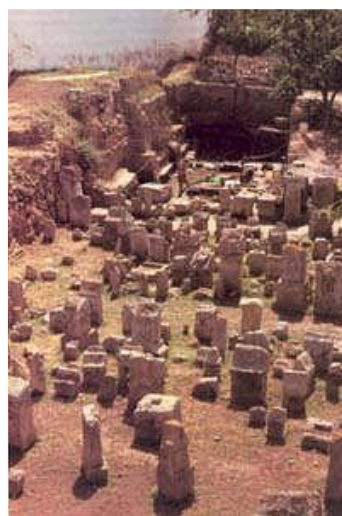


Figure 2.16: Child burial urns in the Tophet, Carthage.
(Stager and Wolff 1984).

Principle: What kills can cure. The sacrifice of their product, a child, in return for the gods' protection of the products of the earth. The 'Law of Similars', 'like follows like', 'what kills can cure', 'what cures can kill'.

2.4 SUMMARY AND CONCLUSION

2.4.1 Apotropaic magic

Apotropaic magic is the use of an object to repel evil forces, to protect and even to heal. It is a ritual observance such as wearing a 'good luck charm' or the use of spells or incantations. It is a symbol of hope and usually takes the form of an amulet. It may engender in the wearer a sense of control in a situation where it is lacking.

2.4.1.1 Principles of apotropaic magic that might be applicable to the Nehushtan

Certain aspects of the principles that govern apotropaic magic, as observed in the use of amulets, might underpin the magical workings of the Nehushtan. These include:

- The eagle-stone is a direct parallel to a pregnant woman because a smaller stone is enclosed within it (§ 2.2.2.1 [a]).

Principle: The eagle-stone was believed to prevent a pregnant woman from suffering a miscarriage. This amulet also served an *imitative magical function*. In the same way as the eagle-stone protected the smaller nodule within it, so would the eagle-stone protect the embryo within the mother's womb.

- A gold bulla was worn as a pendant by all freeborn Roman boys until adulthood, while indigent boys wore a knotted cord. Adult Jews wear knotted tassels (tzitzit) on the corners of their prayer shawl or tallit. The Talmudic rabbis believed that three knots could curtail an illness, five knots could cure it and seven knots would overcome evil forces (§ 2.2.2.1[b]).

Principle: Knots were believed to have healing powers and to protect the wearer against demonic spirits and from committing sinful acts. The knots used to cure headaches have an imitative character as knots are held to unknot headaches.

- These medical amulets were very common as the many finds indicate. They were worn as pendants and custom-made for a Greek woman named Arsinoë. (§ 2.2.2.1 [c]).

Principle: Medical amulets safeguard or protect the wearer against evil spirits that cause her to develop gynaecological disorders during pregnancy.

- Magic bowls were custom-made clay bowls, written in Aramaic script that began at the inside base of the bowl and spiralled upwards to the lip of the bowl. These bowls were buried underneath the floors of the sleeping and living areas of houses. Some bowls contained a crude depiction of a demon or a shackled animal hybrid demon on the inside (§ 2.2.2.1[d]).

Principle: Magic bowls, featuring dedicated inscriptions, render evil demons harmless and unable to enter the home to make mischief. In this way, an object is used to repel evil forces, or to turn away evil.

- The basis of the evil eye is more than ordinary envy. It is a deep-seated, insidious resentment or covetousness and includes malice and greed. The evil eye can be cast consciously or unconsciously. Protection is obtained by amulets (§ 2.2.2.1[e]).

Principle: First, the evil eye has the capacity to afflict injury, by a look, or a lengthy gaze, a word or touch. Secondly, the image of an eye is used to repel the effects of an evil eye.

- Masks have been in use for thousands of years in North America, China and Africa, and their designs are dictated by the characteristics of the different peoples that create them. Each mask is believed to embody powers that interact with ancestral spirits and may be used in times of crises. The uglier the mask, the more likely it is that evil spirits will flee from it. Masks are worn during initiation rites and are later replaced by an amulet replica.

Principle: The mask is believed to expel evil spirits and misfortune. The more hideous the mask the more likely the evil entities would be to flee the scene (imitative aspect). Masks are important because they symbolise the tribal ancestors and regulate their society.

2.4.2 Sympathetic magic

Sympathetic magic comprises two parts: homeopathic/imitative magic and contagion magic, but I am concentrating only on the former. Sympathetic magic is magic where it is sought to produce a large-scale effect, often at a distance by the performance of a small-scale ceremony resembling it. An example would be to pour water on an altar to imitate rainfall, 'like produces like' or 'an effect resembles its cause'.

2.4.2.1 Principles of sympathetic magic that may apply to the Nehushtan

More principles that govern sympathetic magic, as observed in the application of imitative/homeopathic magic(s), may also underpin the magical workings of the Nehushtan. These include:

- Like produces like (the 'Law of Similars').
- An effect resembles its cause.
- What kills may also cure.
- What cures may also kill.
- Like harms/kills like.
- The shamans of the Nootkas of British Columbia ensure a bountiful catch by place effigies of swimming fish into the sea so that they 'swim' in the same direction as the schools of live fish would when they appear. This act follows homeopathic principles (§ 2.3.2.1).

The Haruku fishermen of Indonesia use imitative magic to ensure a good catch of fish. They use a fruit tree branch that yielded a bountiful crop to make a fish trap, in the hope of attracting many fish in the same way as the fruit tree branch attracted many birds (§ 2.3.2.1).

Principle: Fishermen and shamans use images of fish to attract more fish; or objects that are known to attract animals (albeit a different species), thus following the principle of 'like produces like'.

- The Papuans of New Guinea enlist the assistance of the powerful mouth parts of a rhinoceros beetle that adhere firmly to their prey. This ensures a successful dugong hunt (§ 2.3.2.2).

Principle: The characteristic bite of the beetle is imparted to the spearhead by embedding it into the shaft of the spear during hafting. This follows the 'Law of Similars', as a similar trait is imparted on the imbued object.

- The women of the Dayak peoples in Borneo relied on homeopathic magic to ease their childbirth difficulties. Perhaps the woman believed that this magical performance was most effective. It was practiced often by birthing mothers. They would undo any knots in their garments and all locks had to be unfastened to release the infant's birth (§ 2.3.2.3).

Principle: By imitating the mother's movements in labour, the father eases her childbirth by imitative magic. Uttering words to the effect that as he cuts through the mother's ties, the baby's fetters within the womb will loosen and free the child; 'Law of Similars'; 'like follows like' and 'an effect resembles its cause'.

- The ancient Hindus used imitative magic to cure jaundice. The aim was to expel the yellow colour of the patient's skin and replace it with a healthy pink colour. A patient can transfer the jaundice to a yellow-eyed bird, when the patient and the birds gaze deeply into each other's eyes and the yellow colour is transferred to the bird (§ 2.3.2.4).

Principle: Illness travels via the intense stare of the bird's golden eyes so that transference of the disease from the patient to the bird occurs; a ceremony to resolve it; 'like produces like'; 'an effect resembles its cause'; 'influencing an effect by imitating its cause'.

- A theriac was used in antiquity as an antidote to snake bite, but it later became a cure-all for many maladies. Andromachus invented a popular theriac. He substituted lizard flesh for that of a viper as a preferred cure for snake bite following the 'Law of Similars' – this is the same idea that is found among certain cultures that believe that eating the heart of a lion will result in a person becoming brave (§ 2.3.2.5).

Principle: Prevention, protection, cure; 'what kills can also cure' as an antidote to poisons especially the bite of a venomous serpent. The 'Law of Similars'; use poison to prevent a possible poisoning.

- A curse tablet or execration text written on lead or pewter is used to send messages to ancient gods or spirits begging their assistance for power over a rival or enemy. The thief had to be rendered helpless so that he would suffer as Docimedis had done when his gloves were stolen (§ 2.3.2.6).

Principle: Curse tablets are also intended to influence a person against their will by supernatural means to render the victim powerless and to confirm that the damage that harms the victim is intentional. 'The Law of Similars' or 'like produces or imitates like', 'like harms like'.

- The practice of dipping a slice of fresh apple into honey at the end of the Rosh Hashana service is believed by many Jews to herald that a sweet New Year will be theirs (§ 2.3.2.7).

Principle: Sweetness in the mouth results in kind words spoken. Only sweet words will emanate from it. 'The Law of Similars', 'like follows like' and 'sweet follows sweet'.

- The Carthaginians were firm believers that child sacrifice found favour with the gods, who would protect their city from disasters such as crop failure or defeat in battle, provided they were appeased (§ 2.3.2.8).

Principle: 'What kills can cure'. The sacrifice of their product, a child, in return for the gods' protection of the products of the earth. The 'Law of Similars', 'like follows like', 'what kills can cure' and 'what cures can kill'.

Both the use of apotropaic and sympathetic magic, and the principles that underpin their magical workings, were well-known in the ancient world. It is therefore proposed that the way in which the Nehushtan was used, possibly as a kind of 'healing tool', would have been quite familiar to the ancient Israelites and obviously also their neighbours.

The principles of sympathetic and apotropaic magic provide a valid theoretical framework to be applied to the Nehushtan in the book of Numbers.

In Chapters Three to Five, I will take a closer look at examples of apotropaic and sympathetic magic from ancient Egypt, Greece, Anatolia, and Canaan. In particular, I will discuss the different types of snake symbolism that may have influenced the early Israelites in their conceptualisation of the Nehushtan as a snake healing tool.

SYMPATHETIC AND APOTROPAIC MAGIC IN EGYPT

3.1 INTRODUCTION

The main objective of the following chapter is to obtain a better understanding of the Nehushtan as a possible 'healing tool' in the context of the Ancient Near East. In this chapter, I will specifically investigate examples of apotropaic and sympathetic magic in Egypt, as it is possible that the early Israelites might have been familiar with the functioning of sympathetic and apotropaic magic in Egypt. The proximity and long-standing history of cultural interaction between the eastern Levant and Egypt warrants an investigation of sympathetic and apotropaic magic in Egypt, especially pertaining to serpents. The symbolism of snakes, as healing tools in Egypt, could also be relevant. The account of the Nehushtan might have Egyptian influences, which will be investigated.

An investigation of Egyptian magic is relevant to the study, especially in terms of apotropaic magic, as Burnett (2019:73) highlights that 'the general principles of apotropaic magic are similar between ancient Egypt and Mesopotamia (and the ancient Near East at large)'.

I will begin with a discussion of snake symbolism because of the relevance to the Nehushtan story in Numbers 21. I have chosen to discuss the *ureaus* skullcap found on the mummy of King Tutankhamen and Ra's solar barque (cf. §3.2). There are three examples of sympathetic (or imitative) magic in ancient Egypt (cf. §3.3). The first one is ancient mummification in Egypt and how it is related to the legend of Isis and Osiris. This will demonstrate how imitative magic operated in practice. This example employs the principles of 'like produces like' and 'an effect resembles its cause'.

The second example of imitative magic is the ceremonial sandals of King Tutankhamun, of which the principles will be investigated. The principle that is applicable to this example is: attempting to destroy or harm one's enemy by damaging an image of that person.

The third example is the discussion of execration texts and the ritual cursing of the enemies of the pharaoh by imitative magic.

One ancient Egyptian protective amulet, the scarab beetle, and its perceived apotropaic function, and the three amulets from the Metropolitan Museum of Art in New York, will also be investigated in this chapter. I have chosen this example because the scarab beetle symbolises *regeneration and resurrection* in ancient Egypt.

3.2 SNAKE SYMBOLISM IN EGYPT

Snake images were very common in ancient Egypt, and according to Burnett (2019:325) it can represent either malevolent or benevolent connotations. The snake represented wisdom, cunning, fertility, healing, rejuvenation, the underworld and evil, to name but a few aspects. The stunningly beautiful amulets from the tomb of Tutankhamen, the golden⁷¹ double *uraeus*, and the human headed *uraeus* (Hawass 2013:149), are good examples of snake symbolism. Yet another example of snake symbolism is the god Atum smiting the snake of chaos, Apophis (Hawass 2013:53). I will discuss the two examples below to obtain a good understanding of snake symbolism, but also to emphasise any sympathetic or apotropaic magic aspects.

3.2.1 The *uraeus*

I am probing this topic to obtain a deeper understanding of the power that snake images wielded in Egypt. Most compellingly, Burnett (2019:235) mentions that ‘a common Egyptian motif for repelling snakes was by means of using snake imagery in apotropaic contexts’ and adds that ‘the idea behind the efficacy is the like repels like’.

Within the context of snake motifs repelling evil, the *uraeus* worn by the pharaoh represents a compelling example. It is also significant that the pharaoh wore the *uraeus* on his forehead, where it would be most visible to his subjects, who had to *look up to him*. This is a mnemonic of the story of the Nehushtan in Numbers, in which the ancient Israelites had been attacked by a plague of snakes in the wilderness, and to

⁷¹ Burnett (2019:238) quotes Wilkinson’s (1994:83) claim that ‘because the flesh of all the gods described from Re was also said to be of gold, the use of this metal for statues and other representations of deities was certainly symbolic’, To this she adds that objects of bronze, which bore a similar metallic sheen, held similar significance and posits that this enforces a possible connection between Egyptian magic and the bronze serpent of Numbers 21:4–9,

be healed from their venomous bites, those inflicted had to *look up* to the copper snake to be cured.

Although the Biblical text does not explicitly mention the physical act of ‘looking up’ to the Nehushtan, I believe that this physical action is implied, as the Nehushtan was placed on a pole for it to be raised above the people. Avalos (1995b:345) believes that the words ‘look up’ may infer respect.⁷²

Burnett (2019:235) mentions a ‘coiled bronze serpent-staff from a Theban tomb that is reminiscent of the serpent-pole in Numbers 21:7–8.’⁷³ In terms of this coiled appearance, Shanks (2007:63) also refers to a stela inscription dedicated to Amenhotep II that references ‘*uraeus*-serpents, coiled about their sides, that provide protection’, and uses this example to strengthen his argument that the *uraeus* and Nehushtan served similar functions (Burnett 2019:232). It must however be noted that the biblical narrative does not specify that the Nehushtan was coiled around the pole, but rather that it was placed on a pole.

An *ureaus* is “the coiled serpent shown on the forehead of the Egyptian *pharaoh* as a symbol of royalty” (Bahn 1992:523). Geddes and Grosset (2001:435) state that there were two crowns used in ancient Egypt: the white crown of Upper Egypt (that comprised a tall, conical hat of Upper Egypt), and the red crown of Lower Egypt (that consisted of a flat top with elongated projections at the back). The two crowns were combined to form Egypt’s double crown that represented the unification of the two areas. The *ureaus* was placed to encircle the double crown. The golden *ureaus* comprised an upraised cobra, a symbol of royalty, Lower Egypt, and the goddess Wadjet/Buto,⁷⁴ while the vulture symbolised Upper Egypt and the goddess Nekhbet (Geddes & Grosset 2001:435). Charlesworth (2010: 229) tells his readers that a snake has no eyelids and never sleeps. This fact gave rise to the notion that it represents guardianship of the pharaoh and protects him/her from rat and mice infestations.

⁷² In today’s society, it is quite common to hear a person saying that they “look up” to someone, usually inferring that they respect that individual, or look to them for guidance or inspiration.

⁷³ The staff referenced by Burnett is housed by the British Museum (EA 52831) and commentary on it is provided by Roger Forshaw (2014:35). An example of a copper alloy cobra ‘wand’ is given by Burnett (2019:227) and is housed by the Fitzwilliam Musum (E.63.1896).

⁷⁴ The cobra goddess was Wadjet or Buto, but also went by the names of Wadjit or Uadjit. Wadjet became the diadem of Lower Egypt and the Red Crown, thanks to the proximity of her city Dep to that of Pe, where the kings of Lower Egypt were stationed (Waterson 1999:129).

Furthermore, the Egyptian cobra goddess Wadjet represents life, order and legitimate kingship. Charlesworth (2010:238) adds that the Egyptians believed that the serpent is fearless and can renew itself, seemingly to live forever. The snake can kill with its bite and symbolises *the pharaoh who has the power of life and death over his/her subjects*. The *ureaus* on the pharaoh's head symbolises the snake that *encircles and protects* the pharaoh (Charlesworth 2010:238). Images of a cobra, rearing and ready to strike, were placed in the pharaoh's palaces and symbolised their godlike power. The snake symbolises divinity because the pharaoh was believed to be a living god on earth. He was thought of as the *link between the gods and humankind* (Mark 2009). The snake also symbolises *divinity* because it is reclusive, elusive and perceived to be invisible (Charlesworth 2010:239). The Egyptian pharaoh wore an *ureaus* on his diadem to symbolise the power of life and death that he wielded over his people (Charlesworth 2010:239).

The *ureaus* was also believed to *protect the pharaoh by 'spitting poison' at his enemies* (Charlesworth 2010:238). From a practical perspective, one need only think of all the guards that the pharaoh could summon at a moment's notice to attack potential enemies. Naturally, people were afraid of the *ureaus* for it symbolised divine retribution from the goddess Wadjet towards anyone who would threaten the pharaoh's life, his divinity or authority. It could *kill anyone when summoned to do so by the pharaoh*.⁷⁵

Those who lived in the Ancient Near East viewed snakes as symbols of health, healing, and rejuvenation. This was largely due to the snake's ability to shed their old and worn skins,⁷⁶ after which they glistened with renewed vigour and a sparkling new appearance (Charlesworth 2010:239). Figure 3.1 shows a photograph of the beautiful, beaded skullcap embellished with gold and glazed terracotta beads, discovered on the mummified head of King Tutankhamun, embroidered with the figure of an *ureaus* (Desroches-Noblecourt 1967:224, in Golding 2013:255).

⁷⁵ This is reminiscent of where Aaron transformed his staff into a serpent, and it devoured those conjured by the pharaoh's magicians (Exodus 7:8–13). The symbolism here is that the serpent of God was more powerful than its likeness (the pharaoh's serpents). Similarly, it can be said that the Nehushtan is more powerful than its likeness (the serpents of the desert and their venom).

⁷⁶ Perhaps gazing upon the Nehushtan would make one 'shed' the venom (or evil) like a snake sheds its skin. In this manner, healing would take place through rejuvenation, in much the same manner as snakes appear 'rejuvenated' after shedding their skin.



Figure 3.1: A beaded skullcap depicting the *uraeus* found on King Tutankhamun's mummy. (Desroches Noblecourt 1972 164).

Principles: The *uraeus* is a symbol of royalty and legitimate kingship; *guardianship of the pharaoh and protection from rodent infestation, and spits poison at the enemies of the Egyptian king, who had the power of life and death over his subjects and could kill anybody* when summoned to do so by the pharaoh (§2.2.2.1[e]) may have some similarities, as it functions as a protective amulet.

3.2.2 Ra's solar barque

Mark (2017a) describes the evil serpent, Apophis or Apep, which is also referred to as 'the Great Worm' (Geddes & Grosset 2001:142), as the sworn and eternal enemy of the sun god, Ra/Re. The sun represents the boat or barque that the Egyptians believed travels from east to west (sunrise to sunset) every day. During the night, the barque follows the sun and travels into *Duat* ('the underworld') from dusk to dawn (Geddes & Grosset 2001:353). The giant, evil snake Apophis lies in wait every night for any opportunity to attack Ra, to destroy his barque, to kill and devour him, and to prevent the arrival of the dawn. The darkness represents chaos, while the light represents order. Ra is assisted in his fierce nightly battle by various gods, goddesses and even souls of the recently departed. Apophis always revives the following and every day, ready at sunset to attack Ra again. During the night, the priests and populace would shout and scream to frighten away Apophis. They would perform imitative magic such as burning wax effigies of Apophis, and after the image was destroyed, they would

add filth and spittle and burn it again (Geddes & Grosset 2001:142). This is very reminiscent of Golding's description of how wax effigies were burnt daily at the temple of Amon-Ra in Thebes, in order to prevent Ra's boat from being attacked by Apophis (Golding 2013:237).

3.3 EXAMPLES OF SYMPATHETIC (IMITATIVE/HOMEOPATHIC) MAGIC

3.3.1 Mummification, the afterlife and the legend of Isis and Osiris

I was not able to access many relevant examples, but I believe that mummification does have some relevance (as imitative magic). Mummification holds relevance because the ancient Egyptians believed that the very first pharaoh of Egypt, Osiris, was mummified by his wife, Isis. She magically restored him to eternal life. Mummification of the body of the dead person was vital and it had to be an exact copy or imitation of the original person. This was extremely important to enable the soul and spirit to recognise and unite with the mummy, in order to live forever (cf. Asante 2014).

Geb, the earth god, and Neb, the sky goddess, were the parents of Isis, Osiris, Set and Nephthys. Osiris, the popular brother, was the first pharaoh of Egypt. The jealous Set, with the help of his companions, captures Osiris, binds him up with ropes and throws his body, enclosed in a coffin, into the Nile River (Kovacs 1999:160). Meanwhile, the distraught Isis mourns her husband's death and searches the far reaches of the land for his body. Eventually she finds his coffin resting among the river reeds. Unfortunately, the evil Set catches up with her and cuts up Osiris' body into fourteen pieces and distributes them throughout the land (Kovacs 1999:168). Isis discovers them and she magically reassembles them except for his phallus. Isis mummifies the body of her husband and magically restores him to life. She creates a new penis for him, thereby enabling Osiris to impregnate her. From this union, Horus is born. Osiris then descends to become the god of the Underworld and the judge of all souls (Kovacs 1999:169; Brier 2019).

Mummification has been practised for over 2000 years. Geddes and Grosset (2001:403) maintain that the very first pharaoh to be mummified was Osiris himself. Brier and Wade (2001:118). Unfortunately, no record has been left explaining the surgery that took place during the embalming process. Brier and Wade (2001:118) inform their readers that the embalming process began four days after death. This

enabled the friends and family members to mourn their loss, pay their respects and take their leave of the departed.

Hawass (2013:42) explains that the hot, dry desert sands of Egypt make natural mummification possible (cf. Sluglett 1990:1117). During the pre-dynastic period (4800–3050 BCE) a body would be draped with a grass mat and buried facing east in a shallow grave. Hawass (2013:42) believes most strongly that the process of mummification began before the 2nd Dynasty (2890–2686 BCE), but Geddes and Grosset (2001:403) argue that it began somewhat earlier towards the end of the 1st Dynasty (3100–2900 BCE).

The process of mummification was prohibitively expensive. Consequently, only the very wealthy were able to afford it. By the time of the New Kingdom (ca 1550–1070 BCE), more people were able to access mummification (Hawass 2013:42; cf. Geddes and Grosset 2001:403).

After death, the body was washed and then transported to the embalmers, termed ‘the place of cleansing or purification’ or ‘the good house’ (Hawass 2013:42). The first step in the procedure was the removal of the brain. This was done because brain tissue decays rapidly after death. This was achieved by crushing the ethmoid bone that separated the brain from the nasal cavity. A metal or wooden hook was utilised as a beater to break down the brain tissue, to enable the liquid within the skull to drain out easily through the nasal cavity. The head was then turned to one side to facilitate this process (Hawass 2013:42; Geddes and Grosset 2001:403).

The embalmer would make an abdominal incision, using an Ethiopian stone knife, through which the lungs, liver, stomach, and intestines were removed and placed into natron⁷⁷ (Brier and Wade 2001:118; Sandison 1963:259). To desiccate these organs, they were either placed in canopic jars or wrapped and entombed with the body (Hawass 2013:43). The heart remained inside the cadaver because the Egyptians believed it was the seat of intelligence (Carelli 2011:86). The corpse was then washed in a mixture of water and palm wine, and the abdominal cavity filled with natron, linen,

⁷⁷ Sandison (1963:260) states that ‘natron is a naturally occurring mixture of sodium carbonate, sodium bicarbonate, sodium chloride and sodium sulphate’.

and spices such as frankincense and myrrh (Hawass 2013:43; cf. Brier and Wade 2001:118; Geddes and Grosset 2001:403) to appear more lifelike.

Sometimes, even artificial eyes were inserted in place of those of the deceased, and the hair may have been dyed with henna to restore a youthful appearance. The arms of the body were positioned either at the sides or crossed over the chest in the case of a pharaoh. This process was necessary to facilitate recognition of the body by its *ka* or spirit after death. The embalmers piled natron on top of the cadaver and left it to desiccate. This process usually lasted forty days. The mummy was then wrapped in linen bandages and anointed with highly perfumed oils. Desroches-Noblecourt (1972:164) explains that too much unguent would damage the mummy's flesh. Hawass (2013:43) maintains that this process took fifteen days, as there were many rituals that had to be adhered to but does not indicate what these entailed. The fingers and toes of the mummy were individually wrapped, as were the limbs. The second wrapping included many *amulets* infused with ritual power, while the lector priests chanted *incantations* to protect the deceased on their journey to the afterlife (Hawass 2013:43). The final touch was a golden mask that encircled the whole head. Brier and Wade (2001:118) postulate that the exact mummification process was a trade secret passed down from father to son, and each family controlled their own designated area. Because of this, Sluglett (1990:118) notes that there is no record to be found of the exact mummification process.

As mentioned above, Anubis⁷⁸ presided over the mummification of King Tutankhamun. The explanation of mummification is relevant to the legend of Isis and Osiris, when the first mummification of a king was performed by Isis on her husband Osiris' corpse. Thereafter, every pharaoh desired to emulate the great god Osiris.

⁷⁸ Anubis, 'a mortuary god takes the form of a black dog or jackal', with pricked ears and a hanging tail (Jordan 2004:22). In Egyptian mythology, a god of the dead who takes the form of man with a head of a jackal (Geddes & Grosset 2001:322). Anubis' portrayal as a dog may originate from observations of bodies being scavenged from shallow graves and Anubis was believed to protect other bodies from the same fate (Jordan 2004:22).



Figure 3.2: A priest as Anubis mummifying the body of King Tutankhamun.
(Hawass 2013:43).

Kovacs (1999:157) recounts the legend of Isis and Osiris. He begins by relating how in very archaic times, the Egyptian people were warring, nomadic tribes. This resulted in much bloodshed and sorrow. The god Ra requested the god Osiris, and his sister-wife, the goddess Isis, to assume human form and civilise the peoples of earth. The two deities, now in human form posing as elegant, regal travellers, entertained the tribes. Osiris played the flute and Isis accompanied her husband with a haunting song (Kovacs 1999:157).

Principles: Mummification is important as it enables the soul and spirit to recognise and unite with the mummy to live forever; every pharaoh desired to emulate the great god Osiris, who was the first mummy; Isis mummifies the body of her husband Osiris and magically restores him to life; 'like restores like'; 'Law of Similars' may be applicable in this case.

3.3.2 Pharaoh Tutankhamun's ceremonial sandals

Another example of sympathetic magic is the ceremonial sandals of King Tutankhamun (Figure 3.3). Hawass (2013:139) explains that these sandals were found in the tomb, and they are made of wood and inlaid with leather, gold and tree bark. They are very striking, and the design is surprisingly modern. The upper surface of each sandal is decorated with images of a Nubian and an Asiatic prisoner. Their arms are tied behind their backs and a rope can be seen around the necks of both men. These men represent the traditional and sworn enemies of Egypt, who must be

reminded of their enduring capitulation to the pharaoh. This is achieved by the ruler wearing and thus literally walking on their supine figures on ceremonial occasions. Hawass (2013:139) notes that there is no sign of wear on either of them, and it is therefore possible that the pharaoh only wore them for ceremonial occasions.



Figure 3.3: An image showing the ceremonial sandals of Pharaoh Tutankhamun. (Hawass 2013:139).

Principles: Attempting to *destroy or harm one's enemies by damaging an image of them* (§ 2.3.2.5). This illustrates the imitative magic principle of 'like kills like', 'an effect resembles its cause' and 'the Law of Similars'.

3.3.3 Execration texts

Execration texts are also referred to as proscription lists and came to light in Egypt. The word 'execration' means to curse (Coulson et al 1980:291) and the English word to curse is *execratio* in Latin (Kidd 1984:433). These texts were often written on figurines or the statuettes of fettered foreigners (see 3.2.2), while others appeared on bowls (see 2.2.2.1[d]) or on blocks of clay or stone. After being imbued with magic incantations and curses, the execration texts were destroyed by their creators, who smashed them on the ground and buried them near tombs (Kamal 2019:881). The proscription lists were written in Egyptian hieratic text and would list the enemies of the pharaoh, the Egyptian people, or the state or troublesome neighbours, such as the Nubians, the Asiatics and the Libyans (Kamal 2019:880) as well as any Egyptians

hostile to the pharaoh. Execration texts were used from the time of the Old Kingdom to the Late Period (2686-332 BCE).

The prophet Jeremiah was instructed by God to bring a clay jug and gather a group of elders together and to smash the jugs in accordance with God's instructions (Jeremiah 19:10-11 NIV). God was angry with the people and wanted to punish them for their idolatry. This is another example of imitative magic.

Principles: In the same way as the pharaoh and Jeremiah smashed the red pots, so God would destroy Jerusalem and the pharaoh would destroy his enemies. Principles: 'Like cures like' and 'an effect resembles its cause'.

3.4 EXAMPLES OF APOTROPAIC MAGIC IN EGYPT

The ancient Egyptians were firm believers in magic. Imitative magic has been discussed above and now I want to describe examples of apotropaic magical amulets, including that of the scarab or dung beetle, with several examples to be found in the Metropolitan Museum of Art in New York. Many examples (§ 2.2.2.1) were found in the different layers of the pharaoh's mummy bandages. The scarab amulet was worn to protect the pharaoh during his journey to the afterlife. In my view, a scarab beetle has several similarities to that of a snake, in that it can live on the ground and below it. It also symbolises regeneration and by analogy, eternal life.

3.4.1 The dung beetle (scarab) amulet

Both Radcliffe (2006:86) and Cambefort (1994) agree that the scarab first appeared during the time of the First Dynasty (ca 3000 BCE) but Cambefort (1994) notes that an elongated scarab-shaped beetle pendant has been known from the Late Palaeolithic period (10 000 – 20 000 years ago), long before the Egyptian civilisation developed. Cambefort (1994) points out that the scarab became important because it was a convenient snack, and its ability to both fly and vanish into the ground had great symbolic significance (cf. Radcliffe 2006:86). In ancient culture, the shamans believed that the world was created by beetles (Cambefort 1994). In one such myth, an aquatic animal dives down to the bottom of the original waters of chaos and re-emerges at the surface with some matter, perhaps some soil or mud which was believed to be shaped by the scarab to form the earth. Figure 3.4 is a photograph of several glazed clay

scarab beetles manufactured in modern-day Cairo. Derby (2014) explains that in antiquity, clay was a popular medium and many amulets were made using it.



Figure 3.4: Glazed pottery scarab beetles.
(Photograph: Gillian Williams 2017).

In early Egypt, the scarab beetle symbolised the sun. Cambefort (1994) furthermore states that the insect rolling its ball of dung explained the sun's path across the sky from east to west (Radcliffe 2006:86). The capital of Egypt, the city of On, also called Heliopolis, was named after the sun, showing the importance of the sun in Egyptian life. Geddes and Grosset (2010:386) aver that in Egyptian mythology the beetle god *Khepri* became identified with the scarab beetle. At On, *Khepri* was worshipped as the sun god, but was later superseded by the god *Atum*. Later, *Khepri* became identified with the rising sun, *Ra* with the noonday sun, and with *Atum* with the evening sun. *Khepri* in Egyptian means 'to be' or 'to exist' (Radcliffe 2006:86) and *Khepru* in Egyptian means 'to transform' or 'to undergo a metamorphosis'. The god *Khepri* is depicted as a man whose head is replaced by that of a scarab beetle (Geddes and Grosset 2001:386) or wearing a headdress of the insect on his head. There is a large scarab beetle on display in the Egyptian Gallery of the British Museum, most likely brought from Alexandria, and an even larger one can be seen carved from red granite, resting on a two-meter-high pedestal in Karnak (Radcliffe 2006:87).

The Egyptians probably wondered what became of the sun between sunset and sunrise on the following day. Their priests made an analogy between the disappearance of the sun from the night sky to what befalls the scarab beetle's dung ball when it is buried in the ground. They believed that the ball of dung was in fact the beetle's egg. The larvae hatched and metamorphosised into a pupa (Ward 1994:188)

that resembled a mummified corpse that eventually hatched into a beetle (Radcliffe 2006:87). Similarly, the sun was reborn from the earth when it arose anew every morning in the form of the scarab god, Khepri (Radcliffe 2006:86). This amulet can also be used as a seal (Stünkel 2019).⁷⁹

Cambefort (1994) maintains that during the Middle Kingdom (ca 2050–1050 BCE) the view of the scarab changed when it became synonymous with supernatural power and resurrection after death. The process of mummification seems to have been based on the appearance of the scarab's pupa. This led to the idea that after death, the body had to undergo a process of mummification *to protect the deceased while it, like the pupa of the scarab beetle, submitted to a metamorphosis* in order to be resurrected (Cambefort 1994). It is interesting to note that, in a few respects, the scarab beetle is akin to the snake: it lives above and below ground; its young are born underground, and because it undergoes a metamorphosis from the pupa stage to that of an adult, it is regarded as a sacred creature, like the snake. It is an *amulet* with magical regenerative properties that were used by the living and the dead (Foley 2021).⁸⁰

Principles: Amulets are placed in the bandages of the pharaoh's mummy to protect him on his way to the afterlife. As the beetle undergoes a metamorphosis to be resurrected, so too the deceased will undergo a process of resurrection. This aligns with the principle of 'like restores like'; and the 'Law of Similars'.

3.4.2 Amulets in the Metropolitan Museum of Art

Stünke, describes several amulets, namely the two fingered, the headrest and the Wadjet-eye amulet.

3.4.2.1 The two-finger amulet

This funerary amulet (Figure 3.5) was used by the embalmers after the deceased had been mummified. It was necessary, during this process, to make an incision in the left side of the lower abdomen to remove the internal organs to enable mummification. This amulet was usually found near the incision and was believed to magically heal the wound because it was believed to be the most vulnerable part of the mummy where

⁷⁹ http://www.metmuseum.org/toah/hd/egam/hd_egam.htm.

⁸⁰ <https://archaeologicalmuseum.jhu.edu/staff-projects/ancient-egyptian-amulets/>

evil forces could enter (Andrews 2000:128–129). This amulet dates from 664-332 BCE and originates from Egypt (see §3.3.1): This amulet was placed in the wrappings of the mummy to protect him on his dangerous journey to the afterlife.

Principles: The amulet protects the vulnerable part of the mummy to enable it to survive the Underworld until it could unite with the spirit of the deceased.



Figure 3.5: Photograph of the two-finger amulet, 664-332 BCE.
Metropolitan Museum of Art, No 66.99.182.⁸¹

3.4.2.2 *The headrest amulet*

This curved funerary amulet would be placed under the head of the mummy to safeguard it and to enable the rebirth of the deceased (Stünkel 2019) (See Figure 3.6 and §3.3.1).

Principles: This amulet protected the mummy's head to facilitate rebirth of the deceased.

⁸¹ <https://www.metmuseum.org/art/collection/search/550994?ft=66.99.182&offset=0&rpp=40&pos=1>



Figure 3.6: Photograph of the Headrest amulet, 664-332 BCE.
Metropolitan Museum of Art, No 04.2.80.⁸²

3.4.2.3 *The Wadjet-Eye amulet*

Stünkel (2019) mentions that this amulet is used by both the living and the dead. Geddes and Grosset (2001) recall the tale of when Horus and his wicked uncle Seth had a terrifying battle, during which Horus lost an eye. The Egyptians painted this image on their sailing vessels, and it became increasingly popular alongside the depiction of Horus as a falcon. The right eye was known as the sun and the left one as the moon, denoting protection during the day and night. The god Thoth repaired Horus' eye by magic means (Geddes & Grosset 2001:362); see Figure 3.7 and 3.3.1).



Figure 3.7: Example of a Wadjet-eye amulet, 664-332 BCE.
Metropolitan Museum of Art. No 89.2.415.⁸³

⁸²

<https://www.metmuseum.org/art/collection/search/545325?ft=04.2.80&offset=0&rpp=40&pos=1>

⁸³

<https://www.metmuseum.org/art/collection/search/550997?ft=89.2.415&offset=0&rpp=40&pos=1>

Principles: This amulet depicts the Wadjet Eye that is confers powerful protection for both the living and the dead.

3.5 SUMMARY AND CONCLUSION

The aim of this chapter was also to investigate the snake as a 'healing tool' in Egypt. The following key insights regarding Egyptian sympathetic magic and apotropaism throughout the region is pervasive and adds to a better understanding of this practice:

- Mummification enabled the soul of the deceased to reunite with its body to live eternally in the hereafter. For this to take place, the soul should be able to recognise its former body. This recognition was facilitated through life-like funerary masks on mummies, along with the provision of *amulets* and the recital of *incantations*, both of which featured the person's name. The first mummy was the god Osiris, who was magically restored to life by his goddess wife, Isis.
- Snakes and snake symbolism played an important role in both apotropaic and sympathetic magic in Egypt. This can be seen in the examples of the *ureaus* and the burning of wax effigies of Apophis. The *ureaus* was regarded as the symbol of ultimate power in Egypt, and people saw the uraeus as they had to look up to pharaoh, although unlike the early Israelites, the Egyptians did not expect to be healed by the snake image. In Egypt, snakes played the role of *to protect* or *to ward off*, but only in some case *to heal*.
- It was noted that a common tactic for repelling snakes was to employ snake imagery in apotropaic contexts', with the efficacy thereof being linked to the principle of 'like repels like'.
- The ancient Egyptians believed that the gods had skin made of gold, and since objects of bronze displayed a similar sheen, there could be a connection between Egyptian magic and the bronze serpent of Numbers 21:4–9
- During the Middle Kingdom (2050–1060 BCE), the scarab beetle was regarded as (apotropaic) possessing supernatural powers and resurrection (through metamorphosis) because the pupa resembled a mummy. As with snakes,

scarab beetles were seen to emerge from the ground, seemingly existing through 'endless' life cycles of being 'reborn' as they emerge from the ground.

- Amulets also played a role in apotropaic magic. The two-fingered amulet was placed as close as possible to the incision in the mummy's abdomen so that it would protect the most vulnerable part of the mummy where evil forces were likely to enter. The headrest amulet was placed under the mummy's head to protect the deceased and to enable rebirth. The Wadjet Eye protective amulet was used by both the living and the dead. It became very popular and was also used to safeguard sailing vessels during their voyages.

In the case of mummification, the principles of 'like restores like', and the 'Law of Similars' may apply. The snake represented power, protection, and rejuvenation, even resurrection. In this manner, healing would take place through rejuvenation, in much the same manner as snakes appear 'rejuvenated' after shedding their skin. These principles concur with those in Chapter Two and add to a possible theoretical framework to illuminate the role of the Nehushtan.

The story of the Nehushtan (Num 21:8 and 9) was based on complete trust in the one God and faith that they would be cured from venomous snake bite by merely looking up to the Nehushtan. This interpretation is my own view.

In the next chapter we will deal with further examples of apotropaic and sympathetic magic in Greece and Anatolia that might expand our understanding of the copper snake as a healing device and symbol.

Long-term interaction between Egypt and Sinai might have given rise to various expressions of hybridization and multiculturalism in the early Israelite religion and culture.

CHAPTER FOUR

SYMPATHETIC AND APOTROPAIC MAGIC IN GREECE AND ANATOLIA

4.1 INTRODUCTION

In this chapter, I will investigate possible examples of sympathetic and apotropaic magic in Greece, and Anatolia.

This chapter includes the account of the Greek god of medicine, Asklepios, his background, lineage, and healing temples, known as Asklepieia or Asklepios. Snakes played a major role at the healing sanctuaries of Asklepios. Their functions and the healing miracles of several patients and snake symbolism will be discussed. The non-venomous *Aesculapian* rat snakes that lived in the trees and grounds of sacred abaton are also mentioned, as they were used in some temple healings.⁸⁴ Some theories are put forward to explain the healings that took place at sanctuaries such as Epidavros, Messene, Kos, Corinth, and Pergamum to name a few. The anatomical votive offerings in the form of plaster (and sometimes metal) body parts were donated to the healing sanctuary by diseased and distressed patients, all of whom were hoping, and praying to Asklepios, for a miracle. Hundreds of these anatomical votives were discovered buried in a pit at Corinth (and other sites) during archaeological excavations carried out several years ago. The imitative votive offering in the form of a body part represented a healthy organ, such as a pair of eyes, donated by a blind person, or a sound limb, given by a crippled patient. It was hoped that the principle of 'like healing like' would enable a magical healing to take place (§ 2.3). These are examples of *sympathetic magic* that may illuminate our understanding of the role of Nehushtan in the Biblical narrative.

The evil eye will be examined as an example of apotropaic magic.

Although much later than the supposed period of the narrative of the Nehushtan, these practices and examples from ancient (and even modern) Greece and Anatolia might assist to gain a better understanding of the Nehushtan narrative.

⁸⁴ Although not mentioned in the sources, the reason for their use is that they are small constrictors, non-venomous and rather tame, tolerating humans well.

4.2 THE SNAKE AS HEALING SYMBOL

The notion that snakes can contribute to healing may be found in Greek mythology since the Greek god of medicine, Asklepios, used a certain type of snake in the healing temples, where snakes roamed freely (Risse 2015:8). The healing symbol associated with the Greek mythical hero and god of healing, Asklepios (Figure 4.3), is frequently depicted bearing a staff with a single snake coiled around it (Coulson 1980:42). The rod of Asklepios represented healing in the ancient Greek *asklepios* for almost a millennium and is depicted in Figure 4.1 as a snake on a rod or pole.



Figure 4.1: The rod of Asklepios depicting a single, entwined serpent.⁸⁵

According to the description provided in Numbers 21:9, the Nehushtan snake was simply 'put on a pole' or standard, but many modern artistic interpretations of the Nehushtan (such as Figure 4.2) depict it as 'wound around a pole' or standard in a similar fashion to depictions of the Rod of Asclepius. Snakes, or the symbolism of snakes, had healing associations in Greece, so they might be relevant to our understanding of the use of the Nehushtan as a healing tool in the Biblical narrative.

⁸⁵ <https://www.premiumcaremd.com/blog/the-battle-of-the-snakes-staff-of-aesculapius-vs-caduceus>

Chthonian gods (those relating to or inhabiting the underworld), such as Hades (Jordan 2004:110) and Kore (Jordan 2004:162), were rulers of the underworld. Snakes were perceived as the wisest of the animals, since it was believed that snakes possess a vast knowledge of herbology. This belief was inspired by the fact that a snake burrows or holes are located below ground (Charlesworth 2010:246), or between rocks; which means that snakes move amongst the roots of plants⁸⁶ and would therefore be acquainted with their medicinal workings. In addition, a snake habitually moults or sheds its skin after hibernation in the spring, as its skin cannot stretch as the reptile grows. Mattison (1989:73) also adds that the process of shedding could rid the animal of ticks and mites, prior to egg laying and after hibernation. This gave rise to the idea of snake regeneration and the eternity of a snake, as it never appears to be old or sick (Charlesworth 2010:266). The ancient Greeks believed that the snake had acquired powerful energies, being able to absorb the minerals of the earth, possibly because they lived underground (Downing 1990:564). It was within this context of regeneration, that snakes played a role in the *asklepios* of Greece. The snake is akin to the scarab beetle: it lives both above and below ground; its young are born underground, and because it undergoes a metamorphosis in a way, it is regarded as a sacred creature, like the scarab beetle.



Figure 4.2: An artist's depiction of the Nehushtan, a single serpent on a pole.⁸⁷

⁸⁶ www.worldencyclopedia.org/entry/serpent

⁸⁷ <https://www.sunsetchurchofchrist.org>.

4.3 SNAKES AND THE HEALING GOD ASKLEPIOS IN GREECE

4.3.1 Background

Salem and Salem (2000:169) note that Homer described Asklepios as the ‘blameless physician’ in his *Iliad* (IV, 194). Lock, Last and Dunea (2001:710) propose that Homer wrote his epic work in 750 BCE, but there is a possibility of an earlier date for the writing of Homer’s *Iliad*, observes Shurkin (2013), who suggests that the epic poem may have been written in 752 BCE.

Lock, Last and Dunea (2001:710) believe that the cult of Asklepios originated in Athens towards the end of the sixth century BCE and spread across the whole of Greece. This healing cult was extremely popular. Most patients had approached Hippocratic physicians and when their treatments failed, it made sense to resort to an alternative cure (Downing 1990:556). Leonard (2019) refers to cult sanctuaries at Epidavros, Athens, Kos and Corinth as examples. Leonard (2019), and both Charitonidou (1978:10) and Dillon (1994:256), postulate that such sanctuaries were faith-based. Patients would spend the night at these locations and hoped to dream of a cure, often involving snakes (Charitonidou 1978:10, 14). The resident priests would interpret their dreams the next morning (Charitonidou 1978:15).

Although Asklepios is described by Homer as a hero-king in the eighth century BCE, Pindar refers to him as a ‘gentle craftsman who drove pain from the limbs – that hero who gave aid in all manner of maladies’ (*Pythiae*, III, 6–8; D’Irsay 1935:454). It is said that Asklepios could take a chthonic form, with *Chthonic* literally meaning ‘subterranean’, but the word *khthon* means ‘earth’ in Greek⁸⁸ and is associated with *things that dwell in or under the earth*.⁸⁹ They are often described as having the ability to absorb minerals from the earth such as copper, which has known healing properties (cf. Borkow, Okon-Levy & Gabba 2010, Grass et al 2011; Keevil 2017; Wilson 2020).

It is uncertain whether Asklepios was a real historical figure who practised medicine, but his cult may have been preceded by the worship of other healing deities, such as Apollo and Athena. Charitonidou (1978:9) believes that the first two healing

⁸⁸ <https://en.m.wikipedia.org/wiki/chthonic/>

⁸⁹ The gods and spirits that dwell underground are called chthonic deities and these deities are often depicted with entwined serpents (www.merriam-webster.com/dictionary/chthonic).

sanctuaries of Asklepios were erected in 420 BCE at Piraeus and the southern slope of the Acropolis (Alušík & Dostalíková 2017). Authors such as Pausanias, Cassius Dio and Philostatus, describe at least 300 of these healing sanctuaries, which people would visit if treatment with their usual physicians had failed (Downing 1990:556).

4.3.2 The healing temples/sanctuaries

The healing temples were situated in salubrious surroundings, often in mountainous valleys, and situated near a mineral spring reputed to have healing properties (Charitonidou 1978:1). However, Charitonidou (1978:7) argues that there are no distinguishable healing properties in the springs near Epidavros, even though the running water was also used in the healing process, especially in cases of insomnia.

Most of the temple cures that were performed dealt with chronic conditions such as female sterility (Craffert 1998:147). Many priests were employed at centres like Epidavros, and it was their function to interpret the dreams by explaining them to the patients the next day. Charitonidou (1978:15) adds that many of the priests had a good medical knowledge.

The healing sanctuary in Messene during the Classical and early Hellenistic period served as a clinic, and Asklepios was a practising medical doctor. This was explained by Prof Themelis in 2016 when he showed us the model of the *Asklepion* in the museum at ancient Messene. Countless votives, found in the deepest areas of the courtyard, had been dedicated to Asklepios as a healer or hero (Themelis 2003:9).

In Corinth, hundreds of votive offerings were found during repairs to the museum. There were workshops situated nearby where plaster casts of body parts were found and many of them are presently on display in the museum (Lang 1977:23; Laios et al (2015:450–1).

4.3.3 Serpents employed in healing therapy and snake symbolism

The ancient Greeks regarded the fact that a snake shed its skin as a sign that the serpent remained forever young and therefore immortal (Van Buuren 1936:53). This skin shedding is also a symbol of rebirth, transformation and eternal life (Edelstein & Edelstein 1975:366).

The ancient Greeks believed that the snake had acquired powerful energies, being able to absorb the minerals of the earth, possibly because they lived underground (Downing 1990:564).

The following discussion on snake healing therapies is meant to highlight the ancient Greek belief that there is a connection between snakes and healing. The discussion does not propose any direct relation between the Nehushtan and Asklepios. Rather, the intention here is to show that snakes were associated with healing in more than one ancient society.

4.3.3.1 *A snake heals a man's toe*

At the healing temples in Greece, especially Epidavros, snakes wandered around freely (Downing 1990:566). These snakes are now known as the *Aesculapian* rat snake (*Zamenis longissimus*), also known as *Elaphe* (*Colubrids*), a non-venomous constrictor⁹⁰. What follows is a mid-fourth century BCE account of how a serpent healed a man's toe.

The unnamed man was taken outside the abaton in Athens where he fell asleep on a bench (Edelstein and Edelstein 1975:xvi). A snake emerged from the temple and appeared to 'lick' his diseased toe, but the man dreamed that a handsome youth appeared and applied ointment to his lesion (*Inscriptiones Graecae* iv, I, 121–122; Edelstein and Edelstein 1975:233; Wells 1993:29–30). The idea of a snake licking infected or diseased flesh is interesting, as snakes are generally attracted to live (fresh) prey and do not 'sniff out' blood in the air. Licking is also not considered characteristic snake behaviour. Snakes are generally hunters and not scavengers, however, snake behavioural studies indicate that a few species do in fact exhibit scavenging behaviour as a feeding strategy (De Vaux & Krochmal 2002).⁹¹ Snakes flick their tongues to pick up scent and taste cues from the air, but do not lick objects or prey in general (Douglas 1999).

⁹⁰ (<https://en.wikipedia.org/Aesculapiansnake>)

⁹¹ This reference is not in the list of references.

With regards to the healing properties of snake saliva, Angeletti et al (1992:223) found that the saliva of these snakes features polypeptide amino acids that contain a *growth factor* known as EGF (Epidermal Growth Factor) that *stimulates healing*. Biological tests have confirmed this,⁹² and the isolated compounds have been used on lesions, surgical wounds, burns, gastro-intestinal ulcers, and tendon injuries (Angeletti et al 1992:224; Williams 2009:60).

While the information above helps to explain the healing power of snakes in biochemical terms, it does not necessarily explain anything about the mechanisms of apotropaic or sympathetic magic that underpin this type of 'snake healing'. Thus stated, there is still much more that we can learn about the use and significance of snake symbolism, especially in terms of healing tools.

4.3.3.2 *Two ladies who were unable to conceive children*

The following two cases are similar in that both describe the cures of women who were unable to conceive children in relation to snake healing practices:

Agamede of Keos dreamed that a snake lay on her stomach, and afterwards she had five children – we do not know if these were single or multiple births. Edelstein and Edelstein (1975:237; Testimony No. 423) explain that the snake that lay on her stomach was in fact the chthonic form of the god Asklepios who may have had intercourse with Agamede.

In ancient times, it was not unusual for a sterile woman hoping to conceive to dream that a god had impregnated her. The fact that Agamede dreamed this could also have calmed her anxiety, for she later did conceive children.⁹³ What we do learn is the idea that snakes possess healing abilities and could restore Agamede's ability to conceive a child (Craffert 1998:147). The snake is identified with the phallus in many cultures (Rouselle 1984), so its connection to fertility is almost intrinsic.

⁹² For more information on this topic, consult Beeton, Gutman and Chandy (2006) and Mukherjee, Saikia, and Thakur (2011).

⁹³ Modern research on the relationship between infertility and anxiety shows that the inability to conceive children leads to elevated levels of anxiety and depression. However, whether anxiety is a cause of infertility requires further investigation (Rooney & Domar 2018). It could thus be argued that if the latter is proven, then women visiting an asclepion could have found the experience calming, thereby benefitting from reduced stress levels and, possibly, an increase in fertility.

Nicasibula of Messene dreamed that Asklepios approached her, followed by a serpent. She subsequently had intercourse with the snake (the chthonic form of the god) and she gave birth to twins within a year of her dream (Edelstein and Edelstein 1975:237). Once again, we learn that snakes have curative capabilities and supposedly restored Nicasibula's reproductive health. In this case, the snake symbolised the phallus, the origin of fruitfulness, fertility, and new life (Charlesworth 2010:224, 231).

4.3.3.3 *A case of consumption*

Edelstein and Edelstein (1975:235–6) give an interesting account of Thersandrus of Halieis who had consumption (pulmonary tuberculosis), a disease with an unusually high fever. Thersandrus, had slept in the abaton at Epidavros, but had no dream, nor was he healed. Instead, he was transported back to his hometown of Halieis in a wagon. Unbeknown to him, a serpent, most likely from Epidavros, had coiled itself around one of the wagon wheel axles. Thersandrus had arrived home and lay down in his bed, and the snake then made its way to his room and healed him. Although very little detail is provided in this testimony, the wisdom and healing power of the snake is symbolised (Charlesworth 2010:246).

Charlesworth (2010:255) contends that Asklepios was not only linked to snakes but according to Ovid (*Metamorphosis, Book 15*), Asklepios said: '*Only look upon the serpent [emphasis added] that twines about my staff, I shall change myself into this [emphasis added]*', and he transformed himself into a snake. This relates closely to the story of the use of the Nehushtan as a healing tool in Numbers 21. The faithful early Israelites also had to look at the serpent and they were healed.

Asklepios' symbol is the snake coiled around a staff (Figure 4.3). The snake played a healing role in this cure and symbolised a rebirth and a new lease on life for the patient.



Figure 4.3: Asklepios with a snake coiled around his staff at the Epidavros Museum.
(Photograph: Prof M Le Roux 2016).

As can be seen in the examples above, not much detail is available as to how the snake healing took place. This is not surprising, as the patients were asleep at the time and not many people can remember exactly what they dreamed. After all, dreams are not reality, and unless the details of the dream are penned immediately after waking, they vanish swiftly from the mind. The interesting aspect of the dreams is that the patients dreamed of snakes, or of Asklepios. He appeared to them either as a youth or a more mature man with a beard.

As for the role that the snake may have played in the cures, the snake that ‘licked’ the man’s necrotic toe, cured it (§4.3.4). In recent years, research has shown that certain isolated venom proteins, peptides and enzymes can be used in the development of drugs and therapeutic agents in the treatment of several diseases and microbial infections (Angeletti et al 1992:223; El-Aziz et al 2019:1; Mukherjee et al 2011:31). It has been proved that the saliva of the Aesculapian rat snake contains biological compounds that regenerate human skin. The snake proved to be a very useful healing tool in ancient Greece. I believe that the snakes performed a healing function much like the Nehushtan in the Bible was used as a healing tool. Unlike the Nehushtan, the snakes at Epidavros must have kept the rodent, lizard, mole, and frog population in

check. Szalay (2016) adds that these snakes are quite docile and are not a threat to humans. This explains why the snake is depicted coiled round the staff of the healing god.

I have often wondered how the patients, who arrived in the abaton to dream of a cure, fell asleep if it was the first time they slept there.⁹⁴ Some may have been excited, some apprehensive, while others were expectant and hopeful that the following morning they would finally be cured. I imagine that for some, falling into a deep sleep was almost impossible despite the sounds of nature, such as the water springs to be found in the vicinity of the sanctuaries, which may have had a soothing effect. An article by Carod-Artal (2013) came to my rescue.

Carod-Artal (2013:30) postulates that a drug, such as opium, may have been used in these healing temples to induce a sound sleep to enable the snakes to perform their healing functions. Opium (*Papaver somniferum*) is well known for its calming, pain relieving and soporific properties (Dioscorides D4:65), and feelings of euphoria, ecstasy, sleep, and death⁹⁵ are associated with the pharmacological workings of the drug (Askitopoulou 2015). Opium has been in use since before 5000 BCE, with the first documentation from Greece dating back to 2600–1100 BCE in Crete (Tsoucalas et al 2018:179). The opium poppy contains opium and morphine, the latter being named after the god of sleep, Morpheus (cf. *Homer*, in his *Iliad*, *Book 8*, 306; Carod-Artal 2013:31). The connection between opium and snakes is strongly inferred by the presence of a snake relief on an opium vase from Crete, dated to the 12th–10th century BCE (Askitopoulou et al 2002).

Archaeological excavations in Gazi, Crete, discovered in 1937 within a hidden chamber of a cult dwelling, revealed a figurine of the Minoan poppy goddess, which is dated to the Late Minoan III period (1300–1250 BCE) (Askitopoulou, Ramoutsaki and Konsolaki 2002:5). The goddess was so named because she had poppy-shaped hairpins in her crown. These poppy-shaped hairpins contained vertical gashes, which

⁹⁴ Refer to Askitopoulou et al's (2002) article on surgical cures under sleep induction for more information in this regard.

⁹⁵ The sleep inducing and pain-relieving effects of Opium are the result of the drug's ability to slow down messages that travel between the body and the brain. High doses will slow down the heart rate and breathing to such an extent that the person may appear dead. <https://adf.org.au/drug-facts/opium/>

seem to indicate that the sap was obtained in a similar way today as it was then. In the area where the figurine was found, remains of coals and ashes also appeared on the floor. This also seems to indicate that the opium vapours were inhaled (Askitopoulou et al 2002:5).

These above examples all pertain to snake healings that took place, using the snake symbol not only in the abaton, but in the asklepeion garden (see 4.3.3.1) and where a snake even followed and cured a man from consumption at his own home (see 4.3.3.3).

4.4 SYMPATHETIC MAGIC IN GREECE

4.4.1 Anatomical votive offerings and imitative/homeopathic magic

The first record of anatomical votive offerings, so called because models of injured or healed human body parts were offered to Asklepios as votive offerings, originated in ancient Greece. The offerings were made either to express gratitude to the god for the restoration to health, or to beg Asklepios for healing (Themelis, private communication, October 2016). They were originally found on the island of Crete from a time during the third millennium BCE (Laios et al 2015:449). Avalos (1995a:66) notes that a function of the asklepeion was to provide a respite from the stresses of life in antiquity, such as poverty, disease, and the resulting depression (Avalos 1995a:91).

This practice diminished as the ancient Minoans, who practised this custom, slowly dwindled. There was a resurgence of this practice, however, when the Asklepieia/Asklepeions were at their zenith during the end of the fifth century BCE (Laios et al 2015:450). Figure 4.4 shows anatomical votives from the museum at Corinth.



Figure 4.4: Anatomical votive offerings found in the museum at Corinth.
(Photograph: M Le Roux 2016).

Laios et al (2015) make it clear that anatomical votives were used to entreat healing gods such as Amphiaraus, Athena, Demeter, Artemis, and Zeus, and this custom was also applied to mythical heroes such as Hercules, and the Greek healing god, Asklepios, (Laios et al 2015:451) to restore them to health.

Corinth was renowned in antiquity for its sculptors and ceramic artists (Laios et al 2015:450). Most of the votives were manufactured from inexpensive plaster or terracotta material. However, there were also gold, silver, marble or gilded wooden votives (Lang 1977:23; cf. Laios et al 2015:451).

Votives of the eyes and ears may have represented blindness or deafness, while those of the upper torso could have indicated illnesses ranging from parasites to digestive or other abdominal disorders. The male genitalia may have been donated for the return of sexual vigour or virility (Lang 1977:23). The female uteri, ovaries and breasts suggest diseases such as sterility, frequent miscarriages, or possibly even cancer. The arms, hands, legs, and feet may have represented fractured limbs, possibly those that had healed in a misaligned position (Lang 1977:24–25).

Many of the terracotta or plaster votives were painted: the breasts were white with red nipples, while the male genitalia were red (Lang 1977:22). Usually, the anatomical votives presented to the deity were healthy, but Laios et al (2013:452) describe a votive hand that was presented as diseased or maimed.

Reasons for presenting such votives may have been due to desperation because of the sheer persistence of the illness, or the need to present the diseased limb factually (Laios et al 2015:452). These votives dated from fifth to fourth centuries BCE and served the purpose of illustrating the affected body part (Hughes 2008:217). They were hung on the walls or suspended from hooks on the ceiling or packed onto shelves, and most of them had holes to facilitate this practice (Oberhelman 2014:49). Many were found buried in pits during renovations carried out on the Corinth sanctuary centuries later (Oberhelman 2014:49).

The fact that the votives were donated to the god before the healing occurred is strongly suggestive of imitative magical practice. As in the Asklepios, faith and positive thought for a favourable outcome from the god played a vital role. A woman wishing to breastfeed her baby would offer Asklepios a breast or a pair of breasts. Another example would be a man suffering from a lame arm pleading to the god and offering him an anatomical arm (Laios et al 2013:450).

Lock, Last and Dunea (2001:710) as well as Giousmas (2013) write that *tamata* (meaning 'vows' in English) are votive offerings found not only in Greece, but in many regions of Europe, such as Italy (Rouse 1894:11–12).

Principle: Votive eyes and ears represented blindness or deafness, while female reproductive organs represented sterility, miscarriage or even cancer. Arms, hands, legs, and feet may have represented fractured limbs, possibly those that had healed in a misaligned position. An upper torso could have indicated illnesses ranging from parasites to digestive or other abdominal disorders. The male genitalia may have been donated for the return of sexual vigour or virility. Imitative magic is based on the 'Law of Similars' or 'like cures like' (§2.3.2.1).

4.4.2 Imitative/homeopathic healing in the modern Christian churches

Themelis notes that the ancient practices of anatomical votive offerings continue to this day in the Greek Orthodox and Roman Catholic churches. When I visited Greece in 2016, I noticed metal *tamata* hanging near the altars in the beautiful churches I visited there. *Tamata* are also known as *milgaros* (meaning ‘miracles’) in Spanish and are quite common as modern votive offerings in the Roman Catholic Church in Latin America and Italy (Rousse 1894:11–13). ‘A leg may be entreated for the speedy healing of a broken tibia or a plea for good luck in the upcoming football match’ (Vance & Vance 2016). Votive offerings continue to be used as part of magico-religious folk medicine by the Greek American community in Philadelphia (Teske 1985:208). Of the three categories of offerings common within this tradition, the use of the ‘individual offerings, especially gold- or silver-plated effigies of the bodily part to be cured’ are ‘hung before the icon of the benefactor’ (Teske 1985:209). It is helpful that this ancient practice continues into modern times, as it might thereby illuminate the ancient practice. Figure 4.5 depicts a bronze votive of a single eye found in the museum of ancient Messene, which is very similar to the present day *tama*.



Figure 4.5: Bronze eye: votive offering from a patient in ancient Messene.
(Themelis 2003:13).

Laios et al (2013:453) maintain that, with the advent of Christianity, Christian Hellenism incorporated the practice of placing plaster casts of body parts inside the Asklepieia with votives made of metal embodying an illustration of that particular body

part. The votive then acquired the name *tama*⁹⁶ and is made of Alpaca Silver,⁹⁷ tin or gold, which represents a vow. Figure 4.5 shows a *tama* consisting of a single eye. In modern times, *tamata* often take the shape of small rectangular flattened metal discs, which can be purchased at shops specialising in church supplies, such as those in the Plaka area, or from shops in Apollonos Street, near the Little Cathedral in Athens. After purchasing a suitable one, perhaps a pair of eyes, the supplicant then takes the *tama* and hangs it in the church they regularly attend. There is a hole in each one to thread a tie through. Each *tama* is usually hung near the icon of a saint, or it is placed nearby. Afterwards, a votive candle can be lit and the supplicant says a prayer to entreat the saint for healing. A common vow would be to promise a donation to the church or to live a good Christian life (Giousmas 2013). Many relief-embossed *tamata* are available for virtually any body part required, for example, a liver to treat hepatitis, or a heart to bless a new marriage (Vrettos 2016).

The *tamata* are symbolic of the miracle healing that the petitioner hopes for and can be given before or after the miracle occurs. Vrettos (2016) explains that the *tama* is the material link between the patient and God's Holy Spirit.

Father Giousmas (2013) opines that *tamata* also help persuade the saint to whom a votive has been dedicated to accede to the patient's request. Father Giousmas agrees on the antiquity of anatomical votive offerings and agrees that sufferers in ancient times placed their effigy of the afflicted body part beside the statues of their ancient gods.

Principle: The Greek Orthodox Church and Roman Catholic Church have incorporated the ancient anatomical votive offerings into its ritual observance. The plaster body parts are now replaced by flat, metal rectangles with holes in them called *tamata* to facilitate their hanging in the churches to beg the patron saint for a healing miracle. Imitative magic is based on the 'Law of Similars', or 'an effect resembles its cause' or 'like follows like' (§2.3.2.1).

⁹⁶ The word *tama*, plural *tamata* in Greek means *vow* or *vows* in English.

⁹⁷ Alpaca Silver referred to as 'alpaca' is a metal alloy containing copper, zinc nickel and sometimes iron. It resembles sterling silver but is brighter; It was developed in 1823 in Germany when an alloy was sought to mimic silver: <https://www.mgsrefining.com/blog/2020/07/01/what-is-alpaca-silver/>

4.5 APOTROPAIC MAGIC IN GREECE

4.5.1 The evil eye

Coulson (1980:289) defines the evil eye as follows: 'A malicious or envious look superstitiously believed to do material harm', also 'a supposed faculty of inflicting injury by a look'. Rosner (2000:119) informs his readers that the belief in the evil eye was very widespread in antiquity and even beyond that to the seventh century BCE (Berger 2013:786). In Hebrew, *ayin hara*, or the evil inclination, is taken very seriously. It is equated with negative emotions such as greed, jealousy and spite, and votive offerings linked to the disease would be dedicated to a deity prior to healing in expectation of a cure (§2.2.2.1 [e]).

In the Macedonian rural areas, people with blue eyes are regarded as 'being capable of casting the evil eye', *matiasma or mati* (Hardie 1923:161). Berger (2012:1101) notes that blue-eyed people are rare in the Mediterranean area. It is obvious they would stand out in a crowd and were often suspected of being a magician in the Middle East because they were different (§ 2.2.2.1 [c]).

Dickie (1991:18) tells his readers that Plutarch is of the opinion that the human eye has the capacity to release energy rays powerful enough to cause the demise of small children and animals. Hargitai (2018) adds that it is Plutarch's view that there were people who lived south of the Black Sea (referred to as the *Tibii*) who were most adept at inflicting the curse of the evil eye on others (§ 2.2.2.1 [e]).

The 'evil eye' was considered a very potent threat. To protect themselves from the danger of the 'evil eye,' people employed a wide variety of protective charms, amulets, and gestures such as spitting, that are intended to counteract the negative effects of the evil eye. It is a 'quiet symbolic spit' not unlike trying to remove something stuck on the tip of the tongue and is often performed unconsciously. Most evil eye amulets comprise a blue background with an eye in its centre, such as the bracelet in Figure 2.8. This is an example of *imitative magic*, where an image of an eye is employed to repel the effects of a curse believed to be inflicted by a malicious gaze – *an eye for an eye*. The use of the colour blue is also significant since, as stated above, the evil eye is also associated with people who have blue eyes.

Berger (2013:786), a social psychologist, proposes that the basis of the belief in the evil eye is envy. Someone's good fortune may cause others to envy them. Berger explains that most of us experience jealousy, as it is 'wired into our brains' and results in competition to attain success, which most people would experience at times. The evil eye, however, is more than ordinary jealousy, expounds Berger – it is a deep-seated insidious resentment or extraordinary covetousness and includes feelings such as lust, greed, and malice (Berger 2013:786).

Symptoms of affliction with the 'evil eye' can vary from gastric and digestive symptoms to malaise. There may also be headaches and convulsions. An infant would be constantly niggly, restless or crying (Abu-Rabia 2005:241).

Principle: To ward off evil, to protect or repel evil. An amulet, resembling an eye, is used to avert the negative effects of the casting of the evil eye on a person (see 2.2.2.1 [e]).

4.6 SYMPATHETIC MAGIC IN ANATOLIA

In ancient Greek and Roman times sick people would make a pilgrimage to the healing sanctuaries of various curative gods and goddesses, such as Apollo and Hygieia, one of the daughters of Asklepios (Guner et al 2019:384-388). The temple of Asklepios in Pergamon (Bergama) was no exception and many sprang up in Anatolia. In antiquity the congested ports were rife with brothels and STDs (sexually transmitted diseases) were quite common (Guner et al 2019:384-388). Urogenital problems increased greatly, and patients presented votive offerings of male and female genitalia in the hope of a cure. Such a bronze genital votive offering appears below (Guner et al 2019).



Figure 4.6: Bronze genital votive from Anatolia presently in the Harvard Art Museum.
(Guner et al 2019:384-388).

The asklepion in Pergamon was founded in the fourth century by Archius of Pergamon, who had sustained an injury during a hunt (Konuk 2020). Unfortunately, no further details are available about him. A story is told about an unknown patient, who came to Pergamon for healing, but as he was moribund, he was placed outside the sanctuary by Galen. While waiting for his death, he noticed two snakes drinking their milk and then regurgitating it back into the same bowl. The patient, desperate for a speedy end to his suffering, consumed the 'poisonous' contents. The patient then fell into a deep sleep and when he awoke, he was fully restored to health. Galen then commissioned a *stela* with the healing symbol of the snakes coiled around a staff (Konuk 2020), an image of which appears below. It is important to understand that snake venom, even when ingested does not cause death provided the patient does not have duodenal ulcerations that would enable the venom to enter the bloodstream (see 2.3.2.5). It is uncertain what type of snakes were drinking from the bowl. It was probably the non-venomous Aesculapian Rat Snakes that meandered the precincts of the various asklepions in antiquity. The belief that the milk from the snake's gut was poisonous needs some explanation. Snakes do not sip water like humans or lap it up because their tongues are forked. Instead, their mouthparts are modified for drinking (Kirkpatrick 2018) in that they contain spongy tubes that allow water to pass through them and the snake's surrounding muscles project the fluid into the snake's gut (Kirkpatrick 2018). Cundall (2000:2171-2185), however, maintains that when a snake drinks, its mouth may be closed or open. Snakes' water inflow patterns are thus variable and by no means a simple process. If some venom should escape into a body of water, it will be greatly diluted.



Figure 4.7: A stela depicting a carving of the snake healing symbol.
(Photograph by A. Konuk 2020).

Cekirge and Gurdai (2011) describe another asklepion in Anatolia called Alliano, which had existed since the second century BCE. Here bronze surgical instruments were unearthed, (Figure 4.8), proving that surgery was possibly performed on patients there. Today, however, this healing sanctuary lies beneath the waters of the Yortanlı Dam constructed in 2011 (Cekirge & Gurdai 2011:157).



Figure 4.8: Bronze surgical instruments.
(Photograph by A Yaras 2000).

4.7 SUMMARY AND CONCLUSION

As in Egypt, evidence of sympathetic and apotropaic magic throughout Greece and Anatolia is pervasive.

4.7.1 Principles of sympathetic magic that might apply to the Nehushtan

- Snakes played an integral role in the healing temples and sanctuaries of Greece and Anatolia known as Asklepieia (§ 4.3.3). The healing qualities of snakes played a major role in these areas. According to numerous accounts, snakes healed by physically licking wounds, lying on patients, or visiting those afflicted with a variety of medical conditions in their sleep (§ 4.3.4). It was believed that the snakes were able to absorb minerals such as copper (§ 7.4.1) and energies of the underground were thus able to heal humans. Snakes also gained much knowledge of plants and herbs because they were in contact with the roots below the surface. The snake sheds its skin because it cannot stretch as the reptile grows to adulthood. The snake therefore became a symbol of regeneration and even reincarnation, due to its shiny new appearance immediately after its shedding (Van Buuren 1936:53).

Principle: A serpent was attributed to Asklepios because patients who have overcome illness using medical science are believed to have undergone a process like that of the snake – they have sloughed off their illness or old age and grown young again.

- Snakes as healing symbols were quite well-known in ancient Greece, thanks to their association with Asklepios, the mythical hero-physician and god of healing, and his characteristic staff featuring an entwined snake. Descriptions of the rod of Asklepios (Figure 4.1) are also reminiscent of the description of the Nehushtan in Numbers 21:9, which describes a serpent ‘put on a pole’ or standard (Figure 4.2).

Another striking similarity is the physical act of ‘looking at’ the rod of Asklepios and the Nehushtan (§ 6.4.1.2) to receive healing.

Principle: Asklepios said ‘Only look upon the serpent [emphasis added] that twines about my staff, I shall change myself into this [emphasis added]’, and he transformed

himself into a snake. This relates closely to the story of the use of the Nehushtan as a healing tool in Numbers 21. The faithful early Israelites had *to look up to the serpent and they were healed* (§ 6.4.1.2).

- The Greek Christian Church has incorporated the ancient *anatomical votive offerings* into its ritual observance. The plaster body parts are now replaced by flat, metal rectangles with holes in them called *tamata* to facilitate their hanging in the churches to beg the patron saint for a healing miracle.

Principle: Votive eyes and ears represented blindness or deafness, while female reproductive organs represented sterility, miscarriage or even cancer. Arms, hands, legs, and feet may have represented fractured limbs, possibly those that had healed in a misaligned position. An upper torso could have indicated illnesses ranging from parasites to digestive or other abdominal disorders. The male genitalia may have been donated for the return of sexual vigour or virility. Imitative magic is based on the 'Law of Similar', or 'an effect resembles its cause' or 'like follows like' (§ 2.3.2.1).

Snakes played an important role in healing in Greece and Anatolia at the healing sanctuaries of Asklepios. This symbol of medicine can be seen today above the entrances of most hospitals and clinics.

In Chapter Five, the Canaanite context of the Nehushtan will be discussed.

CHAPTER FIVE

THE CANAANITE CONTEXT OF THE NEHUSHTAN

5.1 INTRODUCTION

The event in question (in Num 21) took place in the wilderness, before the entry of the early Israelites into Canaan, which was ruled by Egypt at the time. It will become evident that Egyptian cultural influence (cf. Chapter Three) immensely impacted the southern Levant and in particular the Negev and northern Sinai. The main aim is to investigate the immediate context in which the event took place, which should provide insights that may further illuminate our understanding of the Biblical narrative.

In 2 Kings 18:4, we find King Hezekiah's reference to the copper serpent as the Nehushtan during his iconoclastic reforms. It is the only such reference in the Hebrew Bible (cf. Hendel 1999:615). There is another reference to the copper/bronze serpent in the New Testament Gospel of John 3:14–15. In this regard, it will be interesting to trace the Nehushtan's probable journey to the Temple in Jerusalem. I am investigating this to ascertain whether the Nehushtan was an original Canaanite object and its possible significance in Jebus.

In addition, the objectives will further be to:

- Review evidence of ancient copper metallurgy in the Arabah Valley north of Eilat (in modern Israel) at Timna and Feinan (Biblical Punon in present-day Jordan) to determine the probability of the Nehushtan's manufacture during the period in question. Copper was mined in this area during the so-called Exodus period,⁹⁸ and the early Israelites could possibly have passed through this area, making use of the natural resources needed for production, or utilising the metallurgical skills of local inhabitants.

⁹⁸ The exact date of the Exodus has been a point of contention for many years. As Geraty (2015:55) notes, we have the 'traditional' 18th dynasty date (ca. 1450 BCE) and the current 'consensus' 19th dynasty date (ca. 1250 BCE) but there are also 'Exodus dates advocated from ca. 2100 BCE through ca. 650 BCE.' A discussion of this contentious matter falls outside the parameters of this study.

- Discuss the act of smelting as a ‘magical’ process and hope to shed light on its cultural context. During the Late Bronze Age, copper smelting was held to be a magical and mysterious process and the copper smelters were regarded as magicians. The copper metallurgists were in fact highly skilled technicians.
- Discuss whether there is a link between YHWH and the Canaanite god of metallurgy. Amzallag (2009:387) posits that both the Edomites and Kenites worshipped YHWH as the Canaanite god of metallurgy, while Tubal-Cain, a descendant of Cain, was regarded as the ‘father of every smith’ (Gn 4:22). Aharoni and Sperling (2007:77) also suggest that YHWH was the god of metallurgists.
- Examine available archaeological evidence to ascertain whether any vestiges remain of a snake cult that existed in Canaan and early Israel (§ 5.2). I will also examine the bronze serpents discovered during various archaeological excavations at sites like Megiddo, Tel Mevorakh, Hazor, Shechem, Tel Dan and Gezer, with special reference to the serpent found in the Egyptian temple of the goddess Hathor at Timna in the Negev. Since Egypt ruled Canaan during that time, one could infer that the material culture of Canaan (including copper/bronze snakes) was influenced by that of Egypt.⁹⁹
- The destruction of the Nehushtan by King Hezekiah of Judah (2 Ki 18:4) and the reasons for this action also merit investigation (§ 5.5.3).

5.2 REMNANTS OF A SNAKE CULT IN CANAAN

5.2.1 The Nehushtan in Canaan before the settlement

5.2.1.1 Megiddo

Münnich (2008:39) describes bronze snake figurines, one of which was found during excavations at Megiddo city state that measured 18 cm in length (Figure 5.1). This

⁹⁹ On this specific topic, Amzallag (2015:99) notes that: ‘The abundance of *uraeus* iconography in Late Bronze Age and Iron Age Canaan has led most scholars to interpret the *saraph*, a winged and/or burning serpent evoked in the Bible, as an Egyptian religious symbol borrowed by the Canaanites and thereafter integrated in the Yahwistic sphere. The strong affinity of the *saraph* symbol with a local serpent species, *Echis coloratus*, however, challenges this view. It reveals that the *saraph* was an indigenous Canaanite symbol later influenced in its representation by the Egyptian glyptic.’

snake figurine was dated to between 1650–1550 BCE. Münnich (2008:39) posits that the area of its discovery was associated with a sanctuary because the serpent was found only five meters away from the temple in an area where sacred rites were performed. Münnich (2008:39) adds that the dating of this serpent is not totally certain because it is very hard to distinguish between the various layers, but the author does not extrapolate any further on his reasons for this view. Perhaps the layers were intermingled to such an extent that dates were extremely hard to ascertain.

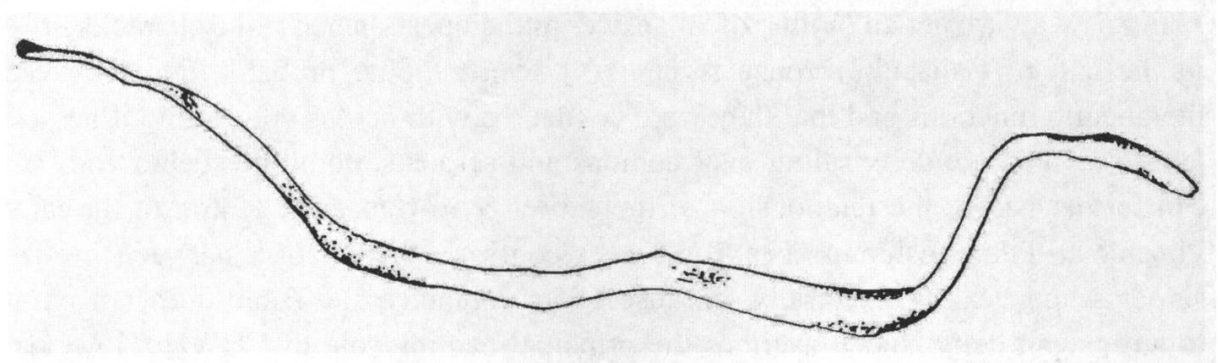


Figure 5.1: The bronze serpent of Megiddo.
(Münnich (2008 :50)¹⁰⁰)

The second snake figure measures 10 cm in length (Figure 5.2); it was discovered in Stratum VII B at Megiddo and dates to between 1250–1150 BCE. Münnich (2008:39) comments that this date is also by no means certain. It could vary between 1300 and 1100 BCE.

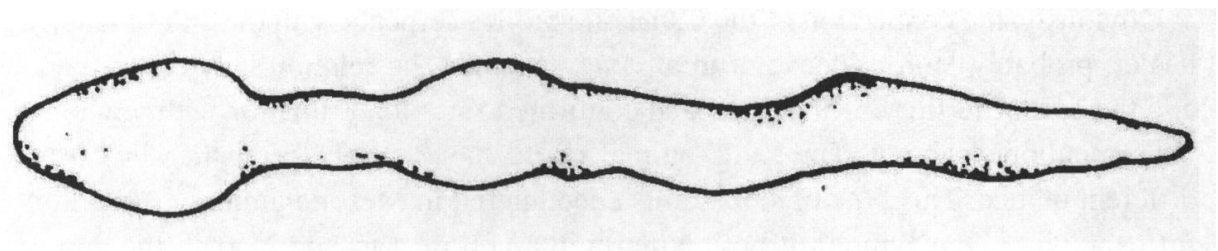


Figure 5.2: A bronze serpent found at Megiddo.
Münnich (2008 :50)

¹⁰⁰ The illustrations sourced from Münnich (2008) are cited by the author as 'drawn after Keel (1992)'. Keel's article (in German) is entitled: *Das Recht der Bilder gesehen zu werden: Drei Fallstudien zur Methode der Interpretation altorientalischer Bilder* and presents three case studies on the methods of interpreting images from the Ancient Near East.

Münnich (2008:45) also mentions the ‘Stone of Zheleth’, which was located next to the En-rogel spring in Jerusalem., and notes that this very spring must have been called ‘The Dragon Well’ in Neh 2:13 (cf. Keimer 2020). Joines (1968:254) notes that there was the ‘serpent’s stone beside the spring En-rogel’ (I Kings1:9), and the ‘spring of the serpent’ (Neh 2:13), is apparently the same spring, for the Old Testament writers knew of only two springs at Jerusalem. The first was the spring of En-rogel’, evidently known as the ‘spring of the serpent’ in the days of Nehemiah, and the spring of Gihon.

5.2.1.2 *Tel Mevorakh*

Another bronze snake (Figure 5.3) 20 cm in length and dated to LB III (1550–1400 BCE) was unearthed at Tel Mevorakh. It was also excavated very close to a sanctuary. Münnich (2008:40) opines that this is the *only* bronze snake that is directly connected with cultic observances. This is in contradiction to what Münnich says about the Hazor snakes – they are also found in a temple ‘Holy of Holies’ together with cultic vessels (see 5.2.1.3).

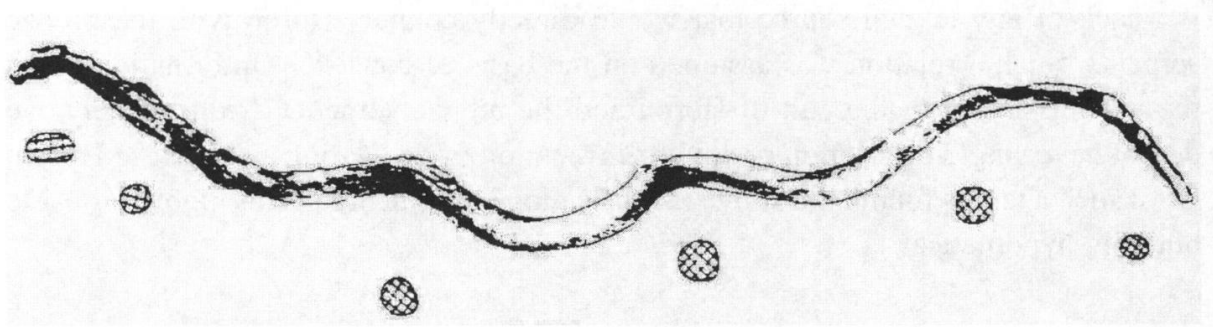


Figure 5.3: A bronze serpent found at Tel Mevorakh.
(Münnich 2008:50)

5.2.1.3 *Hazor*

Münnich (2008:43) explains that two bronze snakes were brought to light in the Holy of Holies at a temple at Hazor. The first one was found in Stratum IB (LBII) and dated to 1400–1300 BCE. This snake measures about 11 cm and is believed to be a cobra image. The second one was found in Stratum 1A (LBII), dated to 1300–1200 BCE. It measures 7 cm in length and has a handle at one end. Münnich (2008:43) posits that this snake may have been utilised as an *apotropaic amulet against demons*. The latter has a handle on one end which Münnich (2008:40) explains would have allowed it to be worn as an amulet, although it could equally well have been hung on a hook inside the sanctuary.

5.2.1.4 *Shechem*

Münnich (2008:40) also notes that two more metal snakes were discovered in Shechem inside a Late Bronze Age Temple dated to 1450–1100 BCE.

5.2.1.5 *Tel Dan*

Laughlin (2009:345) mentions artefacts that were found at Tel Dan. This is interesting because many broken remains of large pottery vessels (*pithoi*) were unearthed there, embellished with snake images in relief. There were also indications that copper was smelted at Tel Dan. Numerous examples of blow pipes, nozzles and copper slag heaps can be seen, and are dated from the tenth to sixth centuries BCE. Oil lamps and incense stands were also found (Laughlin 2009:345). There were also the remains of a *bamah* – a cultic place where religious practices took place during the tenth to sixth centuries BCE (Laughlin 2009:344) – but this is now believed to be the platform of a temple (Laughlin 2009:344).

The symbol of the snake and staff may have migrated to Greece from elsewhere. The Hebrew tribe of Dan were possibly seafarers (Judges 5:17), and Eames (2020) suggests that it is possible that the tribe of Dan had mercantile and commercial links with Greece and became aware of the healing activities of the cult of Asklepios and perhaps adopted them. Archaeological excavations undertaken at Tel Dan have unearthed Greek artefacts that have been dated to the Israelite period (Eames 2020). In Genesis 49:17 the tribe of Dan was compared to a snake (Gn 49:17) (Eames 2020). Artefacts from Bamah A at Tell Dan (Tel el-Qâdi) and vicinity, from the late tenth century and early ninth century, contain *pithoi* decorated with snakes. This snake decoration most probably represented the Nehushtan from the times of Moses (Num 21; Walton, Matthews and Chavalas 2000:405). Golding (2013:250) is of opinion that the snake symbol was used apotropaically (Gn 49:17) to protect the Israelite tribes, as the flag of Dan still contains a depiction of a serpent.

5.2.1.6 Gezer

Münnich (2008:41) relates how another bronze snake (Figure 5.4) was discovered among potsherds on the floor of an undefined structure¹⁰¹ in Gezer. The Israel Museum (the object's holding institute) stipulates the object to be approximately 18 cm in length. However, the records do not mention the object's dating (Münnich 2008:41).

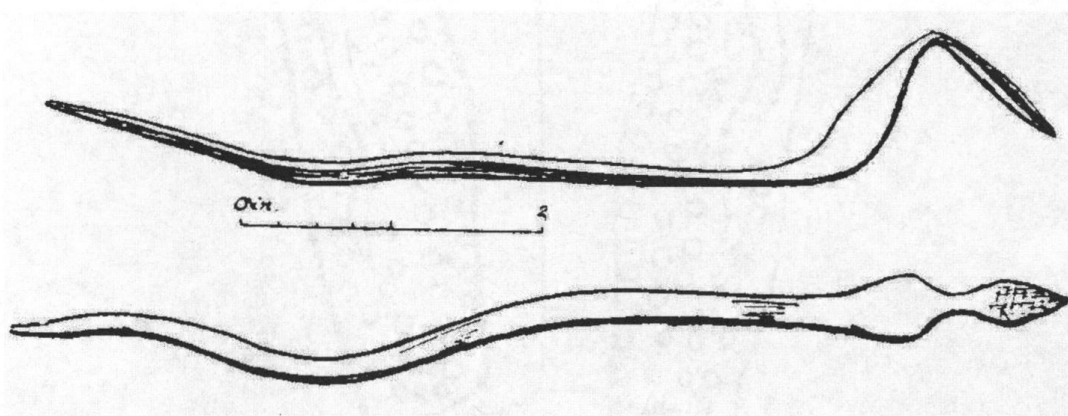


Figure 5.4: Two bronze serpents found at Gezer.
(Münnich 2008:51)

As these snake effigies were discovered close to sacred places of worship, it seems reasonable to suggest that these reptiles may have been worshipped near their respective discovery sites. Münnich (2008:41) insists that most of these copper snake images can be traced to sacred cultic practices but does not suggest a deity linked to these snakes or what their function in the temple may have been.

5.2.1.7 The god Horon/Hauron

Münnich (2008) avers that the Nehushtan can be linked to the Phoenician healer, Eshmun, and the Greek doctor, Asklepios, because both were associated with snakes coiled around staffs and healing (§ 4.6.1.1). We do not know whether the Nehushtan was entwined around a standard for the Hebrews in the desert to gaze upon. The biblical text only says that 'it was put on a pole' (Num 21:9). From a time-perspective, Moses preceded both Eshmun and Asklepios (§ 4.3.1). Münnich (2008:48) associates the cult of the Canaanite god Horon with Nehushtan because both have the power to heal snake bites. This could perhaps confirm a type of snake cult in Canaan, and I

¹⁰¹ Münnich is not aware of the purpose of the building.

refer to the copper snake images and an object like the Nehushtan as mentioned above. These Canaanite bronze snakes seemed to have some therapeutic function and it is possible that Horon was connected to them. Unfortunately, there is no text or artefact to prove this theory. Münnich (2008:49) admits that this is an assumption because of the possible healing functions of the serpents. Until such proof can be brought to light by archaeologists, his idea is only an assumption (Münnich 2008:49) and may be a possible topic for further research.

Münnich (2008:46) defines Horon as a West Semitic deity known for a long time, with references coming from the *Mari texts* from the 18th century BCE, and in Egypt from the time of the 12th Dynasty of the New Kingdom. Horon was very popular in Egypt and the cult of the god Horus and appears in the form of a hawk carrying a snake in its talons. There are two texts from Ugarit, *KTU I.100* and *I. 107*, which show that Horon is most effective in his snake bite healing skills (Münnich 2008:48). The snakes were believed to be linked to demons and Münnich believes that Horon is connected to a god of snake bite healing nicknamed 'Nehushtan' and the other healing bronze serpent gods (Münnich 2008:49).¹⁰² Handy (1995:41) supports the idea that the Nehushtan was a representation of an archaic and unknown god of snake bite cure. He basis this idea on King Hezekiah's reference to the copper/bronze snakes as 'Nehushtan', which is a so-called pun on the Hebrew word for snake (*nehash*), and the word for copper or bronze (*nehoshet*), which all have the same root (*nun, het, shin*), as present in all three words (cf. §6.4.1.7).

5.3 THE ANCIENT COPPER INDUSTRY AT TIMNA AND FEINAN

In this section I am investigating the origin and importance of the Nehushtan that was used by YHWH as a healing tool to heal the early Israelites from the snake plague described in Numbers. It further serves to shed more light on our understanding of the part Nehushtan played in the Biblical account. The people's healing could be an example of *imitative magic*, which was also used in the context of the Ancient Near East.

I will also examine copper mining, smelting and metalworking traditions to determine whether the natural resources, methods and techniques required to create an object

¹⁰² Münnich reminds his readers that the Bible credits all healing as coming from YHWH.

like the Nehushtan existed within the region and period in question. The existence of metallurgical sites, with examples of copper snakes found nearby, support the theory that the early Israelites had access to such resources and skills, either directly, or through skilled artisans from elsewhere.

It is highly possible that the early Israelites commissioned the known itinerant metallurgists of the time, the Kenites (Sperling 2007:76), who lived in the vicinity of the copper mines, to manufacture the Nehushtan. As there is no textual evidence to support this notion, the ancient copper smelting methods employed at the locations of Timna and Feinan (Figure 5.5), provide tacit context that Moses (or someone in the group) could have had access to the materials, technologies and metallurgists needed to manufacture the Nehushtan (§ 5.4.1). The discovery of a metallurgical casting workshop (Rothenberg 2007:74), as well as a copper snake at the Egyptian Temple¹⁰³ of Hathor, at Timna (Rothenberg 2007:727), which dates to the period between the Late Bronze Age and the Early Iron Age (ca 1200 BCE), proves that it is possible that the Nehushtan was made of copper or an alloy of copper (§ 2.5.3).

¹⁰³ The term 'shrine' and 'temple' is used interchangeably when referencing the installation dedicated to Hathor.



Figure 5.5: The locations of Faynan (Feinan) and Timna.
(Yagel, Ben-Yosef and Craddock 2016:2).

The Nehushtan's exact metal composition is unclear, since fluctuating descriptions of the Nehushtan as a copper, bronze or brazen (brass)¹⁰⁴ serpent appear in various publications of both the *Tanach*, the *Midrash* (Midrash Rabbah 19:22) as well as the New Testament (Jn 3:14–15). In the *Amplified Bible*, it is called a bronze serpent (Nm 21:9), while in the Jewish Study Bible, it is termed a copper serpent (Nm 21:9). In the New Testament Gospel of John, we are told that the Nehushtan was a bronze serpent (in the *Good News Bible*). Furthermore, the Hebrew word *nakhoshet* can be translated

¹⁰⁴ The word translated as 'brass' in the King James Version would be more correctly rendered as 'bronze', since the alloy used was copper and tin (Exodus 27:4)' (Patch nd).

as either brass (an alloy of copper and zinc) or bronze (an alloy of copper and tin)¹⁰⁵ or copper because the same word is used for both. The Hebrew word for any type of snake is *nahash* (Alcalay 1990:1619; see § 1.1). It is important for this study because the word 'Nehushtan' is an invented name that involves a subtle wordplay on the part of the author of the second book of Kings (18:4) when King Hezekiah names the copper/bronze snake. The *Midrash* goes further to say that it is a copper/brass/bronze snake (*Midrash Genesis Rabbah* 21:8).

Amzallag (2016:225) discusses the semantic proximity of the words serpent and copper:

In the southern Levant, the essentiality of the serpent metallurgy nexus is emphasized by the semantic proximity of serpent (*nahash*) to copper (*nakhoshet*). The reference to the copper serpent as Nehushtan (2 Kgs 18:4) also emphasizes the essential relation of copper and serpent in this cultic context. The metallurgical dimension of the serpent in Canaan is confirmed using copper serpents as cultic artifacts and, especially, by the copper serpent discovered in the tent-sanctuary of Timna (13th century BCE) in the southern Arabah mining area. The identification of cultic metallurgy in this tent sanctuary confirms that the serpent artifact was essentially related to the metallurgic craft.

Amzallag (2015:112) makes a further note on semantics:

'The representation of the seraph as a copper serpent spontaneously associates it with copper metallurgy. Such a kinship is supported by the appellation of this artifact as Nehushtan (2 Kgs 18:4), a term stressing the semantic proximity of copper (*נחשת*) and serpent (*נחשית*). It is also revealed by the association of the copper serpent found in the tent-sanctuary of Timna with the cultic metallurgy that took place there.'

5.3.1 The magic of copper smelting in antiquity

Amzallag (2009:7) believes that in the days of the Bronze Age, the smelting of stone ores into metal was a significant and almost magical or mysterious process (cf. Finley 1970:599–600). To add to that idea, I would say that the colour change of blue-green malachite (copper carbonate) or royal blue shade of copper sulphide, as the fiery furnace transformed it into a substance that glows a burnt sienna when cold, is rather enchanting (Figure 5.6).

¹⁰⁵ An alloy of copper (Dt 8:9) and tin (Nm 31:22).



Figure 5.6: Copper smelter barrel pouring molten copper casts.¹⁰⁶

Finley (1970:599) remarks that the transformation from ore to metal is indeed an irreversible one and a specialised process in that the ore is melted at over 1000 degrees Celsius. Furthermore, this dramatic transformation of stones into a product that could then be used and re-smelted (recycled) would certainly have appeared to be a mystical or magical process. In some way, this concept of metal recycling (rebirth) and re-use (rejuvenation) is reminiscent of a snake's (seemingly) regenerative ability to shed its skin and gain *a new lease on life* – with its shiny new skin perhaps resembling newly cast copper or bronze.

Rotea et al (2011:8) also maintain that copper miners and smelters in Romania during the Bronze Age were regarded by their communities as magicians performing a sacred trade. The reason for this is that minerals were hidden deep underground and had to be extracted from the bowels of the earth, a dangerous place where chthonic spirits and demons abounded. It was a popular conviction that metals 'grew' inside the 'womb' of Mother Earth and that tunnelling to retrieve them disturbed these natural forces. Before entering the mine, the workers had to appease these malign entities. This was achieved by the most stringent cleansing rituals of mind and body that were highly secret but well-known in Romanian folklore (Rotea et al 2011:11). In fact, it was

¹⁰⁶ <https://www.dreamstime.com/copper-smelter-barrel-pouring-molten-copper-casts-copper-smelting-industry-complex-process-making-copper-plates-out-image121780729#>

believed that the miners' intervention accelerated the gestation of the growing mineral. In this way, the metallurgists assisted the Earth to give birth even faster. In modern Romania, before a new mine shaft is opened, a mass is held to dedicate the shaft to a patron saint and sometimes the shaft is 'baptised' (Rotea et al 2011:12).

5.3.2 Timna

Rothenberg¹⁰⁷ (1990a:1) was engaged in excavating copper mining sites in Timna in the Arabah Rift Valley from 1964–1988, an area where numerous smelting sites were discovered. Figure 5.7 provides a location map of the Timna Valley and regional location map of Faynan, Timna Valley and Umm Bugma (refer to Beyth, Segev & Ginat 2013). What is significant for the purpose of this study is that one of the ephemeral streams that drain the Timna Valley is known as *Nahal Nehushtan* (Beyth, Segev & Ginat 2013:4). Perhaps this may be a remnant of an ancient association with the Nehushtan described in Numbers 21.

¹⁰⁷ "Rothenberg has been dubbed the founding father of archaeometallurgy who excavated in the Sinai and Timna region of the Arabah valley sometimes with a very small team his ground working in the Arabah spanned many decades from the early 50s to the late 90s of the last century.'



Figure 5.7: Location map of the Timna Valley (a) and regional location map of Faynan, Timna Valley and Umm Bugma (b).

(Beyth, Segev and Ginat 2013:5).

King and Stager (2001:165) maintain that copper was the first metal used in antiquity (cf. Wertime 1973:878), and it is also believed that it was the first metal used to make jewellery. Najjar and Levy (2011:33) believe that copper metallurgy was developed because of the ancient manufacture of lime during the pre-Pottery and Neolithic period (7300–6300 BCE). Najjar and Levy (2011:33) believe that it was during the process of smelting rocks to obtain lime that various metals were produced, such as copper oxide and copper carbonate.

Muhly (1973:169) describes the many different types of copper ore, for example copper oxide, copper carbonate and copper sulphide, and elaborates that each one requires a different smelting technique. The ancient Timna miners used copper oxide and copper carbonate in preference to copper sulphide because they were easier to access. Muhly explains that copper ore varies in its raw copper content, and the

ancient miners found it more convenient to smelt the ores close to the mines. The transportation of a copper ingot was far easier than that of the rock containing the metal ore. The slag, gangue, and debris such as copper globules, possibly stone tools, and pottery fragments that remained behind after the miners in Timna had evacuated the site, have proved vital in dating the mining operations (Muhly 1973:170). The Nehushtan was probably made of either copper oxide or copper carbonate ore (Figure 5.8).



Figure 5.8: Copper carbonate ore from Timna, Israel.¹⁰⁸

A copper industry has existed in Timna in the western Arabah¹⁰⁹ since the fourth millennium BCE (Avi-Yonah & Gilboa 2007:293). Rothenberg (1972:293) opines that the miners operating in this area during the Early Bronze Age originated not only from Arabia, but also from Palestine and Egypt during the Old Kingdom period (c. 2680–2180 BCE) (Bimson et al 1985:116). Rothenberg (2007:727) goes on to say that the ancient mines in the Timna region were about ten square km in extent.¹¹⁰ He believes that the Chalcolithic¹¹¹ settlers, who had knowledge of metallurgy, initially converged on the Timna Valley and appear to have been the most ancient smelters found to date – the Late Bronze Age and Early Iron Age are well represented in the archaeological finds in the area. Mining activities were clearly underway at the time the Nehushtan was manufactured (not that we know exactly when this event took place).

¹⁰⁸ Osiris.net/docu/mines_de_suivre_timna/e_mines_de_cuivre_timna_01.htm.

¹⁰⁹ Both Punon and Timna were situated in Edomite territory (1 Chr 1:52; Gn 36:40; §2.3.2).

¹¹⁰ For more information on the geology, stratigraphy, and structure of the Timna Valley that gave rise to ancient mining, refer to Beyth, Segev and Ginat (2013).

¹¹¹ A term for Copper Age (Bahn 1992:29). Coulson et al (1980:135) defines this as ‘a culture using stone and bronze implements’.

Copper was smelted in the Timna region, and to gain insight into how the ancients did it, we turn to Levy and Najjar (2006) for a modern comparative example. Thomas Levy visited southern India in 2005, and he observed that the traditional methods used there to smelt copper were very reminiscent of those utilised in antiquity thousands of years ago (Levy & Najjar 2006:31). The ore-containing rocks are pulverised and placed into a clay crucible and covered with charcoal that is ignited. To raise the temperature inside the crucible to smelt the metal, it is essential to force air into the furnace by means of tuyeres.¹¹² Slag remains behind as a by-product of the smelting process. The remainder of the metal in the slag is re-cycled. Simple sand moulds are formed in the ground near the crucible, measuring approximately 80cm X 15cm, and the molten metal is poured into them. Levy and Najjar believe that the resulting metal ingots are similar in shape to those produced in the Iron Age (Levy & Najjar 2006:33; see Figure 5.9). Charred reeds were found inside the broken tuyeres, which Rothenberg (1990a:74) believes were used to form a wicker-type framework around which clay was wrapped. The plant was identified as *Pharagmites Australis*, common near springs or in marshes in the Arabah and the Negev. This reed is still used for basket making today (Rothenberg 1990a:74).



Figure 5.9: Egyptian depiction of the copper smelting process, showing the use of foot bellows

(Image credit: The British Museum).¹¹³

Rothenberg (1990a:71) describes how the Egyptians of the New Kingdom (19th–20th dynasties) sent copper mining expeditions to the Arabah. They travelled there on donkeys, having reached the coast by ship. Donkeys were very valuable pack animals

¹¹² A tuyere is a clay pipe that funnels air from the bellows to the cavity of a furnace (<https://en.wikipedia.org/wiki/Tuyere>)

¹¹³ <https://www.britishmuseum.org/collection>

as can be seen on the *Beni Hasan mural* (Zeelie 2020:142).¹¹⁴ Rothenberg (1990b:71) believes that Egyptian donkey caravans transported the copper, while Mazar (1990:285) notes the unforgiving terrain through which these caravans would have travelled, via the Sinai desert, to reach the Timna Valley mines.¹¹⁵

Rothenberg (1972:162, 203) postulates that Timna was one of the Atika copper mines referred to in the *Harris Papyrus I* (Rothenberg 1972:201), housed in the British Museum. One of the main reasons for his belief is the fact that Timna, besides being rich in copper ore, was easy to reach from Egypt by both land and sea. Rothenberg (1972:229) believes that the mines in the Timna area had been in production for more than 6000 years, but not continuously. There were long periods of inactivity, sometimes for as long as 2000 years, because the mining areas were not always populated.

Sapir-Hen and Ben-Yosef (2014:776) excavated Site 34 in the Timna Valley, which measured three hectares, and found that a group of nomadic/semi-nomadic metalworkers had occupied it during the Early Iron Age (11th to ninth centuries BCE). As Site 34 was dated to the Late Bronze Age (1300–1150 BCE), it was initially assumed that all other Timna Valley sites were also dated to the Late Bronze Age (Sapir-Hen & Ben-Yosef 2014:777). However, Yagel, Ben-Yosef and Craddock (2016:1) note, following their revision of radiocarbon data, that the only secure Late Bronze context from Timna is the 'Hathor Shrine' (as discussed by Rothenberg 1988) and possibly a section of Site 2 (cf. Erickson-Gini 2014).

These finds have led to a renewed academic debate as to the identity of the inhabitants of Site 34; that is, were they Egyptians or local workers? Glueck (1959) dubbed this site 'Slaves Hill' in 1934 after completing his survey of the area. He assumed that a corvee of slaves worked this mining site. The stark desolation of the surrounding terrain of rocky cliffs led to this assumption. However, the discovery of ancient

¹¹⁴ Zeelie (2020:142) explains to her readers that powdered green malachite (copper carbonate) was used as eye shadow in ancient Egypt. Consequently, the stone also called copper carbonate was worth its weight in gold because it protected the eyes from the blazing desert sun (Coulsen et al 1984:84).

¹¹⁵ For detailed insight into the use of pack animals during the Early Iron Age in the Southern Levant, with special reference to Timna, see Grigson (2012).

domestic animal bones at the site shed new light on the ancient economy and societal diversity (Sapir-Hen & Ben-Yosef 2014:776).

Sapir-Hen and Ben-Yosef (2014:783) document that amongst their finds were the remains of ancient animal bones (those of caprines, viz goats, sheep, and to a far lesser extent that of donkeys), all of which had clear butchery marks on them. Further insight into the metalworking community was provided by the discovery of animal remains and livestock pens at an Iron Age gatehouse within one of the largest smelting camps (Site 34) in Timna Valley (Ben-Yosef, Langgut & Sapir-Hen 2017:411).

These ancient remains would suggest that the diet of the metalworkers was indeed varied, which stands in contrast to the idea that the metalsmiths were lowly folk and poorly paid. This was not the case at all – these workers were exceptionally skilled, well fed and highly regarded (Sapir-Hen & Ben-Yosef 2014:788). This information is important for my study because it corrects the misconception that the metal workers were slaves.¹¹⁶

This information is relevant to my study because it proves that Egyptian metal workers were able to smelt copper and the Nehushtan could well have been a copper snake rather than a bronze snake. Another reason why the Nehushtan may have been a copper snake is because copper was readily available ‘right on their doorstep’ so to speak.

5.3.3 The Hathor temple at Timna

5.3.3.1 The votive moulds found in the vicinity of the temple

Rothenberg (1999:162) reports on his excavation in Hathor’s temple in Timna, dating to the Egyptian New Kingdom period (14th to 12th centuries BCE), which confirms the Egyptian involvement in these mining activities. His finds consist of two furnaces, the remnants of crucible fragments, slag, tuyeres, and many copper objects fused with dark copper that were strewn around the site. These finds indicate that copper was smelted or re-melted there. The most fascinating artefact was, for the purposes of this investigation (§ 5.3.3.1), that of a discarded figurine, with the remnants of the mould

¹¹⁶ For a detailed discussion of the material culture of metal workers from the Early Iron Age Levant, with specific reference to Site 34 (Salve’s Hill), refer to Kleiman, Kleiman and Ben-Yosef (2017).

still clinging to it (Rothenberg 1999:163). This information is important for my study because a copper snake was found inside this shrine hence the discovery of a mould may indicate that the Nehushtan was fashioned using a type of mould.

When the Temple of Hathor was discovered on Site 200, it was taken for granted that it should also be dated to the Late Bronze Age. However, recent excavations have revealed that not all of these sites can be dated to the time of Egyptian ownership. According to Sapir-Hen and Ben-Yosef (2014:778), some ought to be dated to the Early Iron Age (1150–800 BCE), With Yagel, Ben-Yosef and Craddock (2016:1) noting that intense production took place during the Iron Age.

Rothenberg believes that the workshop was a centre for casting votive figurines, perhaps even those of bronze, as discarded tin fragments were also found in the temple. Rothenberg (1999:163) elucidates that the metal originated from the local smelting camps and the nearby mines. This would suggest that it would have been relatively simple for skilled metalsmiths among the early Israelites to use similar techniques to produce the Nehushtan. The copper-slag was destined for re-melting to purify it before it was cast into votive moulds. Rothenberg (1999:164) concludes that, in his opinion, the finds are rather rare and cannot prove that regular smelting took place in Hathor's temple.

Even more relevant to this study is that Rothenberg (1990a:57) also documents archaeological excavations in the area that yielded clay moulds (1990a:57) used to cast copper ingots (1990a:57, 63), as well as tuyeres (1990a:38, 53), and the remains of smelting furnaces and a *copper/bronze snake* (Rothenberg 1990a:8, 12; Hendel 1999:615; see Figure 5.14 below).

5.3.3.2 *The temple*

Avner (2014:105) writes that copper was mined and smelted in Timna by the Egyptians, who built two temples for their mining goddess, Hathor. The first mining period was during the time of Seti I (1323–1279 BCE) or Rameses II (1303–1213 BCE), which ended when the shrine was destroyed, most probably by an earthquake. The temple was rebuilt during the time of Rameses II or III. Again, an earthquake caused the shrine to crumble and collapse. The shrine was never reconstructed, and

the Egyptians lost interest in these mines. After the Egyptians left the mines, the Midianites took them over (§ 5.4.2). This group of semi-nomadic people continued the mining operations and erected *masseboth* west of the courtyard, and offering benches were added. The Midianites covered the shrine with a tented structure (Avner 2014:1105). The ruins of this shrine can be seen in Figure 5.10.



Figure 5.10: The ruined remains of the Egyptian temple of Hathor.¹¹⁷

Rothenberg (1972:183) discovered a most beautiful piece of faience depicting the face of Hathor (Figure 5.11). It was found 20 cm below the surface at the Egyptian Temple of Hathor at Timna. He later realised that this area was an Egyptian shrine to the goddess (1972:183) shown in Figure 5.11. Hathor was an important goddess and patroness of the miners, depicted sometimes as a cow, or a woman sometimes depicted with cow-like ears, and she was called 'The Lady of Heaven, Earth and the Underworld' (Geddes & Grosset 2001:374). The goddess was also the patroness of Egyptian expeditions to Timna in search of valuable stones and metals (Rothenberg 1972:176). The miners believed that she would appear to them in a dream and indicate where they ought to mine. Several stelae have been found where the miners expressed their gratitude to her.

¹¹⁷ <https://www.joysoftraveling.com/israel/tourists-guide-to-timna-national-park-in-eilat-israels-main-nature-park/>

The worship of Bastet and that of Hathor are related. Geddes and Grosset (2001:374) indicate that almost all the goddesses in the Egyptian pantheon were believed to have possessed some of Hathor's qualities. A faience fragment from the temple, engraved with 'Hathor', is depicted in Figure 5.11. Hathor was also called 'Lady of the Turquoise' (Rothenberg 1972:167).



Figure 5.11: A faience plaque of the beautiful goddess Hathor.
(Rothenberg 1996:36).

There were a great number of votive gifts that have been excavated from the Hathor Temple by Rothenberg (1972:176). For example, there were several curiously shaped, animal-like, rough copper castings that were found, but Rothenberg postulates that they may have been 'copper run-offs' produced from the miners' furnaces (Rothenberg 1972, Plates 99,100; 1972:149). Further examples of votive offerings to Hathor are an amulet of Bastet, delicately carved from a piece of bone, and depictions of other cat figures, including that of a leopard (Rothenberg 1972:166). This once again confirms and emphasizes the various influences of the Egyptian presence in Canaan during the pre-monarchic period.

Rothenberg (2007:727) postulates that the shrine of the Egyptian goddess Hathor was constructed at Timna during the Exodus period. He maintains that the diverse items discovered during excavations on the site have led to a more cognitive glimpse into

the relationships between the early Israelites, the Kenites and the Midianites,¹¹⁸ who all lived and worked there during the same period (§5.4.1 & 5.4.2). Rothenberg (2007:727) explains that the populations residing at Timna included the Egyptians (from 19th and 20th dynasties of the New Kingdom), the Midianite/Kenites, the Amalekites from the Negev, and the Midianites from Hijaz (North-western Arabia) (Rothenberg 2003:9). There were several rock engravings found inside Mine 25 (Rothenberg 2003:9), and the details of two of them are mentioned below: Rothenberg (1996:36) explains that the Midianites had been living at Timna since the Egyptians occupied it, and the Amalekites lived there during the Late Bronze Age (Rothenberg 1996).¹¹⁹

(a) Midianite rock engravings

The image below was cut into the rock and is common in the Middle East from early times to the present day. It shows a human figure, with widespread hand and fingers. It is wearing a sword and Rothenberg (2003) describes it as an 'iconic motif'. There is no further explanation given but this figure is evidence that Midianites were present at Timna (see Figure 5.12; cf. 5.4.2).

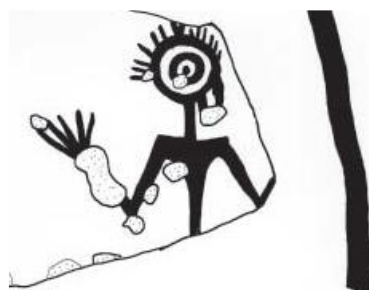


Figure 5.12: Midianite image on a pottery shard found in the Hathor shrine.
(Rothenberg 2003:12).

(b) Egyptian and Amelikite rock engravings

Figure 5.13 is an enlargement of a section of an Amelikite and Egyptian rock engraving also found in Mine 25, but it is not interpreted (Rothenberg 2003): It is evidence that Amelikites were indeed present at Timna.

¹¹⁸ Jethro, a Midianite, was not only Moses' father-in-law but also his mentor (Ex 18:1-29).

¹¹⁹ <https://www.bible.ca/archaeology/bible-archaeology-ti.../>

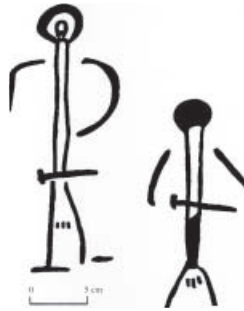


Figure 5.13: Figures carrying swords.
(Rothenberg 2003:11).

As mentioned above this temple dedicated to the goddess Hathor during the 12th century BCE implies Egyptian interest in the area during the New Kingdom period (Rothenberg 1990a:8; Bahn 1992:507; Mazar 1990:265). Pottery found at this Midianite/Egyptian sanctuary proved to be the same as that of the Late Bronze Age copper smelting sites in the Arabah and was petrographically dated to the period between 1318–1156 BCE (Egyptian dynasties 19th–20th; Rothenberg 1990a:185). These dates appear to correlate with the mining activity in the area during the ‘Exodus period’. Small Egyptian votive pottery vessels found at the Timna shrine in 1969 were dated from the mid-13th century to the mid-1st century BCE, and appeared to be votive offerings to the goddess, Hathor. Inscriptions found on the pottery placed them in the 19th and 20th dynasties between the reigns of Seti I and Rameses V (1318–1156 BCE; Rothenberg 1972:163, 166). The temple and mines were abandoned during the 20th Dynasty in Egypt. An earthquake partially damaged the area. The Midianites later took over the temple (ca 14th – 12th century BCE) and the copper mines (Dunn 2014 388). Amzallag (2009:399) notes that other bronze serpents were found at places like Megiddo, Gezer and Hazor, and believes that the snake was not only a cultic symbol, but also a symbol of holiness (see 5.2). The reason for this is because many of them were excavated in or adjacent to sacral areas.

5.3.3.3 *The copper snake found within the temple*

For the purposes of this thesis, the most important bronze snake, which was 12 cm in length (Figure 5.14) and was found inside the ruins of the temple *Hathor*, dated to a period between the Late Bronze and Early Iron Age (1300–1100 BCE) pictured in Rothenberg (1972:173).



Figure 5.14: Copper serpent with gilded head in the Egyptian/Midianite tented shrine.
(Rothenberg 1996-97:39).

The Nehushtan was probably formed using a rather sophisticated kind of mould, which can be deduced from the delicate copper snake discovered at the Temple of Hathor, as it is a good example of the fine craftsmanship of the metalworkers. Rothenberg (1972:173) describes how lifelike the copper snake seems with a gilded head, and two very large eyes. The body appears to be in motion, as if crawling. It is 12 cm long and it was excavated inside the *naos*¹²⁰ of the Hathor Temple at Timna, dating from a period between the Late Bronze and Early Iron Age (1300–1100 BCE) (Münnich 2008:41; Lewis 2005:99). Rothenberg is of the opinion that this is about the same time¹²¹ that Moses' snake was supposedly made in the desert according to the narrative (1990b:175).¹²²

¹²⁰ A shrine, often monolithic, within which the image of an Egyptian deity was housed (Bahn 1992:345).

¹²¹ The production date of Moses' snake and Numbers 21 JE dates between the ninth and eighth centuries BCE (Friedman 2003). Others have dated it to the seventh century. But what must be kept in mind is that the text was written long after the actual event, which makes it difficult to regard the text as historical.

¹²² As indicated above the dating of the Exodus or to prove the historicity of the alleged events are beyond the scope of this thesis.

Perhaps the copper snake found in Hathor's temple at Timna was a healing symbol because, like the bronze serpents discussed in § 5.2, they were also found near shrines.¹²³

5.3.3 4 *Evidence of human occupation*

I am tracing the human occupation in the mining area purely for interest's sake to ascertain during which periods the Timna mines were operational. Rothenberg (1972:128–129) discovered evidence of human occupation at Timna during five distinct archaeological periods.

Stratum V, where flint tools, blades, and scrapers, as well as several hammer stones and embellished pottery sherds were found, enabled dating of the area to the *Chalcolithic period*. Rothenberg adds that it cannot be ascertained whether this shrine was a sacred place or a campsite, because more of the structure would have had to be destroyed during excavation to determine whether it was used as a campsite or a sacred place (Rothenberg 1972:129).

In *Stratum IV* and *III* respectively, a buried plaque of the face of Hathor was found, as well as an engraving with faded hieroglyphic inscriptions that depicted Rameses III giving Hathor a gift, and an *Egyptian incense altar*. These artefacts were used to provide relative dates for these layers, dating to the 19th – 20th pharaonic dynasties (from the end of 14th century BCE to the middle of the 12th century BCE). The temple incurred damage during this period, but it was later rebuilt, after the reign of Seti I (Rothenberg 1972:128).

Stratum II was totally destroyed by an earthquake but appears to have been rebuilt by the *Midianites* (Rothenberg 1972:128). This can be inferred by the discovery of several

¹²³ Amzallag (2015:112) notes the following about the snake species *Echis coloratus*, which is commonly found in rocky regions of the Arabah Valley: "Due to its preference for rocky environments, *Echis coloratus* is encountered mainly in the mountainous parts of the Arabah and Sinai, where copper is mined. The linkage with copper is reinforced by the reddish colour of the morph specifically encountered in the southern Arabah and southern Sinai which evokes the ruddy metal. The creature's mysterious motion on the rocks may easily be associated with the serpentine motion of liquid metal on solid ground, and its burning venom even recalls contact with copper in its molten state." (Amzallag 2015:112).

*masseboth*¹²⁴ and brightly coloured, heavy, beaded fabric which Rothenberg (1972:151) believes was the remains of a tent, which may imply Midianite involvement on this site. This idea was strengthened by the discovery of two postholes in the floor that the worshippers must have used to secure the tent (Rothenberg 1972:151). This, Rothenberg suggests, could have been a *Mishkan* (the Hebrew word for ‘Tabernacle’), like the one erected at Mount Sinai (Ex 40:2). Figure 5.15 depicts a reconstructed Tabernacle at Timna Park in Israel.



Figure 5.15: Egyptian tented shrine (Tabernacle) at Timna.¹²⁵

Stratum I represents the period during which the *Romans* used the mines, probably during the 1st century CE (Rothenberg 1972:128).

5.3.4 Feinan

Biblical Punon, also situated in the Arabah Valley (Avi-Yonah & Gilboa 2007:293), was also called Feinan or Faynan (Hauptmann, Begemann & Schmidt-Streeber 1999:2). Avi-Yonah notes that Pinon was an Edomite prince (Gn 36:41) and suggests that he

¹²⁴ The plural of *masseboth*, which Bahn (1992:312) defines as standing stones erected in the Levant, seem to indicate a cultic purpose.

¹²⁵ According to the Median Project website, the life-sized tent is a replica biblical tabernacle “a tent that God is said to have instructed Moses to build in order to have a transportable sanctuary during the Exodus from Egypt to the Holy Land”. The tented shrine (Figure 5.15), “built by the Egyptians might have been a predecessor of the biblical tabernacle in form”. ([https://madainproject.com/hathor_shrine_\(timna\)](https://madainproject.com/hathor_shrine_(timna)))

might have been connected with the area. Avi-Yonah and Gilboa (2007) believe that the mines in the Punon area were worked from the Chalcolithic period (4000–3150 BCE), to the end of the Early Bronze Age I period and during Iron Age I, as well as during Roman/Nabatean and Byzantine times (Najjar & Levy 2011:32, 34). The mines in Biblical Punon were therefore operational at a time when the Biblical narrators place the early Israelites in the area (Nm 33:42-43).

In the Punon area, there are two main categories of copper deposits: the first one is the Massive Brown Sandstone (MBS) and the second one is the Dolomite-Limestone Shale (DLS), also known as the Burj-Dolomite Shale formation (Najjar & Levy 2011:33). The MBS ore was smelted during the Chalcolithic and Roman periods. Analyses carried out on copper artefacts discovered in the area have revealed that the plentiful DLS deposits were worked during most of the period that the mines were operational because this ore formed slag more readily and much of it was found during excavations. The fact that it contained manganese facilitated the smelting at a lower temperature than the MBS (Najjar & Levy 2011:33).

Hauptmann et al (1999:4) estimate the copper mines in the Feinan area produced between 150 000 and 200 000 tons of slag, mostly during the Iron Age (1200–900 BCE). Najjar and Levy (2011:34) add that the copper production was then at its height, until Roman times. Hauptmann et al (1999:4) are of the opinion that although copper was found at a site, this does not necessarily mean that it was mined in that same area, although they believe that most copper smelting took place in or near areas of human habitation. This would have eliminated the need for miners to transport the ore long distances. Levy et al (2012:211) believe that copper mining took place largely during the Early Iron Age, and that the exploitation of copper ore was a highly organised and sophisticated operation. This is intriguing because it is important to remember that the industry was far more highly developed than first thought.

Levy, Ben-Yosef and Najjar (2012:197) believe that the Feinan area's copper ore deposits comprise some of the highest amounts of this metal in the southern Levant. This is especially true near Khirbet en-Nahas (2011:198), which spans an area of ten hectares. Many copper smelting sites were found there, as well as the ruins of one of the largest Iron Age fortresses in southern Jordan. A cemetery was discovered in Wadi

Fidan, where a few tombs could be seen close to the surface of the ground. Levy et al (2012:199) also document the thousands of slag, tuyere, and furnace fragments, as well as several hundred remains of metals and ores that lay scattered in the area surrounding Khirbet en-Nahas. Associated artefacts have been dated to the Early Iron Age using the most modern technology available such as the new carbon dating method.

The largest Iron Age cemetery in Edom can be found in Wadi Fidan 40. Over 200 tombs and graves have been excavated from this mortuary complex. Levy et al (2012:206) maintain that the exact number of tombs at this site is unknown but speculate that it could be as few as 1500 or as many as 3000. The tombs are made up of cists¹²⁶ with sandstone lining. Cist is from the Latin *cista* (Kidd 1984:58), which means box or casket. Levy et al (2012:204) suggest that these were perhaps the prehistoric graves of a nomadic people. Many of their remains were subjected to toxic metal tests and researchers postulate that the inhabitants might have been metal workers and metallurgists (Levy et al 2012: 207). The authors believe that Wadi Fidan 40's database can link the human population during the Iron Age to mining and smelting activities (Levy et al 2012:207).

This is significant to my study as it is important to realise that the copper metallurgical activities in this area were on an enormous industrial scale.

5.4 YHWH AND THE CANAANITE GOD OF METALLURGY

5.4.1 The Kenites

I am discussing the Kenite tribe because there is a connection between Moses and the Kenites according to the biblical tradition. The Kenite¹²⁷ tribes, according to Knight (1993:17), comprised the Tirathites, the Shimeathites, and the Sucathites (Jerusalem *Talmud – Tractate Kiddushin* 5:1 per Rabbi Abbahu). Allon (1971:906)¹²⁸ maintains that the Kenites belonged to a large group of nomadic clans who engaged in metalwork (cf. Buttrick et al 1962:6). The Bible narrates that the Kenites 'lived among cliffs' (Nm

¹²⁶ A 'cist grave is a grave the sides of which are typically formed of stone slabs set on edge but may be constructed of rubble or brick and which is covered by stone slabs' (Bahn 1992:104). Coulson et al (1972:152) define it as 'prehistoric sepulchral chest or chamber of stone or hollowed tree trunk'.

¹²⁷ The Hebrew word for Kenites '*Kayin*' could also denote 'a spear' (2 Sm 21:16).

¹²⁸ I am making use of the 1st edition of Encyclopaedia Judaica because the Gitlin Library in Cape Town has closed their Reference Library due to the Covid-19 pandemic.

24:21) near Punon/Feinan, and Mondriaan (2011:421) adds that they roamed the Negev, Midian, and Edom – the area under discussion in Section 5.3.

In his vision he saw the Kenites, and uttered this prophecy:

“The place where you live is secure,

Safe as a nest set high on a cliff.”

(GNB, Nm 24:21)

Buttrick et al (1962:6) maintain that this verse refers to the Wadi Arabah. They postulate that the Hebrews may have learnt from the Kenites how to mine copper and fashion it into an object like the Nehushtan.

The Kenites are described as originating from the south of Canaan, that is Midian, Edom and the Arabah (Mondriaan 2011:422–3; Skolnik and Berenbaum 2007:76; cf. Aharoni & Sperling 2007:76). Amzallag (2009:393) however, argues that they originated specifically from Edom, where copper mining activities took place in antiquity. Both Rothenberg (1990a:8) and Milgrom (1990:173) agree and define that place as being in the area around Feinan (Biblical Punon). According to a group in one ‘list of nations’, the Kenites were part of the Canaanite group that included the Kadmonites and the Kenizzites (Gn 15:19; Skolnik and Berenbaum 2007:76).

The Kenites, like three of Cain’s progeny, were nomadic people (Mondriaan 2011:932–4). YHWH’s link to the Kenites is through copper smelting, for YHWH Himself is termed a smelter in Ezekiel 22:20 and the creator of the coppersmith (in Is 54:16; § 5.4.3). The ancestor of the Kenites was Cain and according to Genesis 4:22 Tubal-Cain was the father of copper and metalworkers (cf. Mondriaan 2011; Zeelie 2020). Kenites¹²⁹ such as Caleb and Othniel joined Moses into the desert (Judges 1).

5.4.2 The Kenites, Exodus and YHWH

Fensham (1964:51–54), however, interprets Exodus 18:12 as a covenant between the early Israelites and the Kenites. A covenant includes a sacrificial meal. Other examples of such covenants, which only take place between equals (Cody 1968:155)

¹²⁹ Buttrick et al (1962:7) propose that the Kenites either vanished or possibly intermarried with the early Israelites and adopted their culture and values. However, the biblical text (Sm 27:10) contradicts this view, as it mentions that the Kenites were living in the Negev amongst the Philistines, during the reign of King David. The latter infers that they were still distinguishable from other cultural groups at the time.

are: the covenants between Jacob and Laban (Gn 31:54) and between Isaac and Ambimelech (Gn 26:26–33; Cody 1968:159; Plaut 2006:471–2; Fishbane (2004:143; Mondriaan 2010:353).

Jethro was a Midianite priest (Ex 3:1) but is referred to as a Kenite in Judges 1:16 and 4:11; cf. Sarna 1966). Judges 1:16 and 4:11 make it clear that Kenites joined Moses's group into the wilderness and associated with Moses and his God, YHWH.

A possible explanation for this would be to adopt the traditional-historical approach recommended by Farber (2015). Farber proposes that Moses was such an important figure that many in Israel would try to claim that an alliance existed between Israel and her neighbours, such as the Kenites, Midianites and Kushites. An example of this is where Moses marries a Kushite woman (Nm 12:1), thus they claim that Moses married into their clan. Faber (2015) explains that this construct also existed in Ancient Near Eastern literature. Another explanation would be that Jethro was described as a Midianite priest who was perhaps also a metalsmith by trade, or that the Midianites or Kenites were closely linked.

The Kenites were metalworkers and people such as Caleb joined the Exodus to the Promised Land. Caleb was one of the twelve spies sent by Moses on a secret reconnaissance mission to the fortified cities of Canaan. They were instructed to return with that information and details of the people and the agricultural potential of the land. Caleb reported back that the Canaanite land was 'flowing with milk and honey' and he recommended 'that the people march against the Canaanites with faith in YHWH because He would be their helping hand'. The other ten spies were most reluctant to move against the Canaanites and they gave very negative reports saying that the Canaanites were 'giants' and could not possibly be defeated (Nm 13:1–33; cf. Dt 1:22–40). YHWH favoured Caleb because he had a positive attitude and loved his Creator with all his heart. Caleb was rewarded for his trust in YHWH by being granted a piece of land near Hebron (Jdg 1). Othniel was the first judge of the early Israelites (Jos 15:17; Jdg 1; 3)). He was the son of Caleb's younger brother, Kenaz, so was Caleb's nephew. He accepted the formidable task of the defeat of Debir and putting the Canaanites living there to flight. The reward offered for this task was to make Caleb's daughter, Achsah, his wife. Both Caleb and Othniel were Kenites.

5.4.3 The Kenites, YHWH and the Canaanite god of metallurgy

Amzallag (2009:387) proposes that the people inhabiting the south-eastern area of Canaan, famous for its copper mining and smelting, may have worshipped a benefactor god of metallurgy whose identity remains unknown. There are no details about how this god was honoured.

Amzallag (2009:387) explores the possibility that YHWH may indeed have been that god of metallurgy, who was exalted by the Canaanite metalworkers and argues that YHWH was paid homage to by the Kenites/Qenites, a minor tribe of smelters. It is stated in the Bible that Enosh, the grandson of Adam and son of Seth, was the first human to pray to YHWH (Gn 4:26), while Cain and Abel were the first people to sacrifice to YHWH (Gn 4:3–4). Amzallag (2009:393) maintains that the Kenites/Qenites are descended from Cain who is protected from harm by a mark that God permitted to Cain (§ 6.3.1).¹³⁰ The Bible does not categorically state that all of Cain's descendants were protected in this way. The Semitic root of Cain is *QN*, which means 'to create' and the Bible tells us that Eve begot a male child with¹³¹ YHWH (Gn 4:1) and that Tubal-Cain is the 'father of every smith' (Gn 4:22). Mondriaan (2010:329) avers that YHWH is linked to copper metallurgy through Tubal Cain, the grandson of Cain, the first copper metallurgist. This implies a very close link to Cain and YHWH.

Amzallag (2009:394) proposes a copper link to YHWH and explains that the residence of YHWH is symbolised by two copper mountains (Zech 6:1–6). Ezekiel, in his prophecies, describes a God-like entity as a man whose face glowed like copper (Ezek 40:3). The prophet also describes YHWH as a smelter (Ezek 22:20). In the book of Isaiah, YHWH is said to have created not only the copper worker, but also his metallurgy (Isa 54:16; Amzallag 2009:394). It is interesting to note that YHWH is also described as a potter in Genesis 2:7 and Jeremiah 18:6. I find this interesting because there are many biblical verses than align YHWH with copper metallurgy. This forms

¹³⁰ This claim by Amzallag is unsubstantiated, as we cannot say beyond a doubt that Cain was an actual historical figure, or that he was the antecedent of the Kenites/Qenites, let alone that he was protected by God.

¹³¹ Gn 4:1: 'Now Adam knew his wife Eve, and she conceived and bore Cain, saying "I have acquired a man from the Lord"' (NKJV).

the basis of the theory proposed by some scholars such as Amzallag (2009:387) that YHWH was the god of metalworkers in Canaan.

Much copper was used in the embellishment of the Tabernacle (Exodus 7) and the later Solomonic temple (1 Ki 7). Amzallag (2009:394) describes the two huge columns named Boaz and Yakhin (1 Ki 7:15–22), standing outside Solomon's temple, flanking the main entrance. These were purely decorative. Another copper feature in the Solomonic temple was the molten or Brazen Sea, a large basin, housed in the corner of the Temple courtyard. It contained water and was used by the priests for their ritual ablutions (1 Ki 7:23–26; 2 Chr 4:2–5). The Bible states that he (Hiram) made ten lavers of bronze (basins), each laver contained forty baths, and each laver was four cubits. On each of the ten carts was a laver (1Ki 7:38; *NKJV*). Perhaps they knew that copper and its alloys had anti-microbial properties (cf. Forrest 1982:200; Grass et al 2010; Keevil 2017).

While it is tempting to state that as there are links between YHWH and copper, and between the Kenites and YHWH, there is not sufficient evidence to claim that YHWH is indeed the Canaanite god of metallurgy. However, it does show that the authors understood there to have been competent metallurgists such as the Kenites in the Exodus-group, who could have been skilled in the manufacture of an object such as the Nehushtan. Although this is not the main focus of this thesis, it enables a deeper insight and understanding of the Nehushtan narrative in Numbers.

5.4.4 The Midianites and YHWH

I mention the Midianites because there is also a link between Moses and the Midianites. Buttrick et al (1962:375) regard the Midianites as a nomadic group of traders in Genesis 37:28, who according to the Biblical narrative trace their origins to Midian, the son of Abraham and his concubine Keturah in Genesis 25:1–2. Their designated area appears to have been in north-west Arabia, east of the Gulf of Aqabah (Buttrick et al 1962:7). After Moses fled Egypt to escape the rage and punishment of the Pharaoh, he fled to Midian (Ex 2:15), where he worked as a shepherd for Jethro, a priest of Midian. Moses later married Jethro's daughter Zepporah in Ex 2:21.

Cody (1968:153) relates how Jethro visits his son-in-law, Moses, in the wilderness (Ex 18:12). Jethro sent word that he was accompanied by his daughter and grandchildren. On meeting Moses, Jethro praises and blesses God for saving the early Israelites from the pharaoh's wrath and adds that YHWH is far greater than all the other gods in Ex 18:10. Then Jethro makes a burnt offering to YHWH and is joined by Aaron and the elders to partake of a meal together in the presence of God in Ex 18:12, Cody 1968:153). Cody (1968:153) explains that Jethro's sacrifice to YHWH is a clear indication that Moses learnt of YHWH from Jethro (Cody 1968:154).

Besides the local inhabitants of the Negev¹³², Midianites were also present in the area. Evidence of their presence is illustrated by the combination of Egyptian and Midianite techniques observed in the pottery shards discovered at the Timna mining sites. Figure 5.16 illustrates stone tools used in the mining industry.

Rehren and Pusch (2012:220) believe that copper recycling may have been carried out on the fringes of the Egyptian controlled copper mines in the Negev. This copper from Timna most probably found its way to Egypt via the Nile delta and perhaps even further afield, such as Upper Egypt (Rehren & Pusch 2012:220; cf. Zeelie 2020). Perhaps the Nehushtan was made from the copper found in the Timna area, or perhaps the biblical narrative relies on the reader's potential knowledge that copper mining took place in the region.

Charred reeds were found inside the broken tuyeres, which Rothenberg (1990a:74) is convinced were used to form a wicker-type framework around which clay was wrapped. The plant was identified as *Pharagmites Australis*, common near springs or in marshes in the Arabah and the Negev. This reed is still used for basket making today (Rothenberg 1990a:74).

¹³² The indigenous people of the Negev are the Bedouins, who arrived from the Arabian Peninsula many thousands of years ago (Raanan n.d.).



Figure 5.16: Ancient Midianite stone tools used in the copper mining process.¹³³

5.4.5 The Kenite-Midianite hypothesis revisited

Blenkinsopp (2008:131) maintains that the Kenite-Midianite hypothesis was established on four bases: in the first one, Biblical texts were used to describe the relationship between Moses and the Midianites (see §5.4.2). The second base uses some Biblical poetry to describe YHWH's abode (Blenkinsopp (2008:148; Ex 25:8; Ps 27:5), while the third discusses Cain as ancestor of the Kenites (see §5.4.1). The fourth one is to be found in Egyptian texts from between the fourteenth and twelfth centuries BCE. It is this, which I should now like to discuss.

¹³³ https://en.wikipedia.org/wiki/Timna_Valley#/media/File:Pickaxe.JPG

Egyptian texts from the New Kingdom during the reigns of both Amenhotep III and Rameses II were discovered in Nubia, present day Sudan, These texts expressed the grave concern of the Egyptian pharaohs, Amenhotep III and Rameses II regarding the Beduion (Shasu) living in the areas both east and west of the Arabah (Blenkinsopp 2008:139-40) as they were a both a military and an economic threat to their copper trade route to the mines of Timna and Feinan. There is an accepted correlation between a god and the region in which the god dwells. Hence the name Yahu, a shortened form of Yahweh, would refer to a region where the Shasu lived. Another example was Ashur, which was the name of a person as well as a city (Blenkinsopp (2008:140).

5.5 THE NEHUSHTAN IN THE SOLOMONIC TEMPLE.

5.5.1 Background information

During his rule, King Ahaz of Judah (ca 742–726 BCE), father of King Hezekiah, was under Assyrian suzerainty and requested their overlords' assistance during the Syro-Ephraimite war (734–3 BCE; 2 Ki 16:5–9; Bright 1972:277; Boshoff et al 2000:117). Hezekiah then succeeded to the throne and reigned in Jerusalem (ca 716/5–687/6 BCE; Adeyemo 2006:458) and was renowned for his religious piety and reforms as King (Adeyemo 2006:458; 2 Ki 18:3, 4). During his reign, Hezekiah was most fortunate to have the assistance and advice of two prophets: Isaiah (2 Ki 19:5) and Micah (Jr 26:18–19).

King Hezekiah was strongly opposed to polytheistic Assyrian worship, preferring instead to venerate YHWH (Skolnick et al 2007:87–8). Hezekiah's reforms are mentioned very concisely in the second book of 2 Kings (18:4); the open-air high places were removed, the *asherot* (poles) and sacred stones were demolished, and the *Nehushtan* was destroyed because people had begun to worship it (2 Ki 18:4) because it was believed to have therapeutic properties to cure snake bite (Avalos 1995a:338). According to Fishbane (2004:761), Rashi posits that King Hezekiah referred to it as a 'bronze serpent thing' (Nehushtan), which in Hebrew is a derogative term. Handy (1995:41, cf. Hendel 1999:615) postulates that *Nehushtan* may have been the representation of a minor, but hereto *unknown god of snake bite cure*, that stood in the Solomonic Temple (§5.2.1.7 & 6.4.1.7). Handy (1995:42) strongly believes that King Hezekiah refers to this hereto unknown god in the second book of Kings

(18:4) when describing the Nehushtan. This was a postulation by Rowley (1939:137) who suggested that perhaps the Nehushtan was worshipped in Jebus.

Bright (1972:282) maintains that when Sargon II's son, Sennacherib, ascended to the Assyrian throne in 705/6 BCE, Hezekiah realised that the new king was not as wise or experienced as his father had been. Hezekiah seized this opportunity, refused to pay Judah's tribute to Assyria, and prepared for hostilities. The Assyrians eventually marched to Jerusalem and besieged the city but were unable to conquer it. Sennacherib's wide-spread destruction of settlements in Judah with only Jerusalem spared would have fostered Jerusalem's perceived special religious status and the process of centralisation (Bloch-Smith 2018:19–28).

King Hezekiah was in an unenviable situation – he was walking a political and religious tightrope. Bright (1972:278–281) sums up the situation as follows: the polytheism of the Assyrians infuriated the prophets Isaiah and Micah, and all those loyal to YHWH. It was reminiscent of their apostasy, their spurning of YHWH's commandments.

On the advice of his prophet, Isaiah, Hezekiah sought a peace treaty (Bright 1972:284) and Sennacherib demanded an astronomical settlement. Lederman (2017) posits that the Nehushtan may even have formed part of the Assyrian booty that Hezekiah was forced to pay. In addition, several of Hezekiah's unfortunate daughters were forced to serve as Sennacherib's concubines (Bright 1972:284).

Bright's (1972:282) view is that the time was right for the introduction of reforms, but to do so would be seen as an act of rebellion and a king who tolerated this situation was liable to divine justice (2 Sm 7:14–16; Ps 89:30–37) (Bright 1972:278).

5.5.2 King Hezekiah's iconoclastic reforms

In the Second book of Kings (18:4) it states (referring to King Hezekiah):

He removed the high places, broke the images, cut down in pieces the bronze serpent that Moses had made, for until then the Israelites had burned incense to it; but he called it Nehushtan.

(2 Kings 18:4 AB).

Adeyemo (2006:194) believes that the Nehushtan had, through time, become a symbol of YHWH's healing power by pilgrims who burnt incense to it (cf. Hendel 1999:615). The King's motivation behind its destruction was to enable the people to focus their full attention on the worship of YHWH (Adeyemo 2006:458; cf. Plaut 2006:1030). Eventually, King Hezekiah destroyed the Nehushtan, which was probably worshipped in the temple as a cult object¹³⁴ (2 Ki 18:4). Dunn and Rogerson (2003:146) state that the author of the book of Numbers was careful to attribute it to Moses so that its presence in the temple would be justified, although its origins were clearly Canaanite (Brown et al 1990:88; cf. §5.2).

5.5.3 King Hezekiah's reforms reassessed

As indicated above, the Nehushtan is only mentioned once in the Tanach (2 Ki 18:4) except for the book of Numbers (21:4–9; Rowley 1939:137). Rosenbaum (1979:23) admits that it is very challenging to reconstruct biblical events, but Lewis (2005:98) adds that King Hezekiah regarded the Nehushtan as a great danger to his reforms. This is particularly applicable to Hezekiah's religious reforms, and whether they have any historical basis. To this, Lederman (2017) adds that there is no archaeological evidence (to date) of any religious reforms in the eighth century BCE (Rosenbaum 1979).

There is scholarly disagreement on the two biblical sources for King Hezekiah's reforms (Rosenbaum 1979:23). These two accounts are the book of Second Kings and the later work of the Chronicler, a more 'priestly orientated' account which describes the religious reforms instituted by Hezekiah's grandson, King Josiah. Rosenbaum (1979:24) argues that neither Isaiah nor Micah makes mention of such religious reforms, which tends to give more credence to the account in the Second Book of Kings.

Many archaeological excavations have been carried out across Palestine, and there is a wealth of discoveries that are dated to the Iron Age II (1000–800 BCE). Röthlin and Le Roux (2013) mention a domestic shrine at Tel Halif where 'andromorphic and zoomorphic' figurines, seals, as well as jars belonging to King Hezekiah were excavated. This seems to indicate that the reforms were not entirely religious ones,

¹³⁴ It is plausible, but not certain, that the Nehushtan was worshipped in the temple.

'but limited to the eradication of local shrines' to centralise the cult worship at the Solomonic Temple at Jerusalem (Röthlin & Le Roux 2013).

The discovery of bronze bowls by Sir Henry Layard (1817–1894) and WK Loftus, dating to the eighth century BCE, is noteworthy. Layard and Loftus excavated these bowls between 31 December 1849 and 7 January 1850 in the ruins of the palace in Nimrud, an Assyrian royal city (Barnett 19672:2). The bronze bowls lay in museum storage for more than a century, deteriorating in packing cases as time passed. On one of these bowl fragments there are engravings of Egyptian sphinxes, winged *uraei* (cobras) and shrines, possibly even a canopy (Barnett 1972:1). The rim of this fragment was found to depict an engraving of a snake, perched on top of a standard, which appears in Figure 5.17.

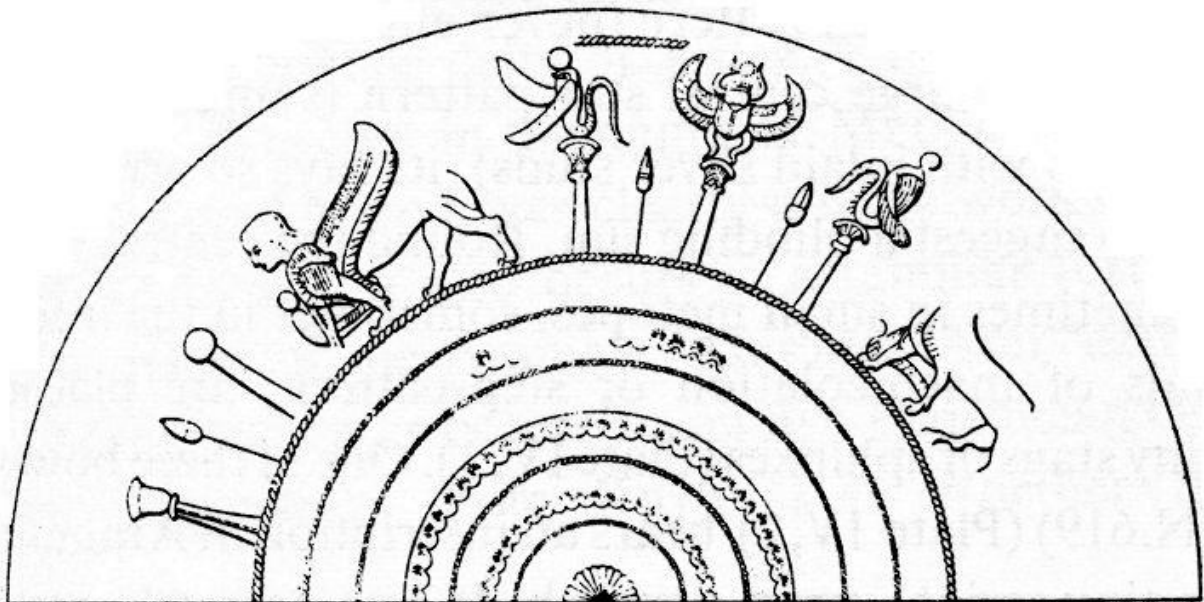


Figure 5.17: A sketch of the Nimrud bronze bowl fragment.
(Lederman 2017).

The depiction shown in Figure 5.17 is very reminiscent of the Nehushtan, described in the book of Numbers, which was raised up on a pole to cure the early Israelite snake plague. It was much later that the Nehushtan was worshipped as an idol in King Solomon's temple, until King Hezekiah broke it into pieces (2 Ki 18:4). As the Nehushtan formed part of the tribute, it was more than likely that it was given piece-meal for its metallic value only (Hendel 1999:615) (see Figure 5.17, with the scarab mounted on a pole).

Lederman (2017) believes this bowl could have originated from Judea and could even have formed part of the Assyrian booty paid either by Ahaz to Sargon II, or by Hezekiah to Sennacherib. 2 Kings 18:14 states that King Hezekiah paid 300 talents of silver and 30 talents of gold. However, that was not all. Lederman (2017) posits that a quantity of metal was included, which may have been the copper pieces that had formed the Nehushtan. Röthlin (2009:78) explains that 2 Kings 18:14 details only the gold and silver taken by the Assyrians but according to the Assyrian scribes far more booty was taken including copper utensils, iron, bronzes, weapons of war such as lances, coats of mail and bows and arrows. The *Taylor clay prism*, with its six sides was discovered in the North Palace of Nineveh. It was produced in 699 BCE and the inscription was in cuneiform. It is on display in the British Museum (No. 91032).¹³⁵ This prism has a bearing on Biblical history.

The Arad temple in the Negev was a large Canaanite city that already existed in the tenth century BCE in what is now the south of Israel and may have existed when Abraham and his kin lived in Beersheba, a nearby wilderness town (Vander Laan).¹³⁶ Both King Hezekiah, who ruled during the eighth century BCE and his great-grandson Josiah, who ruled during the seventh century carried out religious reforms. The bible tells us that Hezekiah destroyed the standing stones or pillars (*masseboth*) and other pagan places of worship during his reign. In Arad there was a citadel that contained a small sanctuary. Centuries later, however, archaeologists unearthed a *massebah* that was found inside this sanctuary. During the late seventh century BCE, the people worshipped it as a symbol of either Yahweh or Baal. This can be deduced by its prominent position in the sanctuary (Bloch-Smith 2015:114). The fact that this *massebah* was discovered in one piece seems to indicate that this sanctuary was not part of the iconoclastic reforms to destroy all vestiges of pagan worship. Bloch-Smith (2015:114) believes that this could indicate some degree of toleration or royal indulgence. With the passing of time, the fallen *massebah* may have grown in religious status, which may have also happened in the case of the Nehushtan. We may conclude that both Hezekiah's and/or Josiah's reforms only pertained to the Solomonic temple. Bloch-Smith (2015:115) remarks that the discovery of the *massebah* inside

¹³⁵ https://www.britishmuseum.org/collection/object/W_1855-1003-1

¹³⁶ <https://www.thatttheworldmayknow.com/arad> (Accessed 14 January 2023).

the Arad temple conflicts with the Deuteronomistic ideal of the Israelite cult centralised solely in the Jerusalem temple. Bloch-Smith adds that more reassessments of this topic should be carried out to correctly reflect the development of the Israelite religion (2015:115).

5.6 SUMMARY AND CONCLUSION

Archaeological evidence of a possible *snake cult* in Canaan was presented. Copper snake effigies were excavated at Megiddo, Tel Mevorakh, Hazor and Gezer, all from Canaanite city states under Egyptian rule and influence. All of these were found in sacral areas near a temple or shrine. At Tel Dan, inside a snake house, large pottery shards were discovered, many of which were decorated with serpent illustrations. A shrine podium and the remains of copper smelting indicate that cultic activities took place there. The Canaanite god, Horon, may be linked to a *god of snake bite cure*, who had the nickname, *Nehushtan*. Unfortunately, there is insufficient evidence to prove this. Handy also believes that *Nehushtan* was the name of an unnamed god of snakebite cure.

The *Nehushtan* may have been fashioned using the local copper, possibly even that which had been mined in the Timna area. The metal workers were regarded as magicians, as the transformation from rock to metal – that can be recycled (reborn) and re-used (rejuvenated) repeatedly – was viewed as a magical wonder. This magical transformation of metal reminds one of a snake's ability to shed its skin, being 'rejuvenated' and 'reborn', with a shiny new skin and a new lease on life.

A study of the copper mining industry at Timna and Feinan has shown that Egyptians mined the area referred to in the *Harris Papyrus* in the British Museum. The shrine of the goddess, Hathor, also points to this fact. A copper snake found inside the ruin of the Hathor shrine is reminiscent of the *Nehushtan*, especially as the Hathor snake, has been dated to about the time that the *Nehushtan* was made. Perhaps the Hathor serpent was also used as a healing tool as it was found in a cultic area. It is also of significance that an ephemeral stream that drains the Timna Valley is known as Nahal *Nehushtan*.

Remnants of a material culture (including ceramics and animal bones) came to light, which correlates to human occupation at Timna. Another sign of human occupation was the remains of a Midianite or Kenite tented shrine at Timna. Moses may have learnt of metallurgy from those clans of nomadic metalworkers who joined him in the wilderness, but this cannot be said for certain. The question as to whether YHWH was the god of metallurgy remains unanswered as there is insufficient evidence to prove that YHWH was the god of the ancient copper miners, although there is a link between YHWH and copper as well as between YHWH and the Kenites.

To date, there has been no archaeological evidence to suggest that King Hezekiah carried out religious reforms during the eighth century BCE. This relates to several bronze bowls brought to light by Sir Henry Layard and Loftus dated to the eighth century BCE. A figure that resembles a snake which was perched on a pole is depicted on the Nimrud bowl – very suggestive of the Nehushtan, especially as the bowl may have been from Judea. This metal bowl could be part of the tribute paid to the Assyrians, either by Hezekiah to Sennacherib, or by Ahaz to Sargon, but there is no proof. This booty might also have included the copper serpent coiled on top of a pole called Nehushtan. However, the depiction on the Judean bowl does give us some idea of the type of snake images that were in existence at that time.

Based on the information presented in this chapter, it is highly probable that the early Israelites had access to the necessary natural resources, technologies and artisans required to produce a copper or bronze snake. The remnants of a snake cult in Canaan also support this view, as does the antiquity of copper metallurgy in the region. It seems feasible that the authors of the account in Numbers were aware of the region's link to copper work and might also have been aware of the connection between serpents and the cult. Whatever historical association there is between Hezekiah's reforms and the wilderness tradition, the telling of the story seems to have been informed by these wider traditions.

This chapter, I believe, contributed to a far better understanding of the context and story of the Nehushtan in Numbers 21:4-9. The long-term interaction between Egypt, Sinai and the whole of Canaan gave rise to various expressions of hybridization and multiculturalism in the early Israelite religion and culture.

In Chapter Six, we shall explore some examples of apotropaic and sympathetic magic in the Hebrew Bible, the *Talmudim* and *Midrashim*. Then, where possible we shall also apply the principles gained from Chapters Two to Five on the narrative of the Nehushtan.

CHAPTER SIX

SYMPATHETIC AND APOTROPAIC MAGIC IN THE HEBREW BIBLE, THE *TALMUDIM* AND *MIDRASHIM* WITH SPECIFIC FOCUS ON THE NEHUSHTAN

6.1 INTRODUCTION

It became evident in the previous chapters that sympathetic and apotropaic magic in various cultures and specifically the Ancient Near East were the order of the day and could have impacted in some way on the early Israelites. The movement of empires crisscrossing the Levant facilitated the intensive exchange of cultures.

The main objective of this chapter will be to discuss and compare the account of the Nehushtan (an example of imitative magical therapy) with other examples of imitative/homeopathic magic treatments to be found in the *Hebrew Bible*, the *Talmudim* and *Midrashim*.¹³⁷ But, more importantly, I will apply the principles of the different examples of apotropaic and sympathetic magic (as outlined in my theoretical framework; see previous chapters) where possible and hopefully shed more light on the understanding and interpretation of the Nehushtan in the Biblical narrative.

Haran (2007:343) is firm in his view that the priests and prophets of early Israel preferred to accord religious importance and value to their own unique ritual practices rather than uphold those of their polytheistic neighbours. The Bible states categorically that the Hebrews were not to imitate the practices of their polytheistic neighbours, which included augury, soothsaying, divination, sorcery, or witchcraft (Dt 18:9–10). The prophet Micha opposed the magical arts with vehemence (Micah 5:11). Fishbane (2004:157) explains that the reason for this widespread ban centred on the belief that magical practices caused affront to the Almighty. Besides being immoral, the participants were guilty of disobedience to God's laws. In the book of Leviticus, it states that a necromancer will be put to death by stoning (Lv 20:27). Witchcraft was outlawed (Ex 22:17) and sorcery deemed to be tantamount to human sacrifice (Dt 18:10).

¹³⁷ I considered discussing the examples from the Hebrew Bible, *Talmudim* and *Midrashim* in Chapter Two, but that would make Chapter Two very lengthy and Chapter Six very short. It also made sense to first discuss sympathetic and apotropaic principles in other sources and in the Ancient Near East before I could identify or apply those principles to biblical and other related narratives.

Despite Haran's (2007) beliefs, and numerous Biblical prohibitions, there is strong evidence of magical practices in the Bible; that of sympathetic and apotropaic magic (see Chapter Two).

The question is whether the Nehushtan should be seen in the light of these practices, or did it serve another purpose?

The remnants of a snake cult in Canaan discussed in Chapter Five, and the bronze snakes found close to sacral areas, may indicate that a similar object such as the Nehushtan could have been part of such cultic practices in other areas. The snake was a symbol of healing in the Ancient Near East and some healing practices certainly made use of sympathetic magic.

What is the source of this apparent discrepancy between the narrative of the bronze serpent and the texts that proscribe the creation of images? This then leads us to ask whether the purpose and use of an object such as the Nehushtan is different from the examples already mentioned and those presented in this chapter?

Sympathetic and apotropaic magic might have been familiar to the early Israelites from their Ancient Near Eastern context. The stories of Jacob's speckled and spotted sheep (Gn 30:37–31:16), the bitter waters of Marah (Ex 15:22–25), as well as the golden mice and tumours (1 Sm 6) will be discussed as examples of sympathetic magic. Three instances of apotropaic magic are observed in the following examples: The mark of Cain in Genesis, the ancient origins of Passover and unleavened bread in the book of Exodus and the Priestly Blessing in the book of Numbers.

These examples will further add to our understanding of the Nehushtan as sympathetic magic device.

6.2 SYMPATHETIC AND APOTROPAIC MAGIC IN THE HEBREW BIBLE

6.2.1 Sympathetic magic in the Hebrew Bible

My main focus will be to investigate if similar stories of sympathetic magic occur in the Hebrew Bible, and to what extent they relate to the story of the Nehushtan.

6.2.1.1 *Jacob's speckled and spotted sheep (Gn 30:37–31:16)*

The biblical story narrates that after Jacob had married Laban's two daughters, he wanted to leave his father-in-law's employ and return home to Canaan. Laban begged him to remain, offering him wages to do so. Jacob refused monetary remuneration but requested all Laban's spotted and speckled sheep and goats, and any future young that were born with those characteristics. Laban agreed and Jacob proceeded to engineer a method to guarantee that many more such lambs and kids were born:

Jacob then got fresh shoots of poplar, and of almond and plane, and peeled white stripes in them, laying bare the white of the shoots. The rods that he had peeled he set up in front of the goats in the troughs, the water receptacles that the goats came to drink from. Their mating occurred when they came to drink, and since the goats mated by the rods, the goats brought forth streaked, speckled, and spotted young. But Jacob dealt separately with the sheep; he made these animals face the streaked or wholly dark-coloured animals in Laban's flock. And so, he produced special flocks for himself, which he did not put with Laban's flocks. Moreover, when the sturdier animals were mating, Jacob would place the rods in the troughs, in full view of the animals, so that they mated by the rods; but with the feebler animals he would not place them there. Thus, the feeble ones went to Laban and the sturdy to Jacob. So, the man grew exceedingly prosperous, and came to own large flocks, maidservants and menservants, camels, and asses (Gn 30:37–43 JBS).

This account of how Jacob managed to breed many striped, speckled, and spotted animals is an example of *imitative magic*. Jacob wanted to breed hardier animals that were spotted and speckled. While the animals were mating, he placed the prepared branches in such a way that the goats could observe them, and the Bible narrates that the female goats produced young with variegated markings. A similar tactic was followed with the sheep which produced streaked and patterned lambs by watching the other speckled and spotted animals in Laban's flock.

Plaut (2006:210) explains that the goats and sheep were either white or dark, and Fishbane (2004:62) notes that most goats in the Ancient Near East were dark coloured. Plaut (2006:210) goes on to say that the 'colour of the staves the animals had seen while mating' would influence the new-born animals, as it forms part of a common notion that visual impressions during the moment of conception influence the progeny of animals (Westermann 1981 in Noegel 1997:7). The moral of the story is one of how Laban, who had tricked Jacob with the animals, was himself outwitted by Jacob. Lacey (2019) continues to explain that Jacob selected the strongest sheep and

gave them additional food, including poplar shoots, which are highly nutritious for livestock.

Principle: By looking at the markings on the tree branches and imitating them, the female goats produced similar kids and the sheep produced lambs with spots, streaks, and speckles on their bodies. 'Like produces like' and 'Law of Similars'. The animals view the speckled and spotted tree branches and produced animals similarly spotted and speckled. (§ 2.3.2.1; § 2.3.2.4).

6.2.1.2 *Sweetening the bitter waters of Marah (Ex 15:22–25)*

In another biblical account, Moses and the early Israelites left the Sea of Reeds, where God had delivered them from the pursuing Egyptians, so they crossed the water to safety. From there, they travelled on into the wilderness of Shur. The journey took three days, and the travellers were extremely thirsty – some of them probably severely dehydrated. They arrived in a place called Marah, so named for its bitter waters, and found that the water was undrinkable. The people complained to Moses, who then prayed to God, who indicated to him which tree branch (bitter wood) he should throw into the water. Moses did so and the water became sweet (Ex 15:25). Sabo (2014:429) observes that:

the people murmur (לָלוּ) against Moses again, a trope which is played out with regularity in the desert wanderings. The implications of this murmuring are perhaps portrayed in that מַרָּה ["bitter"] puns easily with מַרָּה/מָרִי ["to rebel" or "rebellion"]. Just as the *water is "bitter in the Israelites'" mouth, so is the rebellion of the Israelites "bitter" to Moses and their deity'* (JBS).

Plaut (2006:138–9) explains that the sages of the (Babylonian *Talmud* – *Tractate Baba Kamma* 82a) regarded that the Torah was as essential to the spiritual well-being of the early Israelites as water was vital for their physical health – therefore 'water' is interpreted to mean Torah. Thus, they traced the practice of reading Torah in the synagogue on a Monday and Thursday, as well as on Shabbath mornings to the biblical incident of Marah. This meant that not more than two days would elapse without Jews (the descendants of the early Israelites) hearing God's holy word.

Meyers (2005:129) believes that God tested the faith of the early Israelites at Marah. Meyer claims that God knew that the people needed a vital commodity such as water.

She explains that God provided manna and quails for them on previous occasions and would surely do so again (Meyer 2005:129).

From a more practical standpoint, Hillel (2005:127–128), in his environmental exploration of the Hebrew Scriptures notes that:

Several explanations can be offered for Moses' feat. One is that the water of Marah was in a stagnant pool and that casting a tree into the water may have stirred it up sufficiently to bring to the surface better-quality water. Another possibility is that the tree that Moses cast into the water, being a desert plant, exuded salt from its leaves, as does tamarisk. If so, the tree may have been salty enough to cause the suspended matter in the water to coagulate and settle, thereby rendering the water clear of the offensive turbidity.

Principle: In this case, the bitter waters were cured when a branch of bitter wood was thrown into the water. These words describe the principle of homeopathic/imitative magical therapy. God, the Almighty employed this type of healing to remove the bitter taste of the unhealthy and bitter water. This type of healing magic is another example of homeopathic or imitative magic where 'like cures like' (§ 2.3.2.3).

6.2.1.3 *The golden mice and/or tumours (1 Sm 6)*

A further example occurs in 1 Samuel 6. Conrad (1984:283) explains that the Philistines defeated the early Israelites at the battle of Eben-ezer, during which the Philistines decimated 30 000 Hebrews. The Bible, however, states that the Hebrews numbered only 4 000 (1 Sm 4:2). Fishbane (2004:568; 1 Sm 4:4–5) avers that they occasionally carried the Ark onto the battlefield because the early Israelites regarded its presence during such times as the embodiment of God's holy presence and a symbol of God's guidance and support. Conrad (1984:283) and Firth (2009:102) agree that the Philistines considered the Ark a valuable battle trophy, and consequently snatched it away from the defeated Israelites. For the Philistines, it symbolised their enemy's humiliating defeat and the loss of presence of the God of the Hebrews (Firth 2009:102).

The Philistines took the Ark of God to Ashdod in triumph and displayed it in the temple of Dagon (the Philistine god of grain and fertility) (1 Sm 5:2). The following day, the Philistines discovered the idol of Dagon lying face-down on the temple floor before the Ark of the Lord. The statue was returned to its pedestal but the next day it had once

again toppled to the floor in front of the Ark, with its head and hands severed. Despite the uncanny exploits of Dagon's image, the Philistines did not repent until God inflicted a plague of rats and tumours on the inhabitants of Ashdod (1 Sm 5:6).

For the purposes of this study, it is not important to know what sort of plague it was, nor what kind of animal was to blame. What is clear, is that the response to the plague was the application of sympathetic magic. The Philistines realised that the pestilence was linked directly to the Ark.

The Philistines relocated the Ark of God to their five main cities: Gaza, Ashkelon, Ashdod, Ekron and Gath in turn, but the epidemic pursued it (Conrad 1984:283). In due course, the Philistines probably realised the connection between the pestilence and the Ark.

Frazer (1954:10) states that 'practitioners of sympathetic magic' (also known as homeopathic or imitative magic), believed they could produce their desired effect by imitating it. According to Langdon-Brown (1941:34), it appears as though the Philistine diviners connected the plague to the rats, and therefore attempted to control the situation by offering golden rodent effigies in an act of sympathetic magic.

They created models of the tumours, thereby employing imitative magic therapeutically to cure those who were afflicted.

The Bible relates how the Philistines consulted their priests and soothsayers in a desperate effort to placate the Hebrew God to remove this devastating epidemic (1 Sm 6:2). The Philistine priests and diviners advised them to manufacture five golden mice effigies (to represent the rodents) and five golden tumours (to represent the five Philistine cities and chieftains afflicted with the plague). These symbolised their heartfelt desire for the removal of the epidemic. The Philistines offered these golden effigies of the rodents and/or the tumours to the Hebrew God as compensation or as a guilt offering for their theft of the Ark of the Covenant, 1 Sm 6:3–4; (cf. Firth 2009:102; Lewis 2005:101-102).

The Philistines placed the Ark of God in a pristine wooden cart hitched to two milk cows that had never been utilised for any other purpose, such as ploughing (1 Sm 6:7–8). They placed the golden effigies of the rodents and/or tumours alongside the Ark of the Covenant. The cows were left to find their way back to the early Israelite territory with the five Philistine chiefs acting as guards until the cart reached the Israelite border town of Beth-shemesh (1 Sm 6:10–12). The inhabitants of that town sacrificed the cows to the God of Israel and the Biblical narrative concludes this story with the return of the Philistine chieftains to Ekron (1 Sm 6:16). The Philistines thus redeemed themselves and the plague dissipated (Firth 2009:102).

Principle: The models of the rodents and/or buboes cured the plague; ‘Like cures like’. ‘What kills can cure’.

6.2.2 Apotropaic magic in the Hebrew Bible

Although it became clear to me through the examples of sympathetic magic discussed in this thesis, that the role the Nehushtan played as a healing tool in the Biblical narrative was sympathetic in nature rather than apotropaic, I will nonetheless briefly discuss examples of apotropaic magic in the Hebrew Bible.

My reasoning behind this decision is that one must possess a clear understanding of what constituted apotropaic magic, to be able to exclude it as the type of magic relevant to the Nehushtan. Unless the Nehushtan can be compared to both sympathetic and apotropaic magic, it will be difficult to compare the two categories of magic thoroughly. It is often just as important to understand why something is NOT part of a specific category, as it is to understand why it is part of another.

My ultimate goal is to obtain a better understanding of the Nehushtan as a possible healing tool by applying the information I have gained from *the entirety* of my investigations, and not only those aspects that have been highlighted as more relevant.

6.2.2.1 Cain’s mystical mark (Gn 4:15)

The name Cain (Sarna 2007:340) derives from the Hebrew word *Qayin* meaning ‘smith’ in English. He was the eldest of Adam and Eve’s sons (Gn 4:1, 25). The Bible

relates an incident where Cain and Abel offer sacrifices to God. Cain, a tiller of the soil (Gn 4:3), brings produce that may have included fruit, nuts, and seeds, while Abel (Gn 4:4) offers the best first-born animal of his flocks. God approves of Abel's gift but for reasons unknown, ignores Cain's offering. This makes Cain miserable, which does not go unnoticed by God. Cain is unable to accept God's decision (Fishbane 2004:19) despite God's warning of the folly of falling prey to evil impulses.

Later, Cain and Abel go to an open field, where the two begin to fight (Gn 4:8). The argument escalates and Cain kills his brother with either a rock or a stone implement. When questioned by God as to Abel's whereabouts, Cain rudely replies that he is not his brother's guardian. God then punishes Cain for his fratricide and condemns him to hard labour and the life of a ceaseless nomad (cf. Byron 2014). Cain protests that his sentence is far too severe. God then puts a mark on Cain to protect him from being killed, but the Bible is silent on the exact nature of Cain's mark.

Sarna (1966:31) argues that the Bible presumes the existence of an unwritten moral-legal code (Ex 21:12) from the creation of man. Cain's offence was thus against God and humanity. Cain had never experienced death, nor had his parents – being the first parents they were naïve and innocent, remarks Rabbi Nehemiah (in Midrash Genesis *Rabbah* 22:12). The fact that Cain had repented (Midrash Genesis *Rabbah* 22:13) had a positive effect on his sentence. Cain did not murder, but committed the lesser offence of culpable homicide, for Cain perhaps did not have the necessary criminal intent to kill his brother.

Alcalay (1990:48) translates the Hebrew word 'ot' as a 'sign, a mark, an omen, a symbol, or a token' in English. It could also function as a 'decoration.' In this account, I will use the word 'mark' or 'sign' as interpretations of the word 'ot'. Cain's mark had an *apotropaic function to protect* him against those who might seek vengeance for the death of his brother, Abel.

It is interesting that God punished Cain with a protective mark. At first glance, this seems a very light punishment indeed. Halevy (2007:340) maintains that Cain was saved from the death he had inflicted on his brother. It must be borne in mind that Abel's death was probably immediate, whilst Cain endured many years of struggle to

survive. He lived in constant fear of reprisal attacks from those who sought a revenge killing for Abel.

The Bible does not mention the exact nature of the mark of Cain. Because of the perplexities in the text, the rabbis of the Midrash sought to complete the story by writing their own commentaries. Consequently, they have much to say regarding the mark of Cain. Scrutiny of Midrash (Genesis *Rabbah* 22:12), Rashi's view on Genesis 4:15, and *Pirkei De Rabbi Eliezer* Chapter 21, reveals many interesting theories, which I will not be able elaborate in depth here (due to the focus of this study).

Principle: God put an apotropaic mark on Cain to indicate that he was under His protection and belonged to YHWH, to ward off evil, averting or deflecting.

6.2.2.2 *The ancient origins of Passover and unleavened bread*

Gilad (2021) avers that the *Pesach* (Passover) celebration in prehistoric times began as two distinct festivals: One was celebrated by the nomadic or semi nomadic pastoralists and the other by the settled farmers. Gilad (2021) notes that Egypt had nothing to do with the prehistorical festival. The ancient herders celebrated the springtime rite in the month of *Nisan*, the Passover or *Pesach*, and the *Chag Hamatzot* or Feast of Unleavened Bread (Gilad 2021). *Pesach* was an apotropaic ritual performed to ward off evil forces believed by the pastoralists to harm their flocks and families. The ritual consisted of the slaughtering of a lamb or kid, less than a year old. This sacrifice was chosen and prepared on the 10th of *Nisan* but only killed on the evening of the 14th of *Nisan*, after which its blood was dabbed onto the doorposts of their houses (Aberbach 2007:29). The lamb or kid was consumed together with bitter herbs and *matzot* on the evening of the 15th day of *Nisan*, the spring equinox in the northern hemisphere. The reason for this was that springtime was a pivotal time of the year; the flocks had to be moved to their summer pastures and birthing also took place. There were many dangers to be faced along the way.

The *Chag Hamatzot* was celebrated on the 15th of *Nisan* by the settled crop growers, who lived in villages. This festival of seven days duration was the start of the harvest of cereals, their staple food (Gilad 2021). At that time, the grain stores were empty and there was no leavening available with which to make bread. Leavening at that time,

comprised a portion of dough that had been set aside from the last batch of bread made. Lack of leavening resulted in a dry flat wheaten bread (*matza*) being eaten instead (Gilad 2021).

As the two festivals originated in two different groups, they represented what each group saw as important – flocks or crops. These festivals gave a new meaning to both groups to celebrate the exodus from Egypt (Gilad 2021). They are now celebrated as one festival. The two festivals were combined because God liberated the early Israelites from Egypt in the spring and the *Pesach* sacrifice was eaten with unleavened bread (Botser 2008:757).

Principle: The pastoralists dabbed the blood of the animal on their doorposts to gain protection of their flocks and families, and to ward off evil forces during the potentially hazardous journey to the summer pastures.

6.2.2.3 *The Priestly Benediction (Numbers 6:24-25)*

In 1979 Barkay (2009:7) and his team of archaeologists discovered two tiny silver amulets, resembling scrolls, while excavating in Jerusalem (Schmidt 2016:123-124; cf. Smoak 2012). Once unrolled, amulet 1 measured 9.65 x 2.54cm and the second one measured 1.27 X 1.02cm (Fig. 6.1)¹³⁸(Ngo 2022).

¹³⁸ These amulets are presently housed in the Israeli Museum and are important because these silver amulets are far older than the Dead Sea scrolls and date to 600 BC (Ngo 2022).



Figure 6.1: The Ketef Hinnom amulets.
(Ngo 2022).¹³⁹

The importance of this find is that the scrolls contained Hebrew script which reminds one of the priestly benedictions (Nm 6:24-26) (Barkay 2009:8; Smoak 2012:202). They were excavated at Ketef Hinnom, and date to 600 BCE. Both amulets were made of 99% silver and 1% copper, and one was far larger than the other. Once both amulets had been chemically treated to enable the minute script to be read, it was found that both contained Hebrew writing. The first one was found to contain the first two blessings which appeared as follows:

'May YHWH bles[s] you and [may he] keep you [may] YHWH make [his face] Shine'.

The second one contains the full blessing:

'May YHWH bless you, keep you, may YHWH make his face shine upon you and grant you peace.' (Barkay 2009:8-9).

Smoak (2012:202) believes that the amulets 'provide a better understanding of how the incantations functioned as magical texts', and furthermore poses the argument that texts (whether blessings or prayers) add to the efficacy of the amulets in their

¹³⁹ <https://www.biblicalarchaeology.org/daily/biblical-artifacts/inscriptions/miniature-writing-ancient-amulets-ketef-hinnom/>

workings as apotropaic objects. Smoak (2012:235) concludes that the Ketef Hinnon amulets show that 'apotropaic magic played a more important role in ancient Israelite religion than is often emphasized'.

Principle: This discovery reveals amongst other things that incantations (like the Priestly Blessing) presented on amulets influenced the efficacy of apotropaic magic devices – to protect, to ward off or repel the evil.

6.3 SYMPATHETIC AND APOTROPAIC MAGIC IN THE *TALMUDIM* AND THE *MIDRASHIM*

6.3.1 Sympathetic magic in the *Talmudim* and *Midrashim*

The main objective in this section is to investigate whether any light can be shed on the Nehushtan as a curative tool by referring to the Babylonian and Jerusalem *Talmudim* and the *Midrashim* for examples of sympathetic and apotropaic magic.

During my Master's research, I became well acquainted with the Babylonian *Talmud*. In it, the Talmudic rabbis discuss the Hebrew Bible in fine detail, including texts that reference magical practices. The *Talmud* provides guidelines on how rabbis can protect themselves against the evil eye when entering a strange town. The latter infers that the rabbis believed in the effects of magic (Williams 2009).

The Talmudic rabbis engaged in magical practices such as incantations and were aware of the use of amulets to protect themselves against evil forces. The Talmudic sages (200–500 CE) were firm believers in magic, even though it was strictly forbidden (Dt 18:10-11). Rabbi Abaye's¹⁴⁰ mother¹⁴¹ was truly knowledgeable about incantations and knots (Babylonian *Talmud* – *Tractate Shabbath* 66b; §2.2.2.1[b]. above).

Here, I will discuss the clarification of sediment from a wine bottle, as well as the bite of a mad (rabid) dog and the efforts that were made to cure the unfortunate victim. Later I will discuss how amulets to protect people from attack by a rabid dog were

¹⁴⁰ Rabbi Abaye/Abbaye (ca 280–340 CE) was orphaned at birth and raised by his uncle and foster-aunt and he was an outstanding rabbi and scholar, becoming head of the *Yeshiva* of Pumpedita (Pubbedita). https://www.chabad.org/library/article_cdo/aid/112298/jewish/abbaye

¹⁴¹ She was his foster-mother with whom he had a particularly good relationship. https://www.chabad.org/library/article_cdo/aid/112298/jewish/abbaye

extremely popular and no doubt sought after because rabies usually proved a fatal disease.

6.3.1.1 *Clarifying the sediment in a wine bottle*

The first example is a practical application of sympathetic magic (Babylonian *Talmud* – *Tractate Shabbath 33a*). Abin ben Huna said in the name of his teacher, Rabbi Huna ben Guna, that if someone needed their wine to be cleared of sediment, the bottle would be sealed with clay and placed in water and then they should utter words to the effect that ‘just as the clay becomes clear, so let (the name of So-and-so’s wine) also clarify itself’. The principle of imitative/homeopathic magic applicable here is embodied in the maxim of ‘like cures like’. In this case, a bottle of wine with sediment could be clarified without decanting the liquid and straining it through sieves. Abin ben Huna suggests that as the clay seal on the bottle clears in the water, so the cloudy wine would also clarify itself in the same way.

Principle: When placed in water, the seal on the wine bottle would become clear and in the same way so would the wine. ‘Like cures like’ is a form of imitative magic.

6.3.1.2 *The bite of a mad dog*

(a) Rabies in dogs and humans

Dobson (2007:156) describes rabies as a viral infection ‘of the central nervous system, causing acute encephalitis (inflammation of the brain)’ in mammals. Johnson (2018) adds that rabies kills 59,000 people annually worldwide. The *Rhybdauidae lyssavirus* enters the body through infected saliva when the victim is bitten by a rabid mammal, or when an infected animal licks open wounds (Dobson 2007:128).

Rabies was greatly feared as far back as the 23rd century BCE in Mesopotamia. The Eshmunna Code of King Dadusha (ca 1770 BCE) states the amount of forty shekels of silver is payable as compensation by the owner of a mad dog if the animal bites a citizen, but only ten shekels if the victim is a slave (Sec. 56/57 Eshmunna Code).

The Babylonian *Talmud* (*Tractate Yoma 83b*) describes a rabid dog: ‘Its mouth is open and is dripping saliva, its ears flap and its tail is between its legs, it walks on the side of the road, and it may bark in a hoarse tone of voice’. Moses Maimonides lists the

symptoms of rabies in dogs: 'The mad dog always wanders about by himself in a roundabout way, leaning on walls and never barking' (Muntner 1966:39; cf. Johnson 2021). Human symptoms include spasm of the deglutition and respiratory muscular system, hallucinations, mania, and extreme thirst (Dobson 2007:158).

The rabbis pondered the origins of rabies, with Mar Samuel suggesting that an evil spirit was tormenting the afflicted (Rosner 1977:199).

(b) Homeopathic/imitative magic therapy and rabies

Rabies has been a scourge for thousands of years, until the invention of a vaccine by Louis Pasteur in 1885.¹⁴² In the case of a mad dog infecting a person with rabies, homeopathic/imitative magic therapy would consist of the patient ingesting a part of the animal's anatomy or its fur. The principle of this therapy maintains that *what kills can also cure* or *what harms can heal*. The liver of the rabid dog, or its body parts such as its head and its fur, were all used in the hope of a cure from rabies. Using these other body parts of the dog were recommended by many ancient healers (Rosner 2000:267).

The Babylonian and Jerusalem *Talmudim*, as well as the writings of Pliny the Elder, Celsus and Dioscorides will be consulted. Before the Jerusalem and Babylonian *Talmudim* were written, Celsus, Dioscorides and Pliny the Elder had also recommended various cures for rabies.

Rosner (2000:267) explains that if a patient was bitten by a rabid dog in Talmudic times, he or she was not to be given a piece of dog's liver to eat in the hope of a cure, although this treatment came highly recommended by Rabbi Mattia ben Cheresh of Rome, who believed firmly in its efficacy (Babylonian *Talmud Tractate – Mishna Yoma* 8:6). It is surprising that this rabbi from Rome permitted this treatment, as a dog is not a kosher animal. However, the rabbis believed in the value and sanctity of life, so if the ingestion of a non-kosher animal was potentially lifesaving, the act was permitted as a last resort. Saving a life overrides everything else (*pikuach nefesh docheh et hakol*) (Babylonian *Talmud – Tractate Yoma* 85b). Although the sages knew that rabies was fatal, they were obliged to try their utmost to save the patient.

¹⁴² <https://www.britannica.com/biography/Louis-Pasteur/Vaccine-development>

Rabbi Judah, the Prince, had a German servant, who was bitten by a rabid dog. He attempted imitative/homeopathic magic therapy as a last resort and gave the patient some of the hound's liver to eat, but the unfortunate servant died (*Jerusalem Talmud – Tractate Yoma 8:5*). This may have been the reason why the rabbis of the *Babylonian Talmud* regarded the remedy to be of no avail and forbade its use (Rosner 2000:267), despite the remedy being highly recommended by Rabbi Mattia ben Cheresh.

The sages believed that rabies was highly contagious and that it was extremely dangerous to touch or rub against an infected animal or person (*Babylonian Talmud – Tractate Shabbath 22b*). In such an event, all the contaminated clothing should be destroyed (*Babylonian Talmud – Tractate Yoma 83b*). Figure 6.2 depicts a rabid dog with furious rabies in the last stage.



Figure 6.2: Furious rabies: Late stage.
(George Fleming 1872)¹⁴³

People would obviously wish to kill such a dog on sight, but rabid dogs frequently bite a person before the animal can be killed. Maimonides advocated cauterization of the wound or bloodletting but if this was not possible, the area around the wound was incised so that the blood could flow freely (Muntner 1966:39). She adds that Maimonides was aware that all who developed rabies would surely die (*Babylonian Talmud – Tractate Berachot 8:5*). It was even permitted to kill a rabid dog on the Sabbath (*Babylonian Talmud – Tractate Shabbath 121b*).

¹⁴³ https://commons.wikimedia.org/wiki/File:%22Rabies_and_hydrophobia...%22_George_Fleming

(c) Treatments for rabies in antiquity

In an attempt to alleviate these terrible symptoms, physicians in antiquity recommended various imitative/homeopathic treatments: The one recommended by Pliny the Elder (1855)¹⁴⁴ to prevent hydrophobia¹⁴⁵ was to apply the ashes of a dog's head to the wound site. This remedy was prepared by placing the head of a rabid dog into a new pottery vessel, sealing it with potter's clay and finally roasting it in a furnace. The ashes could be consumed in a drink, while others consumed the cooked head. Yet another such cure was to attach a maggot removed from the carcass of the animal. Hairs from the dead dog's tail were inserted into the wound itself in the hope of a cure (*Nat. Hist.* Book 29: chap 32). Pliny adds that the saliva found underneath the rabid dog's tongue can be ingested to prevent the development of rabies symptoms. Pliny admits that the flesh of the mad dog may be cooked, or a broth made from it. Pliny continues to say that not only the liver, but also the flesh of the mad dog can be cooked and eaten or salted and taken with food as a remedy. Pliny also mentions that the raw livers of drowned puppies having the same gender as the dog that inflicted the wound could also be eaten as a cure for rabies (*Nat. Hist.* Book 29: chap 32).

Aulus Cornelius Celsus, a Roman nobleman (25 BCE–50 CE) (Köckerling, Köckerling & Lomas 2013:609), recommends the following homeopathic/imitative magic treatments in his *De Medicina*.¹⁴⁶

He begins by saying that if the dog is mad (rabid), the wound ought to be subjected to bloodletting by cupping to draw the poison¹⁴⁷ out (Celsus, *De Medicina* 5:27, Spencer 1971). Thereafter, the wound would be either cauterised or bled, after which a corrosive substance was applied to it. Celsus does not state what this substance was.

¹⁴⁴ https://archive.org/stream/plinysnaturalhis00plinrich/plinysnaturalhis00plinrich_djvu.tx

¹⁴⁵ An aversion to water, especially as a symptom of rabies in man (Coulson et al 1980:414).

¹⁴⁶ The *De Medicina* is an eight-volume compendium that follows Hippocratic writings, and includes two books about surgery (Köckerling, Köckerling & Lomas 2013:609). The work was formally published between the 18th and 19th centuries CE in Rome (Tarantola 2017:6, also see Spencer 1971).

¹⁴⁷ It is interesting to note that while much of the ancient world ascribed afflictions such as rabies to demons and evils spirits, a number of Mesopotamian 'dog incantations', dating from around 1900–1600 BCE, suggest that the ancients considered the possibility that rabies was transmitted by something within the saliva of an infected animal (Tarantola 2017:2). Also refer to Deen (2011) for a discussion on Rabies as an ancient viral scourge.

If these remedies failed to cure, the liver of a mad dog should be fed to the victim (Celsus *de Medicina* 5:27).¹⁴⁸

Dioscorides, a Greek physician, recommends some imitative/homeopathic remedies for rabies: The roasted liver of a mad dog should be ingested to treat those who had been bitten by a mad dog to prevent the onset of hydrophobia (Dioscorides 2.97). In addition, the tooth of the dog is placed into a bag and fastened to the patient's arm. Dog's blood was another remedy administered by Dioscorides (2.97) to those who were bitten by a mad dog.

(d) Reasons for use of the liver of a mad dog

The liver was held to be the seat of life because there is much blood in it, as well as the centre of intellectual and emotional life (McCartney 1918:19). The rabbinic sages believed that the liver is the seat of anger (Babylonian *Talmud – Tractate Berachoth* 61b).

Principle: Imitative magic was used, and the patient was advised to eat some of the liver of the dog that had bitten the patient. 'Like cures like' and 'what kills can cure'. Moses Maimonides also used imitative/homeopathic magic therapy to treat a patient who had been bitten by a rabid dog using the principle that 'what harms can heal'.

6.3.2 Apotropaic magic in the *Talmudim* and *Midrashim*

Here, I will discuss two examples of apotropaic magic. The first, is a Talmudic story that recounts how Rabbi Hanina ben Pappa was saved by armed men who protected him from his dangerous overnight stay in the local bathhouse.

6.3.2.1 *Rabbi Hanina ben Pappa's atypical adventure in the bath house*

The story is told of Rabbi Hanina ben Pappa (Babylonian *Talmud – Tractate Kiddushin* 39b) and of how a certain matron had taken a fancy to him and was trying to persuade him to have an affair with her. To escape her ardour, the rabbi uttered a magical incantation and was very soon covered in ugly boils and scabs. The lady, however,

¹⁴⁸ <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.02.0142%3Abook%3D1%3Achapter%3D5>

proved herself very able to cure him by doing something, but the *Talmud* is silent as to what exactly it was that she did. Rabbi Hanina ben Pappa, realising that he had met his match, fled from her, and took refuge by hiding in the bath-house – a dangerous place to loiter. The next morning, the rabbinical colleagues questioned him as to his safety during the night. Rabbi Hanina ben Pappa replied that he had been protected by armed men throughout the night. The rabbis explained to him that perhaps he had been tempted by the woman, but because he had successfully resisted temptation, a miracle had been wrought for him in the form of the protective men. He is therefore guarded against evil forces by the same type of men (armed and loitering at a bath house) who would under normal circumstances, perhaps have posed a threat. This is an example of a kind of apotropaic magic.

Principle: His safety was assured by mysterious unknown guards that appeared and protected him during the night. He was guarded against evil forces that would normally harm him (§ 2.2.2.1[b]).

6.3.2.2 *Amulet to protect against contracting rabies after exposure*

As rabies has a very long incubation period, it was believed that it could be prevented by an amulet, a prayer written on a beaver or jackal skin. Rabbi Abaye recommended the following amulet made from the skin of a male hyena (Babylonian *Talmud* – *Tractate Yoma* 84a). The patient had to write on the skin the following words: *Hami, kandi, kloros,*¹⁴⁹ *Yah, Yah*¹⁵⁰, translated as *Lord of Hosts, Amen, Amen, Amen, Selah.*¹⁵¹ Following this, the patient had to take his clothes and bury them in a grave at the cemetery and there they remained for a year after which time they were unearthed and burnt in an oven. The remaining ashes were to be scattered at the crossroads. During the year of waiting, the victim was permitted to drink water from a copper tube instead of a bucket, lest the victim catch sight of the mad dog's reflection in the water and be endangered by cramps in the throat making it impossible to swallow water (Babylonian *Talmud* – *Tractate Yoma* 84a).

¹⁴⁹ These words are magic incantation words that have no meaning, they are nonsense words.

¹⁵⁰ The word *Yah* means *God* (Alcalay 1990:911).

¹⁵¹ This word indicates a pause or silent interlude or the elevation of the voice (Alcalay 1990:1775).

Principle: The animal skin amulet was used to protect against contracting the killer rabies virus. Medical amulets safeguard or protect the wearer against evil spirits that cause rabies (see 2.2.2.1[c]).

6.3.2.3 *An amulet to prevent a bruised foot*

Rosner (2000:18) informs his readers that a coin placed in a shoe will prevent a bruise on the foot possibly caused by ill-fitting shoes (Williams 2009:136).

Principle: The coin protects the wearer against evil spirits that cause a bruised foot. In this way, the coin functioned as a type of medical amulet (see 2.2.2.1[c]).

6.4 INTERPRETATION OF THE NEHUSHTAN NARRATIVE

6.4.1 **Interpretation of the Nehushtan as a healing tool in the Hebrew Bible, *Talmudim* and *Midrashim* (Num 21:4–9)**

The reference to the Nehushtan in the Bible is succinct. Much detail has been omitted, for example: Why did YHWH command Moses to make such an item, why was it later worshipped in the temple, how did it find its way into the temple, were the early Israelites familiar with the 'Law of Similars', were there any indications of a kind of snake cult at that stage, why did they need to *look at the Nehushtan in order to be cured*, where did the copper for the manufacture of the metal snake originate from, who manufactured it? Most importantly, what was the real purpose or function of the Nehushtan in the Biblical narrative?

The Biblical account follows below:

They set out from Mount Hor by way of the Sea of Reeds to skirt the land of Edom. But the people grew restive on the journey, and the people spoke against God and against Moses. "Why did you make us leave Egypt to die in the wilderness? There is no bread and no water, and we have come to loath this miserable food." The Lord sent *seraph* serpents against the people. They bit the people and many of the Israelites died. The people came to Moses and said, "we sinned by speaking against the Lord and against you. Intercede with the Lord to take away the serpents from us". And Moses interceded for the people. Then the Lord said to Moses, "Make a *seraph* figure and mount it on a standard. And if anyone who is bitten and looks at it, he shall recover." Moses made a copper serpent and mounted it on a standard, and when anyone was bitten by a serpent, he would look at the copper serpent and recover (Nm 21:4–9, *JSB*).

There is an interesting Ugaritic parallel to the story of the Nehushtan and that is the story of the healing figurine called *Sha'tiqatu*. In the Bible story, it is the people who require healing, while it is a mortal king by the name of Kirta who is at death's door in the Ugaritic tale (Lewis 2014:2). YHWH uses Moses as his agent to manufacture a metal snake figurine called Nehushtan, while the deity Ilu himself makes a figurine called *Sha'tiqatu* (Lewis 2014:2). In the story of the Nehushtan, the healing is that of imitative magic, while *Sha'tiqatu* heals the king apotropaically by using a figurine of herself (Lewis 2014:2).

There are many artistic depictions of the Nehushtan worldwide and clearly made a huge impression on the minds of the believers (see Figure 6.3).



Figure 6:3: Moses and Nehushtan: Stained glass window at St Marks Church, Gillingham, Kent, United Kingdom.¹⁵²

The early Israelites had complained about their monotonous diet of *manna* (Nm 21:4) but the Mishnaic rabbis were strongly opposed to this view and argued that it was wonderful. Just one piece of manna embodied the taste of many delicious foods

¹⁵² commons.wikimedia.org/wiki/File:MosesandSnake.JPG

(Midrash¹⁵³ Numbers *Rabbah* 19.22). God dealt with them rather violently by sending them venomous snakes that bit many people, resulting in a great number of deaths (Nm 21:6). Rashi¹⁵⁴ avers that God unleashed poisonous snakes on the early Israelites for this reason: Let the serpent, who was punished for its slanderous trickery of Eve, come and exact punishment from those who utter slander. Let the snake to whom all food tastes the same (like dust; Gn 3:14; Babylonian *Talmud* – Tractate Yoma 75a), punish the ungrateful people, to whom the manna tasted like many different dainties (Rosner 1977:181; Williams 2009:179).

Bellinger (2001:260) agrees that the plague of snakes that descended on the people was punishment for their complaining and slandering of God, who had taken care of them by providing them with water and manna. Dunn and Rogerson (2003:146) regard the account of the biting snakes as an explanation of the Nehushtan's origin, and justification for its later presence in the Jerusalem temple.

The early Israelites, realizing that they had brought this on themselves, begged Moses to pray to God for deliverance, having admitted the error of their ways (Nm 21:7). God instructed Moses to manufacture a copper serpent (Nm 21:8) that in later times became known as Nehushtan. There is no further mention of this serpent effigy in the Torah, but Jewish writers referred to this event in The Gospel of John 3:14 and in 1 Corinthians 10:9-11.

6.4.1.1 Background

It is difficult to imagine how many serpents were unleashed onto the whinging early Israelites as divine punishment. A more recent occurrence in modern times may shed some light on what happened. Lawrence¹⁵⁵ (1976:209)¹⁵⁶ describes an incident that

¹⁵³ Peters (2004:16) mentions that the *Midrashim* dissect the Biblical text in precise detail to interpret its plain and homiletic meanings but does not distinguish between them because the authors believed that the Torah was capable of infinite interpretations. The *Midrashim* according to Herr (2007) were 'edited and arranged from 400-500 CE (Early Period; 2007:184). The Middle Period comprised *circa* 500 – 1100 CE and the Late Period from 1100-1500 (Herr 2007:184).

¹⁵⁴ Rashi was an acronym for Rabbi Yitzhaki (<https://en.wikipedia.org/wiki/Rashi>).

¹⁵⁵ 'Lawrence of Arabia', also known as TE Lawrence, published his *Seven Pillars of Wisdom* in 1926. The book is an autobiography of his experiences as a Colonel in the British Army. He famously served 'as a military advisor during the Arab Revolt against the Ottoman Turks' (1916–1918) (https://en.wikipedia.org/wiki/Seven_Pillars_of_Wisdom).

¹⁵⁶ This book was first published in 1926. The 1976 is a reprint of the original.

occurred at Wadi Al-Sarhan ¹⁵⁷ during the Arab Revolt (1916–1918), where he and his men were besieged by a ‘plague of snakes’ and regards the snake infestation as a ‘terror’. He tells his readers that there were horned vipers, puff adders and ‘black snakes’, but does not specify the name of the latter. It is difficult to imagine a plague of snakes, but Lawrence (1976:208) describes it very aptly.

We could not lightly draw water after dark, for there were snakes swimming in the pools, clustering in knots around their brinks. Twice puff adders came twisting into the alert ring of our debating coffee circle. Three of our men died of bites. Four recovered after great fear and pain, and a swelling of the poisoned limb. A strange thing was the snakes’ habit at night of lying beside us, probably for warmth under or on the blanket. When we learned of this our rising was with infinite care and the first up would search around his fellows with a stick till he could pronounce them unencumbered. Our party of fifty men killed perhaps twenty snakes daily. At last, they got so on our nerves that the boldest of us feared to touch ground, whilst those who, like myself, had a shuddering horror of all reptiles.

The above passage gives some insight into the quantity of snakes that could be observed as part of a natural phenomenon,¹⁵⁸ and the paralysing fear and revulsion experienced by the early Israelites at the appearance of the serpents. It is unclear as to the duration of the snake plague, but the wilderness wanderers must have been thoroughly terrified and traumatised by the event. Figure 6.4 illustrates a modern-day ‘plague’¹⁵⁹ of snakes’ from Snake Island near Brazil.

¹⁵⁷ Wadi Ishan (Wadi Al-Sarhan) is situated on Jordan’s eastern border with Saudi Arabia. http://www.kinghussein.gov.jo/geo_env1.html

¹⁵⁸ In 2009, exceptionally low water levels in both the Tigris and Euphrates rivers caused the mass displacement of wildlife, including snakes. Reports of human and cattle attacks in southern Iraq left people in fear of leaving their homes (<https://www.independent.co.uk/climate-change/news/as-iraq-runs-dry-a-plague-of-snakes-is-unleashed-1705315.html>). It is possible that similar conditions may have caused the plague recorded by Lawrence.

¹⁵⁹ The amount of snakes on the island justifies the term ‘plague’, as the sheer amount of snakes (one per square meter) has disrupted any possible human habitation to such an extent that it is even outlawed to visit the island (Brethauer 2018).



Figure 6.4: This photograph illustrates 'a plague of snakes' on Snake Island, off the coast of Brazil (Brethauer 2018).

The Greek historian, Herodotus (460 BCE) was fascinated by the accounts he had heard in Egypt of 'flying serpents' in the Arabian desert (Lederman nd) and speaks of seeing a vast number of skeletons of winged serpents, widely scattered in Buto (present day Tell el-Fara'in) on the Nile delta. Radner (2007:357) refers to Mayor (2000:135-6, 306, note 29), who postulates that what Herodotus saw were not skeletons of recently deceased creatures, but possibly fossilised remains of 'winged snakes' (Radner 2007:357). Herodotus described this place as 'where a narrow mountain pass opens into a great plain, which is joined to the plain of Egypt', where these creatures came in the spring to mate. This area is very suggestive of Sinai and the Negev desert (Radner 2007:358). Radner reminds her readers that Herodotus never actually saw a flying serpent himself and believes that these creatures have never existed at all. The whole account was pure hearsay (Radner 2007:359). There is a place called Makhtesh Ramon where an incredible number of fossils can be found. It is situated in Israel, 85 kilometres south of Beer-sheva, in a crater that formed five million years ago and measures 35 kilometres long and between two and nine kilometres wide (Radner 2007:359).

These fossils that can be seen on the surface were first documented during the 1940's, but sadly there is sparse archaeological information available on this crater, although

it is well known to tourists. Many of these fossils were those of prehistoric amphibians with elongated bodies, which to the untrained eye are reminiscent of 'flying snakes' or salamanders that have been dubbed *Ramonella longispinus* (Radner 2007:361). Radner believes that this crater accords rather accurately with the description of the area referred to by Herodotus, with the steep cliffs opening out into a flat plain.

The importance of this account is that millions of years ago there were creatures living in the Negev desert, which were well known and resembled a seraph snake, which may have become the well-known myth that was mentioned in the Hebrew scriptures. The significance of this account is that the fossilised amphibians with their elongated bodies may have been misidentified as 'flying snakes', and that this might provide a practical explanation for the origin of the seraph myth.

6.4.1.2 *Gazing at the Nehushtan*

According to Old Testament context, the early Israelites believed that Yahweh is the only healer of his people (Exodus 15:26; Psalm 103:3; Jeremiah 30:17; 33:6) and the Israelites, aware that they had sinned, begged Moses to remove the snakes because they had repented (Nm 21:7). God, in answer to Moses' prayer, did not remove the serpents but unexpectedly ordered Moses to make a bronze snake and place it onto a pole. Anyone who had been bitten was admonished to stare intently at it, in order to be cured (Nm 21:9). In the light of my investigation above, it became clear that the Nehushtan cure is an example of imitative or homeopathic magic, where the sympathetic healing comes about by the utilisation of a snake to cure snake bite. This is also in line with the principles of homeopathy or the 'Law of Similars' where what caused the illness is also used to cure it. Burnett (2019:193) notes that 'even with the narrative depicting YHWH as the source of healing (and Moses as his agent), the use of the bronze serpent to ward off real serpents engages in some of the key principles of sympathetic magic'.¹⁶⁰ This is very reminiscent of the magic practiced in Egypt (Burnett 2019:227), when spells, such as those found on the *Horus cippi*,¹⁶¹ were uttered to cure snake bites.

¹⁶⁰ Also refer to Edelman (2007) for a more detailed discussion on Moses's role before he became a law-giver to his people.

¹⁶¹ A cippus is a magical stela that contains instructions on how to heal afflictions. A beautiful example of such a stela dates from the Ptolemaic Period (see item 20.2.23) and is housed in the Metropolitan Museum of Art (<https://www.metmuseum.org/art/collection/search/545766>).

Rabbi Reiner (2006:2) questions whether the author of the book of Numbers *really believed that gazing at a snake had the power to cure its bite*. Shanks (2007:60) opines that the idea of snake drawings being used to ward off danger of the real thing may have filtered through from Egypt (§ 3.2.1). Fishbane (2007:214) feels that gazing at the snake was therapeutic because it would provide an effective counter to its evil power. Friedman (2003:498) is convinced that the Nehushtan is an example of *imitative magic*. The 14th century Torah commentator, Rabbi Bahya (*Midrash Rabeinu Bahya al ha-Torah*) elucidates that the Nehushtan was made of red copper, which is a symbol of the planet Mars and associated with war and death. God's plan, the rabbi said, in commanding Moses to fashion such a copper snake, was a miracle because it demonstrated to the people that it was not the snake that kills, but the sin of slander against God. Similarly, it was not the Nehushtan itself that cured, but God. Adeyemo (2006:194) believes that the Nehushtan symbolised God's healing power which was sought by pilgrims. In this regard, Cohen (1983:907) expounds that the Talmudic rabbis admonished their readers for believing that the bronze serpent itself cured the people's snake bites. Instead, they explained that the early Israelites were healed when they looked up to the Nehushtan [with faith in God, their Supreme Healer] (Babylonian *Talmud* – Tractate Rosh Hashana 29a). McHugh (1982:234) also stresses that only those who gazed up at Nehushtan were healed (cf. Douglas 1982:1091). 'By this means God granted the people deliverance and enforced the lesson of dependence upon himself both for the deliverance and as a general principle' (Kitchen 1988:1092).

6.4.1.3 *The view on venomous snakes in the Babylonian Talmud*

As mentioned above (§6.4.1.4 & 5.3.3.3), Amzallag (2015) proposes *Echis coloratus* as a possible candidate based on its prevalence in the area, its association with mining sites, and its vibrant copper colour.

Rabbi Judah¹⁶² (Babylonian *Talmud* – Tractate *Sanhedrin* 78a) alleges most firmly that the venom of the snake remains in its fangs until it bites, and the venom is then released automatically. There are other sages, whose names are not mentioned, who

¹⁶² Rabbi Judah the Prince also known as Judah ha-Nasi, the second century CE editor of the Mishna, and President of the Sanhedrin. (<https://www.chabad.org>>...>RabbiJudahthePtince).

are convinced that the opposite is true. Snakes release their venom at their own volition. This theory on the snake's ability to choose to release its venom may explain the passage in the book of Numbers 21:6 which states: The Lord sent *seraph* serpents against the people. They bit the people and many of the Israelites died.

I believe that the text above suggests that not every person bitten by the snakes died as a result. A venomous snake can inflict a 'dry bite' that does not contain the deadly venom, since the snake must conserve its venom for killing prey. Mattison (1989:83–4) explains the difference between envenomation and a 'dry' snake bite. Envenomation by a snake is the act of injecting venom into its prey, while a 'dry' bite is one administered by the reptile without the injection of venom (Pucca et al 2020). The serpent's grooved fangs are especially adapted for this purpose. The teeth, situated in the front of the snake's mouth in some species and the back in others, penetrate the victim's skin and this enables the venom to enter the bloodstream at the site of the wound (Mattison 1989:83–4).

Venomous snakes can be dangerous and deadly, but a snake will not bite a person unless it feels threatened. If anyone encounters or tramples on an enraged or frightened snake, the serpent perceives a human as a grave threat to its well-being. In such a situation, the amount of venom released by the snake is under the control of its will (central nervous system) rather than by its instinct (Hayes et al 2002). Rabbi Bahya¹⁶³ maintains that if a bitten individual *looked up at the copper snake*, that person would live. Rabbi Bahya concedes that the cure was the opposite of the natural process. He explains this by saying that the victim would probably be afraid to look at any snake after the terror of the ophidian attack.

6.4.1.3 Venomous snakes and flying *seraphim*

Plaut (2006:1030) states that the Nehushtan is reminiscent of the healing testimonies pertaining to the Greek god of medicine, Asklepios, who would often appear as a healing serpent (§ 4.3.4). Plaut (2006:1038) ponders the reason for the creation of the Nehushtan, for it was contrary to the second commandment prohibiting the making of images. This is precisely what the bronze snake became much later, in the time of

¹⁶³ Rabbi Bahya ben Asher, a Spanish mid-13th to mid-14th century CE Torah commentator. (https://www.chabad.org/library/article_cdo/aid/112279/jewish/Rabbi-Judah-the-Prince.htm).

King Hezekiah. It was, however, not intended to be worshipped as an idol (Williams 2009:171).

Friedman (2003:498) believes that the healing that occurred was merely a case of sympathetic magic that was imputed onto the snake as a cult object. It is Rosner's view (1977:181) that the fiery serpents (*seraphim*) were venomous snakes whose venom resulted in a burning fever but concedes that he is unaware of the snake species responsible (cf. Brown, Fitzmyer & Murphy 1990:88; Williams 2009:172). Carson et al (1995:187) maintain that the Nehushtan may have been a kind of adder or viper found in the Sinai desert. It is known that envenomation from vipers results in an intense hot stinging sensation (Mehta & Sashindran 2002:247), which could have been likened to the burning sensation of fire, or a hot object pressed against one's skin. This could (at least in part) explain why these vipers were referred to as 'fiery'. Many species of viper that inhabit the Negev, such as the Horned viper (*Cerastes cerastes*) and the Palestine viper (*Daboia palestinae*), may have been responsible for countless snake bites (Haglili 2013).

A seraph can also be translated as a winged angel (Alcalay 1990:2724). In the book of Isaiah, the prophet saw a vision of seraphim flying above God's throne. The prophet explains that each seraph creature had three pairs of wings; one pair to cover its feet, one pair to cover its head and one pair with which to fly (Is 6:1).

6.4.1.4 *Why a copper snake*

Rambam¹⁶⁴ maintains that Moses produced a copper serpent¹⁶⁵ as God instructs him to make a 'fiery serpent'. Rabbi Assi (in the *Midrashim*) teaches that the Nehushtan was made of copper because the word for 'copper' is similar to the word for 'snake' (Midrash Genesis Rabbah 31:8). Thus, Moses was guided by the substantive name of the metal (*nekhoshet*), with copper being like the Hebrew word, *nahash* or snake. Amzallag (2015:99) adds that the term *seraph*¹⁶⁶ holds a close affinity with a local

¹⁶⁴ Rambam is an acronym, and the Jewish philosopher was commonly known as Maimonides or Moses ben Maimon (1138–1204 CE) (<https://en.wikipedia.org/wiki/Maimonides>).

¹⁶⁵ Sakenfeld (1995:111) reminds her readers that the Nehushtan on Moses' staff is very reminiscent of snake symbolism in Egypt and Greece. She adds that the snake symbol was very well known in the Ancient Near East.

¹⁶⁶ The term *seraphim* (meaning the burning ones) (also referenced in Deuteronomy 8:15; Isaiah 14:29 and Isaiah 30:6) appears to reference a specific snake species, with some arguing that the 'fiery'

snake species, *Echis coloratus*, which inhabits the mining areas of Arabah and Sinai, and which was seen in ancient times as a guardian of the mines (Amzallag 2015:99). The species also exhibits a colour that is quite akin to copper, which could relate to the description of a 'fiery' (perhaps copper-coloured) snake (Figure 6.5). Amzallag (2015:99) believes that the relationship between YHWH and the *seraph* symbol is possibly rooted in the God of Israel's metallurgical background.



Figure 6.5: *Echis coloratus*, a copper-coloured snake that inhabits the mining areas of Arabah and Sinai.¹⁶⁷

Chizkuni¹⁶⁸ is of the belief that copper was employed by Moses to make the Nehushtan because it is very lustrous. It reflects the light, making it most visible. Chizkuni quotes Ezekiel 1:7, where a heavenly entity is mentioned, whose feet were described as 'glowing like burnished copper'. Because of its 'glowing' or 'shining' properties, the Nehushtan, which was also mounted on a pole or standard, was therefore highly visible to everyone in the camp. The rabbis explained that the reason why the Nehushtan was visible from afar was because it floated in the air when Moses lifted it up (Midrash Numbers Rabbah 19:23). Pawson (2003:173) explains that the Nehushtan was placed on a pole that stood on top of a mountain for everyone to see.

reference relates to the colour of the snake, the reflection of sunlight from its scales, or the inflammation that is caused by its venom (see Ellicot's English commentary, <https://biblehub.com/numbers/21-6.htm>)

¹⁶⁷ https://en.wikipedia.org/wiki/Echis_coloratus

¹⁶⁸ Chizkuni was also known as Hezekiah ben Manoah, a French rabbi and biblical commentator of 13th century CE. (<https://www.Sefaria.org>topics>chizkuni>)

Rashi's view is convinced that Moses had not been specifically instructed to manufacture the Nehushtan of copper, but he uses the same wordplay or pun as King Hezekiah does in 2 Kings 18:4 when the King refers to the copper snake as 'that thing of bronze' (§ 5.5.1) (cf. Fishbane 2004:761).

6.4.1.7 2 Kings 18:4

Rabbi Jose said to the Rabbis that King Hezekiah exceeded his authority by destroying the Nehushtan (2 Ki 18:4), even though it was being worshipped, because it had been made by Moses from his own metal and it was technically the property of his heirs. (*Babylonian Talmud – Tractate Avodah Zarah 44a*).

Edelman (1995:20) is of the opinion that Yahweh¹⁶⁹ was the sovereign of several subsidiary deities, who served under him, but who were also endowed with a certain amount of autonomy, depending on their rank within their echelons. The names and individual duties of these deities are now forgotten because of subsequent biblical editing that took place. However, some names such as Nehushtan, Shemesh, Mot and Rephesh are extant. Edelman (1995:20) terms this religious form 'first temple Yahwism'. Handy (1995:41) posits that the Judahite pantheon consisted of three classes of gods, one of which is believed to be the *god of snake bite cure*, whose name remains a mystery (§ 5.5.1)

The Bible refers to it in the text of the second book of Kings as wordplay or a pun, that describes its shape as 'snake-like' (*nahash*) and the metal from which it was cast, in this case 'copper' (*nakhoshet*), hence King Hezekiah called it Nehushtan. Handy (1995:42) maintains that the unknown *god of snake bite cure* was endowed with expert knowledge that could be used in an emergency, because it had been created by the more senior deities of the pantheon. Nehushtan was thus worshipped by the Judahite cult by means of sacrifices. During his iconoclastic reforms, Hezekiah destroyed it (2 Ki 18:4) because it was being revered as a healing deity itself rather than an effigy that represents God's healing powers. Handy concludes by saying that true monotheism only appeared during the Exile (Handy 1995:42).

¹⁶⁹ Refer to Abba (1961) for a full discussion on the divine nature of the name Yahweh.

In the light of the story in Numbers Moses probably created a copper snake that represented a minor god that was venerated as it was believed to cure snake bite. Although a minor god, it was a most important one, as snakes were very prevalent in the wilderness. This suggests that the Nehushtan may possibly have been worshipped in the Solomonic temple.

6.4.1.8 *John 3:14–15*

The only other source or Jewish interpretation where the Nehushtan is mentioned is in the New Testament (John 3:14-15 and in 1 Corinthians 10:9-11 a reference to the event). For the early Jewish Christians, the act of being *lifted up*, or *gazing up* to an object or person, holds relevance to the story of Jesus, not only because John (one of his disciples) mentions that the Son of Man should be *lifted up* (like Moses lifted the snake/Nehushtan) (John 3:14–15), but also because followers of the Christian faith often *gaze up to an image of Jesus on the cross* (a point that is explicitly illustrated by the stained-glass window in Figure 6.3).

Jesus meets with Nicodemis, a Pharisee, at night because Nicodemis is anxious to learn more from Jesus. During the meeting, Jesus foretells his own death on the cross by telling Nicodemis:

No one goes into heaven except the one who came from heaven – the Son of Man. Just as Moses lifted up the snake in the wilderness, so the Son of Man must be lifted up (John 3:14–15, *NRSV*).

In the above passage, Jesus tells Nicodemis that he will also be lifted up and all those who have faith and believe in Him will enjoy eternal life. The words *lifted up* are used in two ways. The first one refers to his crucifixion and the second to when Jesus ascends to Heaven (Barclay 1975:134).

John 3:14–15 is also discussed by Barclay (1975:134), who notes that the Nehushtan was *lifted up*¹⁷⁰ by Moses himself so that those who were bitten by snakes could stare up at it intensely and receive healing through their faith in God. The Nehushtan was placed on a pole, and Kroetze and Groenewald (1969:184) explain that the pole was

¹⁷⁰ This act of lifting is very reminiscent of the time that Moses held up his arms during the battle against the Amelikites to encourage the early Israelites (Ex 17:10-12).

a flagpole or banner. The Hebrew word *neis* is translated by Alcalay (1990:164) as a 'flag' or 'flagpole'. They also stress the importance of John 3:14–15, where it states that Jesus must be lifted up (onto the cross) like the Nehushtan was lifted up (onto a flagpole) (Kroetze & Groenewald 1969:184).

Cole (2013) is convinced that John 3:14–15 is an example of imitative/homeopathic magic, as it is linked to the story of the Nehushtan. Cole (2013) explains that those who gazed up at the Nehushtan with utmost faith in God were healed from their venomous snake bites. Similarly, Christians who gaze up to an effigy of Jesus on the cross and have faith in Him will receive salvation. The similarity between the Nehushtan and the image of Christ on the cross, is that both provide healing through faith – it is not the effigy of the Nehushtan, or the effigy of Christ itself, that generates healing.

Hovseth (2019) notes that those who believe in Christ will have eternal healing and salvation because God forgives all their sins. This is reminiscent of how God forgave the transgressions of the early Israelites when they gazed upon the Nehushtan.

Linney (2018) echoes the view of Cole when he states that the terrifying ophidians become a healing symbol, inspired by God, when lifted up onto the standard for the early Israelites in the desert to see. The image of a snake that once represented pain and death, came to represent healing and life. Similarly, Jesus on the cross, a symbol of execution that ends in death, reverts into a symbol of salvation and life everlasting. Although Linney does not express this view, it is surely an example of imitative magic. It must, however, be noted that this view is a Christian interpretation and does not appear in the Hebrew Bible.

Interestingly, many depictions of the Nehushtan as it is placed atop a pole present the serpent as curling up and around a cross bar (Figure 6.6). This depiction is visually similar to the depiction of Christ on the cross (Figure 6.3). However, it must be noted that this depiction is a deliberate comparison made by Christians. It is possible that the artist, Helena Lehman, was quite purposeful in highlighting the (hereto unsubstantiated) similarities between Christ on the Cross and the Nehushtan – even the Rod of Asclepius and Caduceus are incorporated or accommodated in the

depiction (Fig. 6.6). In fact, the Hebrew Bible used the term ‘standard’ and not ‘cross’ when referring to the structure on which the Nehushtan was placed.

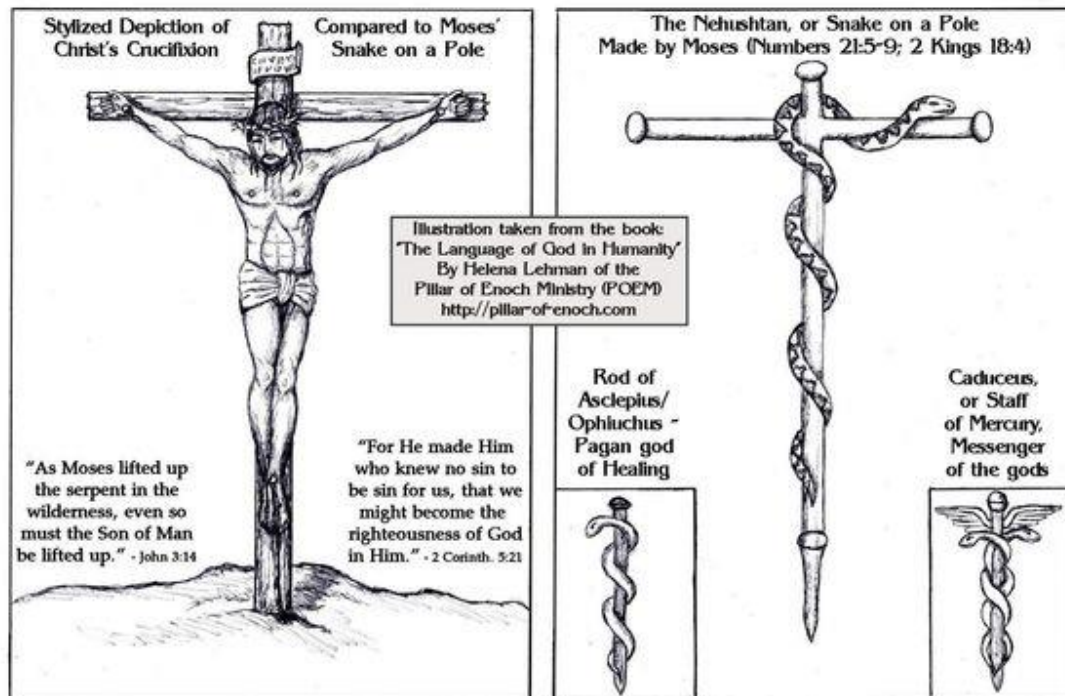


Figure 6.6: A stylised depiction highlighting the similarities between Christ on the cross, the Nehushtan, the Rod of Asclepius, and the Staff of Mercury.¹⁷¹

Principle: ‘Like cures like’, ‘what kills can cure’. Similar to how the snake, which brings death, can now bring life as the Nehushtan, so too the cross, which brought death to Jesus, can now bring salvation and life eternal as a representation of Christ.¹⁷² What kills (snake/cross) can also cure (Nehushtan/Christ).¹⁷³

6.5 SUMMARY AND CONCLUSION

It is clear from the examples presented in this chapter that the early Hebrews participated, both consciously and unconsciously, in magical observances, both sympathetic and apotropaic, despite the strict prohibitions to the contrary in the Hebrew Bible. Attempts were possibly made to edit them out of scripture, but clues remain suggesting the efficacy of these practices.

¹⁷¹ Illustration by Helena Lehman, taken from the book *The language of God and humanity*.

¹⁷² Only Christians, who know the story of the Nehushtan well enough, would make this connection.

¹⁷³ Only Christians who have an excellent knowledge of the Nehushtan story would draw a connection between Jesus on the cross and the Nehushtan.

The story of the Nehushtan in the book of Numbers illustrates how an image of a snake healed snake bites. In the light of the investigation in the previous chapters and above, it became clear that the Nehushtan served as a kind of sympathetic device.

Cain's mystical mark (Gn 4:15) was discussed as a possible apotropaic mark that would be clearly visible to all who saw him, protecting him from evil and indicating that he belonged to YHWH. The principle employed here was that Cain belonged to YHWH, and that the mark served to protect him from those seeking revenge for Abel's death, or to ward off any other evils that may befall him.

The prehistoric origins of the Passover and Unleavened bread were discussed, and it was explained how they were in time merged into one festival. The Passover sacrifice was an apotropaic act designed to protect the flocks and families of the herders seeking summer pastures for their animals. This is in accordance with the principles of apotropaic magic which *protects the flocks from danger*.

The tale of Rabbi Hanina ben Pappa, recounts how a matron tried to seduce him one night. After a failed attempt at making himself undesirable, ben Pappa hides in a nearby bath house where he is protected from evil throughout the night by an unknown gang of armed men. He is therefore guarded against evil forces by the same type of men who would under normal circumstances, perhaps have posed a threat.

The Nehushtan was a snake image used to cure snake bite, which is an example of sympathetic magic. In a way, it was different to the other examples of sympathetic magic already discussed in this thesis. The principles of sympathetic magic that apply are: 'The Law of Similars' or 'like cures like'; and more specifically; an image of a snake used to cure snake bite. In this way – Nehushtan is a device that is used positively. There are examples of other images used negatively to injure or to harm others, such as the wax effigies of Apophis which were burnt to harm the giant reptile (§3.2.2 & 2.3.2.6).

Images of fish were used by fishermen to attract more fish. This is also sympathetic magic that made use of an image in the hope of catching fish to feed themselves. In this way, it is similar to the Nehushtan in that it is used positively. A theriac was also

used positively to heal, but it was not an image, it was a potion (§2.3.2.5). Another similarity is the imitative magic aspect of the evil eye where the image of an eye is used to ‘heal’ the negative effects of the evil eye (§ 2.2.2.1[e]).

Although the practice of magic was forbidden in the Hebrew Bible (Ex 22:18; Lv 19:26; Dt 18:9-14), I propose that the Nehushtan narrative does not represent the type of magic that would’ve been prohibited. The Nehushtan account relates more to that of sympathetic than apotropaic magic, and definitely excluded contagion magic. Therefore, this approach could illuminate the ‘uncommon’ use of the Nehushtan amidst the general proscription of magic.

Apotropaic amulets to protect a patient against contracting rabies after due exposure was a hyena skin engraved with an incantation spoken by the victim. It was rather detailed and involved burying their clothes in the cemetery for a year. Later the apparel was exhumed and burnt, and the ashes were scattered at the crossroads. The amulet and incantation serve as protection against contracting rabies which follow the principles of ‘like follows like’ or ‘an effect resembles its cause’.

Amulets were also used to protect against lesser afflictions than rabies, such as a bruised foot or callus, probably caused by ill-fitting shoes or the mere duration of a long journey. A coin, which functioned as a medicinal apotropaic amulet, was placed in the shoe and was believed to function preventatively.

This chapter once again confirms that the Nehushtan in Numbers 21:4-9 functions as a sympathetic magic device. The examples from the Hebrew Bible and other sources highlight the occurrence of other sympathetic magic practices in more than one way:

The early Israelites were familiar with *sympathetic magic*, and our first example of this was the story of Jacob’s speckled and spotted sheep (Gn 30:37–31:16), which recounts how *imitative magic (like produces like)* was used to reproduce the desired offspring within a herd of sheep. By looking at the markings on the tree branches and imitating them, the female goats produced similar kids and the sheep produced lambs with spots, streaks, and speckles on their bodies.

In the account of the mice and tumour plague encountered in 1 Samuel 6, golden effigies of mice and tumours were made by the Philistines to thwart the plague. Alongside the return of the Ark to the Israelites, sympathetic magic was employed to lift the plague. In this instance, the Philistines relied on the principles of 'like cures like' and 'what kills can cure'.

Rabies is a terrifying virus that penetrates the limbic or emotional centre of the brain resulting in the mindless frenzy common to all patients and ending in coma and death. Although the rabbis were aware of this, Rabbi Judah the Prince attempted imitative magic therapy by giving his slave a raw lobe of the rabid dog's liver to eat. The consumption of dog meat and organs were recommended by some, even though dog meat is not kosher. These efforts were mostly permissible only as a last resort. The principle behind this imitative/homeopathic magic therapy was 'what may harm may also heal'.

In a Biblical account from Exodus (15:12–25), Moses is said to have turned the bitter waters of Marah sweet by adding branches of bitter wood. The bitter wood that Moses threw into the bitter water at Marah functioned as a 'healing tool' because the bitter wood sweetened the bitter water. Moses does not appear to question why bitter wood would sweeten bitter water, instead he has faith in God. In this light, it was not only the Nehushtan that had to be looked at with faith in God, but the bitter waters were also cured through faith in God.

It became evident that the Nehushtan was used by Moses, who made it at God's behest to function as a healing tool, which healed the early Israelites, who had slandered God and were guilty of loss of faith in Him. This loss of faith had to be restored for the people to be healed when they gazed up at the Nehushtan. YHWH commanded Moses to make a metal snake image because, as I have discovered, the Nehushtan is an example of *imitative magic*, where sympathetic healing takes place using a *snake to cure snake bite*. This also concurs with the principles of homeopathy or the 'Law of Similars' where the cause of the illness is used to cure it. The Nehushtan, itself is an indication that a snake cult may have existed in early Israel. Several scholars have suggested that *Nehushtan* was the unknown *god of snake bite cure*, or the nickname for a *god of snake bite cure*.

In the same way that the female goats and sheep produced spotted and speckled young by watching and imitating the patterns on the tree branches placed in front of them while they were mating, so too did the early Israelites recover from snake bite by gazing at the Nehushtan, a metal snake image.

The Nehushtan was later worshipped in the Solomonic Temple, with incense being burned to it.. It was possibly worshipped in the Temple Court area of the Solomonic Temple until the reign of King Hezekiah. The Nehushtan was not initially intended to be venerated as an idol in the time of Moses but was created merely to be used as an *imitative magic healing device*.

Several examples of apotropaic and imitative/homeopathic magic have been explored from the Hebrew Bible, the *Talmudim* and the *Midrashim*, and have shed new light on our comprehension of the Biblical narrative of the Nehushtan in the book of Numbers.

CHAPTER SEVEN

SUMMARY AND CONCLUSION

7.1 INTRODUCTION

7.1.1 Background to the Nehushtan narrative

The Israelites had become bored with the taste of their daily *manna* and let God know in no uncertain terms. God too had grown weary of their continuous complaints. Consequently, He unleashed a plague of venomous serpents on the people, who then begged God to forgive them. Instead of eradicating the reptiles, God ordered Moses to manufacture an imitative magic cure – a copper or bronze snake known as the Nehushtan – and to mount it on a standard for all the people to see as it shone brightly in the wilderness sun. The principles of sympathetic magic were utilised and applied as a theoretical framework to better comprehend the account of the Nehushtan in Numbers 21. What follows is an overview of the key evidence presented in this thesis, and the final conclusions that were drawn as a result.

7.1.2 Research questions and methodology

My main research question was: What was the role and significance of the Nehushtan as a 'healing tool' in the context of the Ancient Near East? Did it serve a purpose in apotropaic or sympathetic magic?

To answer this question, an anthological approach was applied that included an overview and analysis of Judaica, archaeology, anthropology, psychology, historiography, and homeopathy, as well as textual sources with special emphasis on the *Hebrew Bible*, the *Talmudim* and *Midrashim*.

I have explored the main principles of sympathetic and apotropaic magic to compile a theoretical framework in Chapter Two of this study. It became apparent that the principles of sympathetic magic are more relevant than apotropaic magic when considering the role that the Nehushtan played in the story in Numbers 21. The information that follows focuses on the principles of imitative magic that elucidate the Nehushtan's role as a healing tool. When there are apotropaic principles that apply to the Nehushtan, they will be discussed briefly in this conclusion.

Chapters Three, Four and Five illuminated the presence and practices of snake cults and related activities from Egypt, Greece, Anatolia, and Canaan, but also to the understanding of sympathetic and apotropaic magic principles. The movement of empires, that included Mesopotamia, Egypt, Anatolia, Persia, and Greece, crisscrossing the Levant provoked real and perceived cultural change, thus facilitating the intensive exchange of cultures.

The most notable examples from the Ancient Near East came from Egypt as the Egyptians controlled Canaan (during the so-called Exodus).

7.2 PRINCIPLES OF APOTROPAIC AND SYMPATHETIC MAGIC

In my quest to illuminate the Nehushtan narrative and determine how it functioned, I investigated numerous apotropaic and sympathetic or imitative examples, such as the preserving stone (§2.2.2.1[a]); knotted amulets (§2.2.2.1[b]); medical amulets for Arsinoë (§2.2.2.1[c]); magic incantation bowls (§2.2.2.1[d]); the evil eye (§2.2.2.1[e]); African masks (§2.2.2.1[f]) and child sacrifice in Carthage (§2.2.2.1[g]). It became clear that some of these apotropaic practices do manifest *imitative elements*, but the principles are not directly applicable to the story of the Nehushtan. However, a discussion of apotropaic principles proved valuable as part of a *comparative investigation* that allowed this thesis to highlight that sympathetic magic is more applicable to the functioning of the Nehushtan in Numbers 21.

Some of the most important insights and principles that were gained from Egypt, Greece, Anatolia, Canaan, and the Hebrew Bible, are given below - for Egypt (§ 7.3.1.1—7.3.3.4); Greece and Anatolia (§ 7.4.2.3—7.4.3.6) and Canaan. The chapter on the Canaanite context of the Nehushtan did not discuss imitative magic principles, but the Nehushtan in Canaan I and in the Hebrew Bible (§7.6.1.1—7.6.1.4).

The theory that developed through the course of this thesis, is that the Nehushtan is an example of sympathetic rather than apotropaic magic. The synopses given below highlight the key aspects of both apotropaic and sympathetic magic to help illustrate the factors that support this theory.

7.2.1 Apotropaic magic

As part of my investigation of apotropaic magic, I looked at various examples of objects that were used to avert evil influences and deflect bad luck. Amulets were believed to *protect* against unseen evil spirits, demons and witches that inflict illness or cause unfortunate events. The magical effect desired from amulets, is to guard against these unwelcome entities. Magic spells and incantations also form part of the protective supernatural armoury. An amulet can be a symbol of hope or a magical sacred item that is used to ward off illness or prevent unfortunate events, such as walking in front of a carriage or falling down the stairs. It protects the wearer but seldom promises a cure. Amulets are therefore (in most instances, but not all) preventative and not curative. The apotropaic examples that were discussed throughout this thesis therefore aided me in determining whether apotropaic principles could be applied to the narrative of the Nehushtan. In what follows I will only refer to those that are applicable in some way or another to the role the Nehushtan played in Numbers 21.

7.2.1.1 *The preserving stone or eagle stone*

The preserving stone or eagle stone (§ 2.2.2.1[a]) was beneficial to pregnant women as it was believed to protect against abortion and miscarriage (Podgorny 2017:195). In this respect, it was an amulet that would embody the philosophy of apotropaic magic, by using the amulet to repel evil forces that might hurt the foetus. As the outside of the preserving stone may be thought of as the mother's womb – guarding the unfixed section within, which is akin to the embryo within – it may be seen as *a kind of imitative magic to repel or protect from evil forces*.

Principles: This amulet also served an imitative magical function. In the same way as the eagle-stone protected the smaller nodule within it, so would the eagle-stone protect the embryo within the mother's womb. As the eagle stone embodies an imitative magic function, it is therefore applicable to the Nehushtan narrative.

7.2.1.2 *Knotted amulets*

Amulets containing knots (§2.2.2.1[b]) were believed to possess curative powers and *to shield the wearer against malicious spirits* (Phippen 2010).¹⁷⁴ It could be a potent

¹⁷⁴ <https://www.archaeologicalmuseum.jhu.edu/writer/jessica-hippen/>

reminder not to commit a sinful act while in prayer (Day 1950:243), but also a visible sign to keep their thoughts turned towards holiness and the Creator. Amulets were held to be hallowed items that had to be worn or carried (Rosner 2000:17). Thus, the knots would serve as *an apotropaic device to repel temptations*.

Principle: Knots were believed to have healing powers that protect the wearer against demonic spirits and from committing sinful acts (apotropaic). The knots used to cure headaches have an imitative character as knots are held to unknit headaches. As these knotted amulets can work in a curative manner, they are applicable as imitative healing tools to the Nehushtan story.

7.2.2 Sympathetic magic

Sympathetic magic, also called imitative magic, was explored in depth to ascertain whether it would be possible to compile principles that could be used as a theoretical framework that is applicable to the Nehushtan. My investigation of examples from the Ancient Near East and other parts of the world, as well as the Hebrew Bible, the *Talmudim* and the *Midrashim*, has led to the identification of principles upon which my theoretical framework is based. All these examples and their principles have contributed towards a better understanding of the Nehushtan as 'healing tool' within its Ancient Near Eastern context:

7.2.2.1 Fishing

Frazer (1954:12) explains how the Nootkas depend on the ocean for their staple food. They engage in imitative magic which is also known as the 'Law of Similars', to trap their food (§2.3.2.1). They place depictions of fish, swimming through the sea, en route towards their prey so that the fish would be sure to appear and swim into the waiting nets.

The principles are: Fishermen use images of fish to attract more fish; 'Like produces like' and 'like follows like'.

7.2.2.2 Hunting

Frazer (1954:18) expounds how the Papuans of Papua New Guinea, still hunt dugongs or sea cows (*Hydrodamalis gigas*) to this day using imitative magic. They

utilise coconut rhinoceros beetles (*Oryctes rhinoceros*) because their mouth parts tend to penetrate their victim's skin and do not easily let go. The Papuans are convinced that when they put a coconut rhinoceros beetle (*Oryctes rhinoceros*) inside their spear weapons, they are sure to cling to the dugong flesh in the same way as the beetle cleaves to its prey (§2.3.2.2).

The principles are: To ensure that spears will adhere to the prey, hunters use beetles with powerful jaws inside the shaft of their spears. 'An effect resembles its cause' and 'Like produces or follows like'.

7.2.2.3 *Childbirth*

The first people of Borneo, the Dayaks, make use of a shaman to assist a mother in labour by imitative magic (§2.3.2.3). During a complicated childbirth, the shaman instructs the father how he should emulate the baby's birth process by guiding a boulder tied around his waist. This ritual persists until the child comes into the world (Flack 1947:713). The Hos women from West Africa also use imitative magic during a complicated birth. A shaman ties the woman's hands and feet with forest vines and explains to her that as he undoes her bonds, her baby will be set free from its bonds inside her uterus (Flack 1947:716), thus imitating a mother in labour to assist with labour.

Principles 'like follows like'; 'like frees like'; the 'Law of Similars'; and 'effect resembles its cause' are applicable.

7.2.2.4 *Jaundice*

Frazer (1954:15) notes that in India, many archaic Hindu people used imitative magic to treat jaundice (§2.3.2.4). This was based on the idea of eradicating the yellow colour and restoring the normal colour of the patient's skin. The yellow spice, turmeric, and yellow birds were used to relocate the colour from the patient to the birds, and the red hairs of a bull were said to restore the normal colour. Similarly, in Greco-Roman times, the use of a Eurasian Stone curlew, with amazing yellow eyes, was seen as very efficacious (Frazer 1954:16), indicating that illness could travel via the deep gaze at something; an intense stare can cure.

Principles: 'like follows like'; the 'Law of Similars'; 'an effect resembles its cause'; 'influencing an effect by imitating its cause'. This seems to indicate the possible functioning of the Nehushtan. As the jaundiced patient gazed at the bird, the yellow colour was drawn from the patient. Similarly, perhaps, as the people gazed intently at the Nehushtan, so too the venom was drawn from them.

7.2.2.5 *Theriac*

A theriac is an antitoxin to snake venom (§2.3.2.5). The first ingredients for theriac were found at Kos at the sanctuary of Asklepios (Karaberopoulos et al 2012). King Mithridates IV of Pontus was believed to be the originator of this antidote. The original potion contained vegetable matter and wine. The King added snake toxin (Mayor 2010:239) and in this way, he employed the principles of imitative or homeopathic magic to cure serpent envenomation. Viper meat was substituted for that of a lizard. It was thought that snake venom or snake tissue was a snake envenomation curative. This method adheres to the principles of imitative or homeopathic magic.

Principles: 'What kills can cure'; 'what cures can kill'.

7.2.2.6 *Curse tablets, binding spells, and poppets*

There were different types of curse tablets: those for a disappointed lover, or for a business rival, for personal property loss because of theft, and to quash illegal opponents in court (§2.3.2.6).

Sometimes a curse tablet takes the shape of a human figure, with their hands fastened tightly behind their backs in a kneeling position (Craffert 1998:78). Some were even headless and intentionally disfigured and stabbed with pins in their head and body. This was done intentionally to hurt the victim (Craffert 1998:78). This is a form of *imitative magic*, which holds that 'like follows like'. It is hoped by the maker of the figurine that the victim will suffer unbearable pain in the pinned body parts such as the brain, face, heart, or groin.

Principles: 'The Law of Similars' or 'like produces or imitates like;' 'Like curses like'; to destroy one's enemy by damaging or annihilating an image of that person.

7.2.2.7 *Spiritual rituals that honour a new birth and a New Year*

Many Hindus, Muslims, and Jews alike, engage in imitative magical practices such as taste customs. Hindus and Muslims believe that a new infant will never fail to speak kindly to others if the baby savours a sweet treat, often a mixture of dates and honey that is put onto the child's tongue (Kaut 2018; Alalah 2019). The Hindus call this ritual *jabakarma* (Kaut 2018), while the Muslims term it *tahnik* (Alalah 2019).

The principle: 'Like follows like'; 'the Law of Similar's'.

It is a Jewish tradition for congregants present to enjoy apple slices, topped with honey after the *Rosh Hashanah*¹⁷⁵ holiday service, with a prayer that symbolises their sweet new year (Trepp 1980:104). Principle: Sweetness in the mouth results in kind words spoken. Only sweet words will emanate from it.

Principle: 'Like follows like'; the 'Law of Similar's' (§2.3.2.7).

7.2.2.8 *Child sacrifice in Carthage*

The Carthaginians sacrificed their beloved children in the hope of appeasing the god Kronos, and for procuring his *protection* of the city during a crisis such as drought or crop failure (§2.3.2.8). Stager and Wolff (1984) describe how archaeologists discovered thousands of pottery jars in the Carthaginian *Tophet* with small stelae erected over each tiny grave. This is an indication that the parents loved their children because they buried their remains in that very old cemetery. It is interesting to note that it was mostly the children from the nobility that were sacrificed (Rives 1994:54). They offered up their noble children (their best produce) as a vow to their god, so that, in return, their city would be protected by Kronos.

Principle: Child sacrifice found favour with the god, Kronos, who would, in return, protect the city of Carthage and its crops from disasters (Rives 1994:54). In my view the children were sacrificed in return for the god's protection of their food supply. The children, after all, were the 'fruits' of their parents. The sacrifices could also have been made in fulfilment of personal vows.

¹⁷⁵ This in English means *New Year*.

These principles of sympathetic and apotropaic magic provide a valid theoretical framework to be applied to the Nehushtan in the book of Numbers.

7.3 PRINCIPLES OF SYMPATHETIC AND APOTROPAIC MAGIC IN EGYPT

7.3.1 The Uraeus and Ra's solar barque

Snakes played an important symbolic role in Egypt but primarily functioned as *apotropaic devices*. The *uraeus* (§ 3.2.1), for example, has a dual apotropaic function. Firstly, it is a diadem worn on the head of the pharaoh that symbolises royalty and absolute power. But it is also an amulet as it functioned to vanquish the enemies of pharaoh by repelling evil forces. People had to look up to the uraeus on the head of the Pharaoh. It was noted that images of snakes were used to repel snakes, following the principle of 'like repels like' (Burnett 2019:236). The ancient Egyptians also believed that the Gods had skin made of gold. It is therefore possible that bronze held a similar meaning, and that there could be a connection between Egyptian magic and the bronze serpent of Numbers 21:4–9 (Burnett 2019:238).

Ra's solar barque was a symbol of the sun as it moved with it during the day and followed it underground at night, where the evil Apophis would attempt to destroy the barque (§3.2.2). Apophis, a huge snake, also known as the Great Worm (Geddes and Grosset 2001:142), is the eternal enemy of the sun God Ra, that waited for any chance to attack, kill, and eat Ra and so prevent the next dawn. Ra, with the help of gods, goddesses, and souls of the recently departed always succeeded (Geddes and Grosset 2001:353) in killing Apophis, but he revived each day, gaining strength to begin anew each night (Geddes and Grosset 2001:353). During the hours of darkness, the people and priests would use imitative magic to attempt to destroy Apophis by making wax effigies of him and burning them with the intention of annihilating him forever (see 2.3.2.6), which is a similar example of *imitative magic*.

The examples of sympathetic or imitative magic applicable to the Nehushtan follows:

7.3.2 Mummification, the afterlife and the legend of Isis and Osiris

Mummification is a form of *imitative magic* (§ 3.3.1) in which it was vital to preserve the physical body of the deceased as a life-like representation so that the spirit of the deceased could find its eternal home in the Blessed Fields (Hawass 2013:43).

Principles: Mummification of the body was important to enable the soul and spirit to recognise and unite with the mummy to live forever: 'Like restores like' 'like imitates like'; 'like follows like'; the 'Law of Similarars' (§2.3.2.3).

7.3.3 Pharaoh Tutankhamun's ceremonial sandals

Pharaoh Tutankhamun's ceremonial sandals were discovered in his tomb (§3.3.2). They were most beautifully made of wood, leather and gold, and are an example of imitative magic. Images of fettered Nubian and Asiatic prisoners of war appear on the upper surface of the sandals (Hawass 2013:139). These were the sworn enemies of the pharaoh and required constant repression. The king would place his feet and walk on and crush Egypt's traditional enemies by trampling on them constantly as he walked about (Murphy & Sarsalla 2016:5).

Principles: Sworn enemies of Egypt, must be reminded of their enduring capitulation to the pharaoh by him literally walking on their supine images; *attempting to destroy or harm one's enemy by damaging an image of those people.*

7.3.4 Egyptian Principles of apotropaic magic that may apply to the Nehushtan

Although apotropaic magic is not applicable to the Nehushtan, I discussed three examples from Egypt: the *ureaus* diadem worn on the pharaoh's brow that protected him from his enemies and his grain stores from rodents. Snake hieroglyphs were snake images on a coffin that served to protect the deceased from fearsome snakes in the Underworld. The amulet of a scarab or dung beetle, represents resurrection, as they undergo a metamorphosis before 'resurrecting' as an adult (§3.4.1).

Snake images were very common in Egypt, where they represented wisdom, fertility, healing, and rejuvenation. Snake venom heals but also kills (§2.3; §2.5).

The *ureaus*, where the snake protects the Pharaoh and like the snake, holds the power of life and death over the Egyptians (§2.2.2.1[e]).

Principles: Amulets were placed in the bandages of the pharaoh's mummy to protect him/her on their way to the afterlife. In a few respects the scarab beetle is like the snake: Both are capable of life underground, where they produce their young. Both protected the pharaoh: the ureaus snake during the life of the king and the scarab after death (§2.2.2.1[f]).

There is also an imitative aspect to the scarab beetle: As the beetle undergoes a metamorphosis to be resurrected, so too the deceased will undergo a process of resurrection. This aligns with the principle of 'like restores like'; and the 'Law of Similars'.

- It became evident that Egyptian cultural influence immensely impacted the southern Levant and in particular the Negev and northern Sinai.
- Evidence of Egyptian apotropaic and sympathetic magic is pervasive.
- The movements of empires that included Mesopotamia, Anatolia, Persia, and Egypt crisscrossing the Levant provoked real and perceived cultural change, thus facilitating the intensive exchange of culture.
- Long-term interaction between Egypt and Sinai gave rise to various expressions of hybridization and multiculturalism in the early Israelite religion and culture.

7.4 PRINCIPLES OF SYMPATHETIC AND APOTROPAIC MAGIC IN GREECE AND ANATOLIA

In Greece and Anatolia, snakes played a vital role in healing, especially in the healing sanctuaries known as *Asklepieia* or Asklepios. My investigation of the healing god, Asklepios, and the function and role of the snakes, as well as the principles of apotropaic and sympathetic magic, where applicable, have illuminated some aspects of this research.

7.4.1 The snake healing symbol

A single snake coiled around a pole or staff (Coulson 1980 42) recalls the Nehushtan and the Greek healing god, Asklepios, as snakes were associated with both (cf. Prakash & Johnny 2015). They were also linked with the underworld, as snakes live and hibernate underground (Jordan 2004:110). The reptile never appeared to age as it regularly shed its skin and was regarded as living forever. They also were believed to absorb the minerals of the earth (Charlesworth 2010:15) perhaps because they were subterranean creatures (Downing 1990:564).

7.4.2 Sympathetic magic

The sanctuaries of the Greek god of medicine, Asklepios, were discussed in detail and examples of imitative magic that took place in the Asklepieia of ancient Greece were provided. The god's background and aspects of the healing practices that occurred in these ancient temples (Charlesworth 2010:266) were discussed. It is not difficult to visualise the non-venomous snakes freely roaming the abaton of the sanctuaries and how they may have healed skin conditions by licking the patients' sores. Some of the actual healings that took place in some of the *asklepions* are explained. It would be interesting to know more about the healing sanctuaries and snake healings that occurred there.

7.4.2.1 The healing temples/sanctuaries

The healing temples were all set in health-giving places, usually near a natural spring. Epidavros rose to prominence in the fourth century BCE (§4.3.3). There were other sanctuaries at places such as Athens, Kos, Messene, and Corinth, that were situated outside the cities (Charitonidou 1978:15). Most of the maladies treated were chronic conditions such as an inability to conceive children. The suppliants seeking healing slept overnight at the abaton, the most sacred area of the sanctuary, where dream-healing occurred. The priests who lived there, interpreted the dreams, many of whom had a medical education. In ancient Messene, Asklepios was a civic doctor, while in Corinth hundreds of plaster cast votives were found that indicated that imitative magic healing was employed. Because snakes' habitat was subterranean, the ancient Greeks thought snakes were able to imbibe the healing minerals of the earth that enabled them to perform their healing functions.

7.4.2.2 *Serpents employed in healing therapy and snake symbolism*¹⁷⁶

The snakes utilised were non-venomous constrictors known as the Aesculapian Rat Snake (*Zamenis longissimus*; §4.3.4). Asklepios was credited with being able to postpone the death of his patients by renewing them, much like a snake will cast off its worn-out skin. This explains the significance of the serpents in the healing cult. One of the examples discussed was a serpent that healed a man's toe by licking it (Wells 1998:29–30). It has been scientifically proven that snake saliva contains a growth factor that will stimulate skin healing (Angeletti et al 1992:223).

Agamede of Keos (Edelstein & Edelstein 1975:237) and Nicasibula of Messene (Edelstein & Edelstein 1975:147) were seemingly unable to conceive children (§4.3.4.2). Agamede dreamed a snake lay on her abdomen. The snake was Asklepios, who, in her dream, impregnated her. Similarly, Nicasibula dreamed the snake had intercourse with her. This treatment proved beneficial and healed her and she gave birth to twins within a year. Thersandrus of Halieis who had consumption, slept in the abaton at Epidavros, but had no dream or cure. When he reached his home on a wagon following his return trip, a snake which had coiled round a wheel, found him in his room and healed him. These examples of snakes being employed in healing are reminiscent of the Nehushtan, which like the snakes of Asklepios, were employed as a *curative tool*.

7.4.2.3 *Anatomical votive offerings and sympathetic magic*

The use of anatomical votive offerings originated in Crete (Askitopoulou et al 2002:450; §4.4.1) and Corinth became an important centre for sculptors and artists. Examples of all body parts of both men and women were discovered in pits by archaeologists, where they had been placed centuries before (Oberhelman 2014:49) (§4.4.1). The anatomical votives were presented to the god before the healing took place. A person with an inflicted arm would plead to the god for healing and offer him an anatomical votive arm.

Principles: 'Law of Similars'; 'like produces like'; 'an effect resembles its cause'.

¹⁷⁶ Mariette would it be a good idea to state in the text that this group is not part of sympathetic healing, or would this be a problem?

7.4.2.4 *Imitative healing in the modern Christian churches*

The Greek Orthodox Church and Roman Catholic Church have incorporated the ancient anatomical votive offerings into its ritual observance (§4.4.2). The plaster body parts have been replaced by flat, metal rectangles with holes in them (Vrettos 2016). The reason for this is that the *tamata* are light weight and far easier to transport than the anatomical votives of antiquity. By placing the *tama* onto the small hooks found on the altars it enables a person to beg the local patron saint for a healing miracle (Giousmas 2013). A person with an afflicted eye would offer a votive of a single eye to the saint to beg for healing (Laios et al 2013:453).

The principle applicable is much the same as in the ancient healing sanctuaries: 'Like follows like'; 'like heals like'; the 'Law of Similars'.

7.4.3 Greek principles of apotropaic magic that may apply to the Nehushtan

Even though apotropaic magic does not apply to the Nehushtan, I have elucidated an example of apotropaic magic, that of the evil eye amulet. The amulet is used to repel evil (apotropaic function) while the image of an eye is used to repel the effects of the curse of the evil eye (§4.5.1).

The healing symbol of medicine in Greece is very similar, a snake coiled around a staff that is very reminiscent of the Nehushtan (§4.2). The Nehushtan is an image of a snake (a healing device) that heals snake bites.

Snakes played an important role in healing in Greece and Anatolia at the healing sanctuaries of Asklepios. This symbol of medicine (a staff entwined by a snake) can be seen today above the entrances of most hospitals and clinics, and often features as part of the emblems/badges of medical practitioners, like paramedics.

7.5 THE CANAANITE CONTEXT OF THE NEHUSHTAN

The purpose of Chapter Five was to investigate the possible remnants of a snake cult and principles of apotropaic and sympathetic magic in Canaan and early Israel. Obviously, the long-term interaction between Egypt and the Sinai had a major impact on the religion and culture of Canaan and the early Israelites. There is evidence of a snake cult in Canaan, judging by the bronze snake figurines found there (§5.2).

Copper mining and smelting took place in Timna and Feinan. The Nehushtan was made of copper; perhaps the Kenites were commissioned to do this by the early Israelites, who passed through this area during the Exodus period (§5.3.2; §5.3.3). A copper snake reminiscent of the Nehushtan was found inside the ruined temple of Hathor that has been dated to the time the Nehushtan was made and may have functioned as a healing device (§5.3.4). There is a link between YHWH and copper and between the Kenites and YHWH but insufficient verification to prove that YHWH was the Canaanite god of metallurgy. It is possible that the Nehushtan originated in Canaan (§5.2.1) and was later worshipped in the Solomonic temple (§5.5). Perhaps the Nehushtan was worshipped as an unknown god of snake bite cure in Jebus. It has been postulated that the Nehushtan may have been taken by the Assyrians as booty and not destroyed by King Hezekiah (§5.5.3).

7.5.1 Remnants of a snake cult in Canaan

Rowley (1939:137) postulates that there is a possibility that the Nehushtan originated in Canaan (§5.2.1) and was venerated in a temple in Jebus, and presided over by a Jebusite priest, Zadok.¹⁷⁷ Joines (1968:235) is of another opinion and maintains that the Nehushtan was placed in the Solomonic temple later by King Solomon (§5.3).

7.5.1.1 The Nehushtan in Canaan before the settlement

It is of significance that copper snake effigies were found at Megiddo, Tel Mevorakh, Shechem and Gezer (Münnich 2008:39–41). This indicates that as these serpents were found near to sacred shrines, it seems logical to suggest that these bronze snakes may have been venerated at their respective shrines. Münnich (2008:48) links the Nehushtan to both the Phoenician god, Eshmun, and the Greek doctor, Asklepios, as both are associated with staffs and healing. First, there was the Nehushtan, placed on top of a standard, which means that Moses predated both Eshmun and Asklepios. Münnich (2008:48–49) draws a parallel between the Canaanite god, Horon and Nehushtan because both cure snake bites. This information would perhaps indicate a type of snake cult in Canaan. I would say that there is a strong indication that the copper snake is of Canaanite origin and was believed to cure snake bites.

¹⁷⁷ For more information on Zadok, see Kamrat (2007) in the *Encyclopedia Judaica*.

7.5.2 The ancient copper mining and smelting industry at Timna and Feinan

I have investigated the copper mining and smelting industry in Timna and Feinan because the Nehushtan was manufactured from copper and probably passed through this area during the Exodus period (§5.3)

7.5.2.1 The magic of copper smelting in antiquity

Amzallag (2009:7) believes that the ancient copper metallurgists were regarded as magicians because of their skill and knowledge in transforming rock into metal (Rotea et al 2011:8), a substance that can be recycled (§5.3.1; 5.4.3; 5.4.4). The copper workers were artisans, who were highly skilled, ate well and were not slaves (Rotea et al 2011:8). It is very likely that the early Israelites commissioned the Kenites (§5.4.1) or Midianites in the 'Exodus group', the nomadic metallurgists, to cast the Nehushtan from copper sourced near Timna or Feinan. A copper snake discovered in the Hathor shrine lends strength to this argument.

Copper workers, who lived in Romania during the Bronze Age, partook in a holy activity (§5.3.1). The reason for this was that minerals mined from the earth had to be extracted from deep within it, where chthonic demons and spirits proliferated (Rotea, et al 2011:8). It was believed that mining activities disturbed these subterranean entities, who required placating. This involved performing mysterious rituals. This analogy may apply to the ancient copper workers and throws more light on how they were perceived by others.

7.5.2.2 Timna

Copper was the first metal used in archaic times, and it was used to make jewellery. The copper industry has existed in Timna in the western Arabah Valley since the fourth millennium BCE (§5.3.2) and was established during the Late Bronze and Early Iron Age around the time that the Nehushtan was made (Rothenberg 1972:293). The Egyptians reached their mines in the Arabah by boat and traversed the remainder of the journey by donkey caravans (Rothenberg 1990:71).

It was discovered that a group of semi-nomadic metal workers had lived in this area during the period from the Early Iron Age (11th to 9th centuries BCE) (cf. David 2018).

These people included Midianites, as can be ascertained from the pottery remains located at Timna and stone tools used by miners (Rothenberg 1990:71).

Sheep and goat bones were found at Site 34, populated by Egyptians or locals. Most of the bones displayed evidence of butchery marks (Sapir-Hen & Ben-Yosef 2014:788). This may be evidence that the metal smiths ate animal protein and were remunerated well enough to afford it (Ben-Yosef, Langgut & Sapir-Hen 2017:411).

7.5.2.3 Re-melting of copper in the Hathor shrine precinct

In the area of the Hathor shrine (§5.3.3) dating to the 14th to 12th centuries BCE, New Kingdom, Rothenberg (1999:162) found evidence that copper had been re-melted. He found crucible fragments, copper slag, tuyeres and remains of copper objects strewn around the area. An object of great interest was a rejected figurine with the remains of its mould still adhered to it. Unfortunately, it is unknown whether the Nehushtan would have been cast in such a mould, but it remains a possibility.

7.5.2.4 Feinan

Feinan (§5.3.4), known during Biblical times as Punon, was situated in the Arabah Valley. Mining operations may have taken place from the Chalcolithic Period (4000–3150 BCE) to the end of the Early Bronze Age I; the Iron Age I and Roman/Nabatean and Byzantine times (cf. Engel 1993). In Feinan, there were other metals and trace elements found with the copper ores (Najjar & Levy 2011:33). It is possible that the information on the trace metals could, in theory, confirm if the Nehushtan of the Biblical narrative was made in the Feinan area. Unfortunately, this is impossible as the copper serpent was either destroyed by King Hezekiah (2Ki 18:4) or was included in the booty paid by King Hezekiah to the Assyrians (Barnett 1972:2).

7.5.3 The Hathor shrine at Timna

7.5.3.1 The votive moulds in the vicinity of the shrine

It is of significance that a copper snake was found inside the ruin of the Hathor shrine, and it is reminiscent of the Nehushtan, especially as the Hathor snake has been dated to about the 'time that the Nehushtan was made' (according to the narrative). Perhaps the Hathor serpent's purpose was that of a healing device. It is therefore possible that

the Nehushtan may have functioned as a *curative device*. A figurine mould found inside this shrine may suggest that a mould was used to make the Nehushtan, because the copper snakes found at Megiddo, for instance, were very finely crafted, and therefore impossible to create without a mould (Rothenberg 1999:164; §5.3.3.1).

7.5.3.2 *The temple*

The Egyptians built two shrines for Hathor in her role as the Egyptian mining goddess of Timna (§5.3.3.2). In time, both were destroyed by earthquakes. Eventually, the Egyptians lost interest in the Timna mines (Avner 2014:105). The Midianites then took over and covered the Egyptian shrine with a tent-like structure. Rothenberg (1972:167) found a piece of faience with Hathor's face depicted on it. There were remains of animal-shaped copper castings in the shrine. These copper items may have been votive offerings made by the miners to their goddess Hathor. The copper workers believed she would communicate to them in dreams where the copper could be found. Rothenberg (1972:167) suggests that the Hathor shrine was built during the Exodus period. Midianite pottery discovered in the shrine was petrographically dated to between 1318–1158 BCE (19th to 20th Egyptian dynasties). This correlates to the mining activities during the (traditional) Exodus period.

7.5.3.3 *The copper snake found within the temple*

Rothenberg (1972:8) documents the most important find for the purposes of this thesis, which is the copper snake found in the Hathor shrine (§5.3.3.3). It dates to between the Late Bronze Age and the Early Iron Age (1300–1100 BCE). This was about the time that the Nehushtan was made (Rothenberg 1972:173). It may be linked to bronze serpents brought to light at Megiddo, Gezer, Hazor and Shechem, which are very reminiscent of the Nehushtan. These snakes seem to suggest that copper serpents were not unusual but surprisingly common.

7.5.4 YHWH and the Canaanite god of metallurgy

7.5.4.1 *The Kenites*

I discussed the Kenites because there is a connection between Moses and this tribe through Jethro, his father-in-law (§5.4.1; 5.4.3). The Kenites were one of the Canaanite tribes and are believed to have originated from the south of Canaan – that

is the area around the Arabah, Midian, and Edom. They were nomadic or semi-nomadic metal workers, who may have originated from Feinan. This is important to know because the Kenites were metalsmiths who were skilled in copper metallurgy.

7.5.4.2 The Midianites and YHWH

There is a connection between Moses and the Midianites (§5.4.2) (Buttrick 1962:375), who were nomadic traders, who probably originated from Midian (Buttrick 1962:6), through a son of Moses and his concubine Keturah. Moses married Zepporah, the daughter of Jethro, a Midianite priest. It is feasible that Moses learnt of YHWH from Jethro who, according to scripture (Exodus 18), performed a sacrifice to Him. This may indicate some sort of covenant between Jethro and YHWH. This point is important because Jethro's sacrifice to YHWH is a good indication that Moses probably learnt about YHWH from Jethro, his father-in-law (Cody 1968:154; cf. 5.4.2).

7.5.4.3 The Kenites, Jethro and YHWH

Cody (1968:153) points out that although Jethro was a Midianite priest, he was also described as a Kenite (§5.4.3). This can be explained by postulating that he was a metalsmith by trade. Another suggestion is that because Moses was such a prominent person, the neighbouring peoples of the Ancient Near East would be anxious to claim kinship with him. Such an example would be his marriage to a Kushite woman, and this may also have been the case with Moses and his father-in-law, Jethro (Sarna 1966:19). YHWH was pleased with Caleb, a Kenite and one of the twelve spies, for his service and belief in Him. He and Joshua were the only ones who had been brave enough to agree to spy on the feared Canaanites (see 5.4.3).

7.5.4.4 YHWH and the Canaanite god of metallurgy

Amzallag (2009:387) postulates that the copper smiths of South-East Canaan may have venerated an unknown god of metallurgy and questions whether YHWH was not perhaps this god worshipped by the Kenites, a small group of copper metallurgists (§5.4.4). Tubal-Cain is credited with being the father of every smith (cf. Boyarin 2007:29). This may point to a link between the metallurgists and YHWH worship. There may be an association between YHWH and copper – the Bible has several references to YHWH and copper. YHWH is regarded as a smelter, who also created the metallurgists to exploit the ore.

As previously stated, there is a link between YHWH and copper; and between the Kenites, Midianites and YHWH, but it is too tenuous to maintain that YHWH is that mysterious Canaanite deity of metallurgy.

7.5.5 The Nehushtan in the Solomonic temple

7.5.5.1 Background information

Bright (1972:277) notes that King Hezekiah carried out a policy of religious reforms (§5.5.1). One of these was the destruction of the Nehushtan, a metal snake, which was being revered as an idol. It may even have been a representation of an unknown *god of snake bite cure* (Handy 1995:41). Sennacherib, son of Sargon II, was not as adroit in state matters as his father. King Hezekiah soon realised this, and promptly refused to pay his regular tribute to the new Assyrian king, who laid siege to Jerusalem, but never vanquished the city (Bloch-Smith 2018:20).

The prophet Isaiah persuaded Hezekiah to suspend hostilities (Bright 1972:277). The Assyrians did so, but demanded an impossibly high peace agreement and the Nehushtan may have been part of it. However, the biblical account maintains that the Nehushtan was destroyed by King Hezekiah during his iconoclastic reforms (Adeyemo 2006:458; §5.5).

7.5.5.2 King Hezekiah's reforms reassessed

It is stated in the Bible that the Nehushtan, made by Moses, was annihilated by King Hezekiah and it is very challenging to attempt to recreate Biblical events and this applies to the king's religious changes mentioned in II Kings. Bright (1972:282). Lederman (2017) expounds that to date there is no proof of any holy reforms during the eighth century BCE. Scholars disagree on this aspect and Röthlin and Le Roux (2013) point to archaeological evidence that seems to point to King Hezekiah's eighth century BCE reforms that were not only religious, but also instituted to destroy local shrines and to centralise the cult worship at the Solomonic temple (§5.5.2).

Sir Henry Layard and WR Loftus excavated several bronze bowls from the palace ruins in Nimrud during 1849-1850. On one of these vessel fragments was incised sphinxes, several *uraei* and a canopy, the brim of which depicts an etching of a serpent

atop a standard, which is reminiscent of the Nehushtan that Moses made in the wilderness. Much later, it was worshipped as an idol in the Solomonic temple until King Hezekiah destroyed it. There was an engraving on the same fragment that, when translated, means 'belonging to YHWH'. Lederman (2017) is convinced that this Judean bronze bowl could well have been a part of Assyrian plunder that was paid either by Ahaz to Sargon II or by Hezekiah to Sennacherib and may have included the Nehushtan itself. Röthlin and Le Roux (2013) note that archaeological remains were discovered in Nimrud that appear to date to King Hezekiah's eighth century reforms. These were religious and were put in place to centralise the cult worship at the Solomonic temple. This metal bowl could have been part of the tribute paid to the Assyrians, either by Hezekiah to Sennacherib or by Ahaz to Sargon (Lederman 2017). There is no absolute proof of this idea and in the absence of such proof, the Biblical account is acceptable. This is yet another area for further research.

The remains of a snake cult were found in Canaan which means that the Nehushtan may have been related to such a cult (§5.2.1). It is very possible that the Nehushtan was made of copper, probably mined at Punon or Timna (§5.3). The Nehushtan may have been carried off by the Assyrians as booty (§5.5.3). The bronze bowl fragment of a snake figure perched on a pole is suggestive of the Nehushtan. The Nimrud bowl fragment may have been part of the booty carried off by the Assyrians and this also indicates the type of snake images existing at the time.

7.6 SYMPATHETIC MAGIC IN THE HEBREW BIBLE, THE BABYLONIAN AND JERUSALEM *TALMUDIM* AND *MIDRASHIM*

There are several relevant examples of sympathetic magic in the Hebrew Bible, *Talmudim* that refer to the presence and functioning thereof in the Old Testament times that will illuminate the context and understanding of the Nehushtan narrative.

7.6.1 Sympathetic magic in the Hebrew Bible

7.6.1.1 *Jacob's spotted and speckled sheep (Gn 30:37–31:10)*

Westermann (1981 in Noegel 1997:7) maintains that Jacob manipulated the female goats and sheep to produce spotted and speckled young by watching and imitating the patterns on the tree branches placed in front of them while they were mating. In the same way that the female goats and sheep produced spotted and speckled young

by watching and imitating the patterns on the tree branches placed in front of them while they were mating (§ 6.2.1.1), the early Israelites recovered from snake bite by gazing at the Nehushtan (a metal snake image).

Principles: 'The law of Similars'; 'like follows like'. (§6.2.1.1; §2.3.2.1). By looking at the markings on the tree branches and imitating them, the female goats produced similar kids and the sheep produced lambs with spots, streaks, and speckles on their bodies. The animals viewed the speckled and spotted tree branches and produced animals similarly spotted and speckled. (§2.3.2.1; §2.3.2.4).

7.6.1.2 *Sweetening the bitter waters of Marah (Ex 15:22–25)*

Plaut (2006:442) expounds that Marah was known for its bitter water, which was too bitter to drink. The parched Hebrews begged Moses to intercede with God on their behalf (§6.2.1.2). God responded most unexpectedly; God taught Moses His method of sweetening the bitter water of Marah. He wanted to restore the bitter water by throwing a branch of bitter wood into the water.

The principle of homeopathic magic applies *where like is used to cure like* (§2.3.2.1).

7.6.1.3 *The golden mice and tumours (1 Sm 6:4)*

Sympathetic magic must have been a well-known and accepted practice in Philistia, which was utilised by the Philistines to appease the Hebrew God. This practice was accepted without question (§6.2.1.4). The magical ceremony of appeasement performed by the Philistines was most successful. At the battle of Eben-ezer, the precious Ark of the Covenant was snatched away from the early Israelites (Firth 2009:102) (§6.2.1.4). Fishbane (2004:568) explains that the Ark was taken onto the battlefield to encourage the people. The Philistines viewed the Ark as a battle trophy and a symbol of the defeat of their enemies, but it was snatched away and taken to Ashdod, where it was installed at the temple of Dagon (1 Sm 5:2). The Philistines were forced to submit to the God of the early Israelites, as Dagon fell on his face before the Ark time and again. This was accompanied by a plague sent to the Philistines – possibly a rodent (bubonic) plague or a boil pestilence (Conrad 1984:282). The Philistines believed that the Ark and the plague were linked. They made models of golden mice and/or buboes (swollen inflamed lymph nodes), with the intent that they

would end the rodent plague The author of the first book of Samuel was aware of imitative magic to compensate God for stealing the Holy Ark, which was returned, and subsequently the plague left them (Langdon-Brown 2014:34).

Principle: 'Like cures like', 'What kills can cure'. The models or images of the rodents and/or buboes cured the rodent plague.

Principle: 'The Law of Similars'; 'like placates like'; 'like follows like', an image of the rodents ended the rodent plague (§6.4.2).

It is clear from the examples above and below that the early Hebrews participated both consciously and unconsciously in magical observances, both sympathetic and apotropaic, despite the strict prohibitions to the contrary in the Hebrew Bible. Attempts were possibly made to edit them out of scripture, but clues remain suggesting the efficacy of these practices (§ Chapter Six). A few examples of sympathetic magic in the Hebrew Bible gives even more context to the Nehushtan story.

7.6.2 Sympathetic magic in the Babylonian and the Jerusalem *Talmudim* and *Midrashim*

7.6.2.1 *Clarifying the sediment in a wine bottle*

Abin ben Huna explained that the sediment inside a bottle of wine could be clarified by sealing it with clay and placing it in water and it was also necessary to utter an incantation. As the water cleared so would the sediment in the wine bottle.

Principle: When placed in water, the seal on the wine bottle would become clear and in the same way so would the wine. 'Like cures like' is a form of imitative magic.

7.6.2.2 *The bite of a mad dog*

Rabies, which has been around for thousands of years, is a terrifying virus that penetrates the limbic or emotional centre of the brain, resulting in the mindless frenzy common to all patients and ending in coma and death. Although the rabbis were aware of this, Rabbi Judah the Prince attempted imitative magic therapy by giving his slave a raw lobe of the rabid dog's liver to eat. This was done as a last resort to save the

slave's life, but sadly, the slave died. It was for this reason that the rabbis were very reluctant to recommend this cure.

Principle: Imitative magic was used, and the patient was advised to eat some of the liver of the dog that had bitten the patient. 'Like cures like', 'what kills can cure' and 'what cures can kill'.

The description of a rabid dog's behaviour by Rabbi Moses Maimonides is most accurate. This implies that he must have studied rabid dogs in great detail. He admitted that cauterising the bite wound had proved to be an effective cure. The rabbis seemed to be aware of the long incubation period of rabies. This may explain the burying of the victim's clothes at the crossroads for one year after exposure to the virus.

Principles: 'What kills can cure'; 'what cures can kill'; 'the Law of Similars'.

7.7 CONCISE INTERPRETATION OF THE NARRATIVE

What follows is my interpretation of the story of the copper serpent in the book of Numbers, which is based on a concise interpretation of the narrative within the framework provided by this thesis.

The early Israelites were on their way to the 'Promised Land' from Mount Hor along the route to the Sea of Reeds to circumvent Edom (Num 21:4). The people complained about their boring diet of manna. Some even wished they were back in Egypt (Num 21:5). God grew angry and withdrew His protection against the desert fauna (Num 21:6). This area was rife with venomous snakes, which most people are terrified of encountering. Naturally, the serpents attacked the people and many perished.

The people repented and Moses prayed to God (Num 21:7), who ordered that a copper snake be manufactured (Num 21:8). It is possible that Moses requested his Kenite family of coppersmiths to assist in making a snake effigy. The existence of copper industries at locations such as Timna and Feinan support the Nehushtan's production, as both the natural resources and skillsets necessary to create such an object were available to the early Israelites. It is also possible that a mould may have been used in its production, as this method of casting was already well-established at the time.

God then ordered this newly fashioned snake effigy to be placed up on a flagpole or standard so that it was visible to the whole camp as the shiny copper glittered in the desert sun (cf. Num 21:9). An imitative magical rite followed, and the metallurgist magicians produced a healing tool or device.

It is possible – when considering the cultural practices of the Ancient Near East in relation to the production of objects of imitative magic – that an imitative magical rite would have been performed at some point, possibly involving the metallurgists (who were themselves considered to be ‘magicians’ in their own right) who crafted the Nehushtan. To the people, this was powerful magical medicine, not only because it came from the Almighty, but also because it adhered to the known – and trusted, within the context of Ancient Near Eastern cultural practices – principles of imitative/homeopathic magic that followed the ‘Law of Similars’, where ‘like cures like’, ‘an effect resembles its cause’, and ‘what kills can also cure’. As role-players within the cultural context of the Ancient Near East, the early Israelites would have been familiar with the workings of sympathetic magic, having witnessed the effects of it through cultural contact, and would not have questioned the Nehushtan’s efficacy as a healing tool. As a result, the people whose faith in God was restored gazed up at the serpent and were cured and proceeded on their way to the ‘Promised Land’. Known and trusted Ancient Near Eastern cultural practices were used to heal the early Israelites who had been bitten by snakes, in the form of a copper image of a snake (the Nehushtan) to gaze up to. The principles is of imitative magic that followed the ‘Law of Similars’, where ‘like cures like’, ‘an effect resembles its cause’ and ‘what kills can also cure’.

According to the biblical narrative the early Israelites had come from a different cultural group, that of Egypt (Ex 13). There is no doubt that they had absorbed some cultural practices of Egypt during their sojourn in the land of the pharaohs. They were on their way to the Promised Land and met other peoples and some enculturation would have taken place on the way. The early Israelites must have had prior experience with sympathetic magic to have had faith in and acceptance of it, to have solved their ophidian problem by using such magic. In Canaan possible remnants of a snake cult were discovered, where sympathetic magic may also have played an important part.

Lastly, similar objects (to the Nehushtan) were found close to cultic areas (e.g., Megiddo, Jebus and Timna) which further suggest that the Nehushtan might have functioned as a curative device.

The Nehushtan was magic with the intent to heal, which I believe was permissible, just like rabbis were allowed to ward off evil when entering a strange town. The Nehushtan was an exception to the rule when it came to magic practices, but not uncommon in their Ancient Near Eastern context. The Nehushtan functioned as sympathetic magic (benevolent) and not contagion (sorcery/witchcraft) magic. The early Israelites still knew that only YHWH could heal or rescue them (see the context of the Old Testament, e.g., Jdg 2:1-3). In the Old Testament all divinatory practices would clearly be called magical and the magic of the Nehushtan was such a practice. It was meant to heal, not to inflict harm and therefore it would have been a permissible type of benevolent sympathetic magic.

7.8 AREAS FOR FURTHER RESEARCH

Future research could investigate the following topics:

- The ancient Egyptian use of an object like the Nehushtan; like snake effigies on staffs and standards, with a particular focus on healing attributes, or connections to healing cults.
- A possible connection between YHWH and the Canaanite god of metallurgy.
- More evidence that somniferous (sleep-inducing) drugs were used at the healing shrines of Asklepios in ancient Greece.
- The possibility that the Assyrians may have carried off the Nehushtan as booty.
- The nature and extent of the belief in the efficacy of magic-like customs and halakhic practices on the part of contemporary Jews who engage in the rituals discussed in 2.3.2.7.

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