

Contents

Acknowledgments — VII

List of Abbreviations — XV

1 General Introduction — 1

- 1.1 Geographical and Temporal Scope — 4
 - 1.1.1 Why Post-Hellenistic Sources — 6
- 1.2 Why *Dreckapotheke* — 7
 - 1.2.1 Methods — 10
 - 1.2.1.1 Loan-Words? — 10
 - 1.2.1.2 Identifiable Names of *Materia Medica* — 10
 - 1.2.1.3 Context and Combination of Ingredients — 12
 - 1.2.1.4 Medical Ingredients Considered — 12
- 1.3 General Definition of Terms — 14
 - 1.3.1 Medicine vs. Magic — 14
 - 1.3.2 *Dreckapotheke* and Similarly *Perplexing* Ingredients — 16
 - 1.3.3 Difficulties Inherent in their Interpretation — 17
- 1.4 History of the Scholarship — 20
 - 1.4.1 General Comparative Interests — 20
 - 1.4.2 On Medicine — 20
 - 1.4.3 Specifically on *Dreckapotheke* — 23

2 The Sources — 25

- 2.1 Mesopotamian Sources on Drugs and Pharmacology — 25
 - 2.1.1 Archaeological Evidence — 25
 - 2.1.2 Textual Sources — 26
 - 2.1.2.1 Ebla — 29
 - 2.1.2.2 Uruanna — 30
 - 2.1.2.3 *A Pharmaceutical Inventory* — 30
 - 2.1.2.4 *Vademecum* of the Physician — 31
 - 2.1.2.5 *Šikinšu*-Series — 31
- 2.2 Principal Greek and Roman Sources on Drugs and Pharmacology — 33

3 Historical and Intellectual Contexts — 41

- 3.1 Cross-Cultural Material Transfers and Occasions for Contact — 42
 - 3.1.1 Late Bronze Age — 43
 - 3.1.2 Early I Millennium BCE — 44
 - 3.1.3 Achaemenid Period — 46
 - 3.1.4 Hellenism and Alexandria — 47
 - 3.1.5 Rome and the Early Empire — 49

- 3.2 Cross-Cultural Intellectual Transfers — **50**
 - 3.2.1 Transfers of Literary and Artistic Motifs — **50**
 - 3.2.2 Transfers of Ideas Associated with Science and Technology — **51**
 - 3.2.3 Transfers of Ideas Associated with Medicine — **53**
 - 3.2.3.1 Medical Deities — **53**
 - 3.2.3.2 The Iconography of Asclepius: The Serpent — **55**
 - 3.2.3.3 The Iconography of Asclepius: The Dog — **56**
 - 3.2.4 Circulation of Scholarly Knowledge — **59**
 - 3.2.4.1 Early Days of Greek Philosophy — **60**
 - 3.2.5 The Problem of Communicating with Foreign Speakers — **66**
 - 3.2.6 Understanding *Assyrian* Characters Outside of Mesopotamia — **67**
- 3.3 The Role of the Magi — **72**
- 3.4 The Withering of a Mesopotamian Tradition — **75**

4 Materia Medica — 76

- 4.1 The Practice of Medicinal Plants — **76**
 - 4.1.1 Acquiring Practical Knowledge About *Materia medica* — **77**
 - 4.1.2 The Ingredients and their Materials — **79**
 - 4.1.2.1 Types of Medical Ingredients: Plants, Minerals, Animal, and More — **79**
 - 4.1.3 The Ingredients and their Application — **82**
 - 4.1.3.1 Simple vs. Compound Medicaments — **83**
 - 4.1.3.2 Specialization of Therapy and Ingredients — **86**
 - 4.1.3.3 *Materia magica* Vs. *Materia medica* in the Medical Corpus — **87**
 - 4.1.3.4 Drug Therapy on the Battlefield? — **89**
 - 4.1.3.5 Ingredients in the Kitchen: Medicine and/or Diet — **90**
 - 4.1.4 *Materia medica* and its Provenience — **92**
 - 4.1.4.1 Mesopotamia — **92**
 - 4.1.4.2 Gardens and Cultivation of Physics — **94**
 - 4.1.4.3 Drug Trade and Movement, East and West — **95**
 - 4.1.5 *Materia medica* in Greek and Roman Medicine — **97**
 - 4.1.5.1 Simple and Compound Medicaments in Classical Medicine — **98**
- 4.2 The Naming of Medicinal Plants — **99**
 - 4.2.1 How do Plant Names Arise? — **100**
 - 4.2.2 Perplexing Names of Drugs — **101**
- 4.3 The Enquiry into Medicinal Plants — **102**
 - 4.3.1 Lists, Classification, Organization — **103**

4.3.2	Precursors to Botany —	105
4.3.2.1	Theophrastus and <i>Šammu šikinšu</i> —	106
5	<i>Dreckapotheke</i>, Filthy and Perplexing Ingredients —	112
5.1	Animal/Human-Based Ingredients —	112
5.2	<i>Dreckapotheke</i> and Disgust —	113
5.3	Perplexing Ingredients in Mesopotamian Medical Records —	118
5.3.1	Ebla and III Millennium BCE —	118
5.3.2	Old-Babylonian Period —	119
5.3.3	End of II Millennium and I Millennium BCE —	120
5.3.3.1	List of Animal-Based Ingredient Names —	121
5.3.4	<i>Coded</i> Names in Late Babylonian Astromedicine —	128
5.4	Perplexing Ingredients in Greece and Rome —	128
5.5	Interpretation and Challenges —	130
5.5.1	How They Were Explained and Perceived in Mesopotamia —	138
5.5.1.1	Uruanna III —	138
5.5.1.2	Medical Commentaries —	140
5.5.1.3	The Aluzinnu —	142
5.5.2	How They Were Explained and Perceived in the Graeco-Roman World —	143
5.5.3	Explanations in a Greek Magical Papyrus —	146
5.6	Modern Interpretations of Babylonian Perplexing Ingredients —	148
5.6.1	Reginald Campbell Thompson's Interpretation —	148
5.6.2	Franz Köcher's Theory —	149
5.6.3	Other Interpretations —	150
6	Academic, Popular, Folk Medicine and its Professionals —	152
6.1	A Note on Definitions —	153
6.2	The Professionals of Healing —	154
6.2.1	The Academic Herbal Expert in Mesopotamia —	154
6.2.2	The Popular/Folk Herbal Expert in Mesopotamia —	157
6.2.3	The Herbal Expert (and Frauds) in the Greek and Roman World —	159
7	Case Studies: Transfers of Knowledge Emerging from the Study of <i>Dreckapotheke</i> —	161
7.1	The Aluzinnu —	162
7.1.1	The Text —	163
7.1.2	Audience —	164
7.1.3	Perceived Ambiguity of Ingredient Names —	165
7.1.4	Risible <i>Dreckapotheke</i> —	166

7.1.5	The <i>Aluzinnu</i> and its Equivalent in the Greco-Roman World —	167
7.1.6	Quacks and Excremental Therapy —	171
7.2	Astral Medicine from Uruk to Rome —	172
7.2.1	Astral Medicine in Antiquity —	173
7.2.2	<i>Kalendertexte</i> in Babylonia —	174
7.2.3	SpTU 3, 104 —	177
7.2.4	Pliny's "Commentary" to SpTU 3, 104's Instructions —	180
7.2.5	Implications of the Parallel —	188
7.2.5.1	<i>Materia Medica</i> —	188
7.2.5.2	Purpose of <i>Kalendertexte</i> 's Treatment —	189
7.2.5.3	Fevers —	189
7.2.5.4	Order and Regularity in SpTU 3, 104 —	191
7.2.6	Prognostic Reasons? —	192
7.2.7	Role of Number Seven in the Mesopotamian and Graeco-Roman Healing Context —	196
7.2.8	Babylonian <i>Kalendertexte</i> and the Doctrine of Critical Days —	198
7.3	Medico-Pharmaceutical Literature —	204
7.3.1	Human Ingredients: Blood as Treatment for Epilepsy —	204
7.4	Excremental Therapy —	209
7.4.1	Dog Dung —	210
7.4.2	Dove Dung —	213
7.4.3	Gazelle/Goat Dung —	219
7.5	Other Perplexing Ingredients —	223
7.5.1	Snake Skin —	223
7.5.2	Snake Fat —	226
7.6	Shared Explanations of <i>Dreckapotheke</i> Ingredients —	229
7.6.1	Two Remedies for an Injured Eye or Impaired Vision —	230
7.7	Final Reflections —	235
8	Epilogue —	237
8.1	Results —	240
8.2	Broader Implications —	242
8.2.1	Written Transmission Vs. Oral Exchanges? —	242
8.2.2	Medico-Magical Justification —	244
8.2.3	Altered Perception of Ancient Pharmacology —	244
8.3	What Next —	245
9	Appendix —	247
9.1	URU.AN.NA III 1–143 (138) —	247
9.1.1	Publication History —	247
9.1.2	Dating —	248

9.1.3	Preservation State of Uruanna III —	248
9.1.4	Description of the Manuscripts —	249
9.2	Approximate Portions of Text Preserved in Each Manuscript —	255
9.3	The Purpose Underlying the Series —	255
9.4	The Organization of the Material —	257
9.4.1	General Organizational Principles in Uruanna III —	257
9.4.2	Organizational Principles in Uruanna III, Lines 1–143 —	258
9.4.2.1	The Left Sub-Column —	258
9.4.2.2	The Right Sub-Column —	260
9.5	The Content: A Problematic Matter —	261
9.5.1	Problem 1: Absence of Determinatives —	262
9.5.2	Problem 2: Association of Different Categories of Substances —	262
9.5.3	Problem 3: <i>Deck-</i> or <i>Dreck-</i> Names? —	263
9.6	Transliteration —	273
9.7	Variations —	289
9.8	Translation —	292
9.9	Photographs —	299
9.9.1	Photograph 1: Manuscript A —	299
9.9.2	Photograph 2: Manuscript B —	300
9.9.3	Photograph 3: Manuscript C —	301
9.9.4	Photograph 4 (a and b): Manuscript D = Da (+) Db —	302
9.9.5	Photograph 5 (a and b): Manuscript E = Ea (+) Eb —	303
9.9.6	Photograph 6: Manuscript F —	304
9.9.7	Photograph 7 (a and b): Manuscript G = Ga (+) Gb —	305
9.9.8	Photograph 8: Manuscript H (rev.) —	306
9.9.9	Photograph 9 (a and b): Manuscript I —	307
9.9.10	Photograph 10: Manuscript J —	309
9.9.11	Photograph 11: Manuscript K —	310
9.9.12	Photograph 12 (a and b): Manuscript L = La (+) Lb —	311
9.9.13	Photograph 13: Manuscript M (S) —	312
9.9.14	Photograph 14: Manuscript N —	313
9.9.15	Photograph 15: Manuscript O —	314
9.9.16	Photograph 16: Manuscript P —	315

Works Cited — 317

Index — 341

Index of Names and Subjects —	341
Index of Words —	345
Index of Cited and Edited Texts —	348
Index of Cited Ingredients —	352

