



University of Groningen

Searching for Dead Sea Scribes

Hayes, Gemma

DOI:

10.33612/diss.563365951

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2023

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Hayes, G. (2023). Searching for Dead Sea Scribes: a study on using Artificial Intelligence and palaeography for writer identification in correlation with spelling and scribal practices, codicology, handwriting quality, and literary classification systems for Dead Sea Scrolls. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. https://doi.org/10.33612/diss.563365951

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverneamendment.

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Download date: 13-02-2023



Searching for Dead Sea Scribes

A study on using Artificial Intelligence and palaeography for writer identification in correlation with spelling and scribal practices, codicology, handwriting quality, and literary classification systems for Dead Sea Scrolls

PhD thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Thursday 9 February 2023 at 16.15 hours

by

Gemma Anne Hayes

born on 25 June 1982

in Sydney, Australia

Supervisors

Prof. M. Popović

Prof. E.J.C. Tigchelaar

Assessment Committee

Prof. F.L. Roig Lanzillotta

Prof. G. Brooke

Prof. D. Stökl Ben Ezra

ACKN	OWLEDGEMENTS	7
ABBR	EVIATIONS	10
1. Cha	pter One:	13
Introd	uction	13
1.1	Ancient Scribes Penned Ancient Scrolls	13
1.2	Scribal Identification in Qumran Scholarship and its Ramifications for Theor	ies
abo	ut the Origins of the Dead Sea Scrolls.	16
1.3	Handwriting Analysis, Palaeographic Assessment and Scribal Identification	27
1.4	Taxonomic Models	29
1.5	Outline and Main Thesis of the Present Study	30
2. Cha	pter Two	35
Identii	fying Dead Sea Scribes: A Traditional Palaeographic Approach	35
2.1	Introduction	35
2.2	Palaeography	37
2.3	Typology and Style Classifications of the Qumran Manuscripts	48
2.4	Scribal Identification	53
2	.4.1 An Assessment of the Previously Identified Scribes of the Qumran	
N	Manuscripts	57
	2.4.1.1 The Scribe of 1QS, and 1Q28a (1QSa), 1Q28b (1QSb), 4Q175	
	(4QTestimonia), 4Q53 (4QSamc), 4Q443 (4QPersonal Prayer), 4Q457b	
	(4QEschatological Hymn), 4Q422 (4QParaphrase of Genesis and Exodus), and	
	Interlinear corrections in 1QIsaa, Cols. XXXIII and XXXVIII.	57
	2.4.1.2 The Scribe of 1Q11, 4Q57, 4Q113 and 11Q14	69
	2.4.1.3 The Scribe of 1QpHab and 11Q20	74
	2.4.1.4 The Scribe of 4Q207 (4QEnf) and 4Q214ab (4QTLevief)	77
	2.4.1.5 The Scribe of 4Q6 (4QGen ^f) and 4Q7 (4QGen ^g)	79
	2.4.1.6 The Scribe of 11Q12 (11QJub) and 11Q21 (11QTemplec)	81
	2.4.1.7 The Scribe of 4Q390 (Jeremiah Apocryphon Ce), 4Q280 (4QCurses), 5Q	
	(5QSerekh) and 5Q13 (5QRule)	85
	2.4.1.8 4Q390 (Jeremiah Apocryphon Ce), 4Q424 (Instruction-like composition	
		85

	2.4.1.9 The Scribe of 4Q392 (4QWorks of God), 4Q388 (4QpsEzek ^d), 4Q388a	
	(4QapocrJer Ce), Hand A of 4Q393 (4QCommunal Confession)	87
	2.4.1.10 Hand B of 4Q393 and the Scribe of 4Q368 (4QapocrPent)	90
	2.4.1.11 The Scribe of 4Q542 and 4Q547	92
	2.4.1.12 The Scribe of 1Q1, 1Q27 and 4Q26b	95
	2.4.1.13 The Scribe of 4Q161 (4QpIsa ^a), 4Q166 (4QpHos ^a), 4Q171 (4QPs ^a)	98
	2.4.1.14 The Scribe of 4Q397 (4QMMT ^d), 4Q475 (4QRenewed Earth) and 110	ე18
	(11QNJ)	98
	2.4.1.15 The Scribe of 4Q259 (4QS ^e), 4Q319 (4QOtot)	98
	2.4.1.16 Two Accidently Named Scribes	99
2.5		99
2.6	Conclusions	101
3 Cha	pter Three:	103
J. Cila	pter rince.	103
Identi	fying Dead Sea Scribes: A Digital Palaeographic Approach	103
3.1	Introduction	103
3.2	Digital Palaeography	104
3.3	The Scribe Identified by Ada Yardeni	107
3.4	Method	112
3	3.4.1 Preprocessing / Binarisation	112
3	3.4.2 Feature Extraction Algorithms	114
3	3.4.3 The Hinge Feature	116
3	3.4.4 Fragmented Connected-Component Contours (FCO3)	118
3.5	Experiments	118
3	3.5.1 Probability-based decision-making: Curves for False Reject and False	<u>;</u>
P	Accept 123	
3	3.5.2 Results from the FRR curve	125
3.6	Interpreting the Results	128
3	3.6.1 Palaeographic Charts	130
3	3.6.2 Drawing Comparisons from the Charts	147
3.7	Reflecting on Traditional Palaeographic Models in Light of Digital Tools	149
3	3.7.1 Lists of Criteria for the Identification of Scribal Hands	149
3	3.7.2 Idiographs	151
3.8	Conclusion	152
4. Cha	pter Four:	155
Spellir	ng and Scribal Practices of Dead Sea Scribes	155
4.1	Introduction	155
4.2	Features and Forms of the Qumran Scribal Practice	161
		1

4.3	Practices of GQS001, the Scribe of 1QS and the Scribe of 1QpHab and 1	11Q20
4.3	.1 Analysis of GQS001	165
	4.3.1.1 A Comparison of 4Q397 with 4Q394, 4Q396 and 4Q398	174
	.2 Analysis of the Scribe of 1QS	177
	4.3.2.1 A Comparison of 1QS with other <i>Serekh</i> manuscripts	187
4.3	.3 Analysis of the Scribe of 1QpHab and 11Q20	189
4	4.3.3.1 A Comparison of 11Q20 with other Temple Scroll Manuscripts	193
4.4	Comparison of the Spelling and Scribal Practices of the Three Scribes	193
4.5	Influences on the Spelling and Scribal Practices of Scribe	198
4.5	.1 Authority	198
4.5	.2 The Function of a Manuscript	199
4.5	.3 Phonetics and Pronunciation	203
4.5	.4 The Sect	204
4.3	.5 Time	205
	.6 Vorlage	205
4.5	.7 Synthesis	206
4.6	The Qumran Scribal Practice in Light of the Individual Scribes of the Qui	mran
	scripts	206
	.1 QSP in the history of Qumran Scholarship	207
_	.2 The Tefillin	208
4.6	.3 Were plene / lengthened spelling and scribal markings a sectarian pract	
4.6	4000	211
	.4 QSP as a binary model	216
4.7	Conclusions	220
5. Chapt	er Five:	223
The Cod	icology, Quality, and Literary Content of the Manuscripts Copied by GQS	001223
5.1	Introduction	223
5.2	Codicology and Quality of GQS001 Manuscripts	224
	.1 Letter Size	231
5.2	.2 Line Spacing	231
	.3 Margins	232
	.4 Manuscript Preparation	232
	.5 Format	233
	.6 Quality	234
5.3	Comparison with other Dead Sea Scrolls	235
5.4	Codicology, Quality, and the Function of a Manuscript	243
5.5	Literary Content and Categories	247

5.5.1 The Subject Matter of the Texts Copied by GQS001	248	
5.5.1.1 4Q161—Pesher Isaiah ^a	248	
5.5.1.2 4Q166— <i>Pesher</i> Hosea ^a	250	
5.5.1.3 4Q171—Pesher Psalms ^a	252	
5.5.1.4 4Q397— Miqṣat Maʿase ha-Torah (MMT)	254	
5.5.1.5 11Q18 New Jerusalem (NJ)	256	
5.5.1.6 4Q215—The Testament of Naphtali	257	
5.5.1.7 4Q474—The Text Concerning Rachael and Joseph	258	
5.5.1.8 4Q439 Lament by a Leader	259	
5.6 The Literary Categories of the Texts Copied by G-QS001	261	
5.6.1 The Sectarian Texts	262	
5.6.1.1 The Pesharim 4Q161, 4Q166 and 4Q171	263	
5.6.1.2 Miqṣat Maʿase ha-Torah (MMT)	269	
5.6.1.3 Lament by a Leader	274	
5.6.2 Aramaic Texts	275	
5.6.2.1 New Jerusalem (NJ)	279	
5.6.3 The Nonsectarian Texts	287	
5.6.3.1 Testament of Naphtali (4Q215)	290	
5.6.3.2 Text Concerning Rachael and Joseph (4Q474)	293	
5.6.4 Conclusions regarding the Literary Categories of the texts copied by GQS00	01	
	294	
5.7 Literary content, handwriting quality, codicological features and the function o	f	
GQS001's manuscripts in his sociohistorical context.	295	
6. Chapter Six:	300	
Conclusion	300	
BIBLIOGRAPHY		
NEDERLANDSE SAMENVATTING		

Acknowledgements

Many years ago, I was sitting in a corner of a library in Melbourne researching for an assignment. With my mind absorbed reading about the Qumran Scrolls, I stumbled across the fact that each of the individual scrolls were dated by the shapes of the handwriting written on them. My thought was, "I want to learn how to do that." It's a marvel to me how the small flame lit by that thought managed to take me on a journey to the other side of the world, and to writing a PhD at the Qumran Institute in Groningen. There is a large number of people I need to thank for making all of this possible.

Indeed, the first person to thank is Mladen Popović. I am thankful for Mladen's imagination, determination and sharp intelligence. All of these qualities he brought to bear on making the "HandsandBible" project, and this PhD dissertation happen. An entourage of people—not to mention science—have been the beneficiaries of Mladen's vision and hard work. Yet, of all of his qualities, it is his kindness and sense of humour I want to thank him for. While being part of the project was wonderful, writing this PhD was far more difficult than I'd bargained for. There were many moments when I really was not sure if I could do it. While Mladen had to regularly critique some rather terrible ideas and turns of phrase, he did it with enough kindness and sense of humour that despite my un-assuredness in my abilities, I never considered quitting.

I am thankful also for the support from my supervisor Eibert Tigchelaar. The field of Qumran studies is lucky that Eibert found Dead Sea Scrolls to be such an area of interest to him, but none are luckier than his PhD students. Having both in person discussions and sharing back and forth email correspondences with Eibert is always entertaining. Eibert brings his sharp intelligence and perspicacity to all these conversations, and this dissertation has benefitted immensely from the time that Eibert gave to me.

I am thankful to the postdoc on our team, Drew Longacre, whose cleverness and kindness I am also the beneficiary of. I am thankful for many hours of conversation about shapes of letters, palaeography and all things scrolls. And in moments when I did not know if I could do it anymore, Drew reminded me that I do important work, and that my writing is not that bad. The Longacre family, Michelle, Victoria, Gloria and Jerome, I also owe a debt of gratitude to. For sharing morning joys with me in those covid years, which involved running tracks around Paddepoel, building secret hideouts (Gloria, only you know what I mean), breakfasts, coffees and encouragement for the long days of writing at home.

To the rest of the team—Ayhan Aksu, Maruf Dhali, Lambert Schomaker, Hans van der Plicht and Hanneke van der Schoor—I owe a tremendous debt. For me, much of the joy of this journey can be attributed to Ayhan. Anyone who spends time with him sees his acuity emerge through his sense of humour. He brought this acuity to many conversations with me about this PhD, and I am grateful for that time. Maruf is not only a genius, but he is also a super nice person. He can take concepts related to Artificial Intelligence, deep learning and neural networks and make them understandable and fascinating. This study would not be what it is without Maruf, nor for that matter his supervisor Lambert Schomaker. It is an exceptional honour to have worked with Lambert and I am thankful also for his conversations, emails and patience in explaining very technical and complicated concepts in ways that I could grasp. Our team, and this PhD dissertation, also benefitted greatly from Hans and Hanneke. Hans helped me understand C14 dating, and Hanneke shared with me her thoughts about Aramaic scrolls. I want to thank Hans and Hanneke also for interesting conversations and emails over these last years.

People (and PhD's) at the Faculty of Religion, Culture and Society that I would like to acknowledge are Luisa, Vivi, Mauricio and Oihane. For anyone who has the arduous task of writing a PhD, these four Spanish speaking beauties will brighten up the end of the day with food, wine, conversation and laughs. To Saara and Alvaro, living with these two was a light in my last year and a half of writing this PhD. They are such gorgeous people to do home and life with. Thanks also goes to office mates in both "the Cave" and Bijbelhuis, Ruwan and Eelco. I appreciate their jokes and their encouragement regarding PhD life. And to Welmoed for a number of iterations of writing groups that we created to help survive the covid years when face-to-face contact decreased. These groups helped me to set goals and gather my thoughts for the week ahead, and it is lovely sharing conversation with her.

I would like to thank my reading committee, George Brooke, Daniel Stökl Ben Ezra and Lautaro Roig Lanzillotta. Particularly George, I am grateful for the time he spent here in Groningen in 2018 and for his offering some extremely helpful comments regarding this PhD dissertation.

Turning now to Australia. To my parents, whose own curiosity, love of learning and ability to ask good questions instilled these strengths in me. Particularly it was my Mum who supported me in my quest to study weird and niche subjects like Hebrew and palaeography. I am thankful also for her artistic skills, and for her rendition of the scribe on my cover page. And to my twin sister Emily. She will always be partly responsible for

anything good that I do. And to Ian Young, who supervised my Master's thesis at Sydney University. This PhD would not have happened without his willingness and guiding hand supervising a Master's student interested in using palaeographic techniques to find scribes.

To Samson and Shiloh. What inspiration you provided me in these last nine months to get this PhD finished. You two are an incredible joy. While Groningen gave me a PhD, indeed its greatest gift is the two of you.

And to the scribe at the centre of this book. Isn't it incredible that he lived two thousand years ago and yet collided with my life? He had such pretty handwriting; it is so nice that for this dissertation I got to write about it. You know when people ask that question, "if you could have dinner with anyone from history who would it be?" For me it would be scribe GQS001. Then over dinner, I could ask him his name.

Abbreviations

ADHO Alliance of Digital Humanities Organisation

BA Biblical Archaeologist

BASOR Bulletin of the American School of Oriental Research

BASP Bulletin of the American Society of Papyrologists

BibOr Biblica et Orientalia

BJRL Bulletin of the John Rylands University of Library of Mancheser

COMSt Bulletin Comparative Oriental Manuscript Studies Bulletin

CQS Companion to the Qumran Scrolls

DJD Discoveries in the Judaean Desert

DM Digital Medievalists

DROPS Dagstuhl Research Online Publication Service

DSD Dead Sea Discoveries

ECDSS Eerdmans Commentaries on the Dead Sea Scrolls

EJL Early Judaism and Its Literature

FAT Forschungen zum Alten Testament

HeBAI Hebrew Bible and Ancient Judaism

HBM Hebrew Bible Monographs

HSS Harvard Semitic Studies

HUCA Hebrew Union College

IEEE Institute for Electrical and Electronic Engineers

ISACR Interdisplinary Studies in Ancient Culture and Religion

JCIT Judaism, Christianity and Islam – Tension, Transmission, Transformation

JAOS Journal of the American Oriental Society

JAS Journal of Archaeological Science

JCTC Jewish and Christian Texts in Contexts and Related Studies

JJS Journal of Jewish Studies

JSJ Journal for the Study of Judaism in the Persian, Hellenistic and Roman Period

JSJSup Supplements to the Journal for the Study of Judaism

JSOT Journal for the Study of the Old Testament

JSOTSup Journal for the Study of the Old Testament Supplement Series

JSP Journal for the Study of the Pseudepigrapha

JSPSup Journal for the Study of the Pseudepigrapha Supplement Series

LSTS Library of Second Temple Studies

MTK Materiale Textkulturen

PIASH Proceedings of the Israel Academy of Sciences and Humanities

PHSC Perspectives on Hebrew Scriptures and its Context.

OLA Orientalia Lovaniensia Analecta

RevQ Revue de Qumrân

ScrHier Scripta Hierosolymitana

SBT Studies in Biblical Theology

SDSSRL Studies in Dead Sea Scrolls & Related Literature

SJLA Studies in Judaism and Late Aniquity

STDJ Studies on the Texts of the Desert of Judah

TSAJ Texte und Studien zum antiken Judentum

VT Vetus Testamentum

VTSup Supplements to Vetus Testamentum

WUNT Wissenschaftliche Untersuchungen zum Neuen Testament

1. Chapter One: Introduction

1.1 Ancient Scribes Penned Ancient Scrolls

An anecdote shared by Malachi Martin is that Eleazar Sukenik once remarked to a friend that what differentiates the study of the Dead Sea Scrolls (DSS) from hitherto Hebrew studies is that they were penned by scribes, as opposed to printed Hebrew texts. Such a remark is imbued with possibility for a Hebrew palaeographer. Yet, while Hebrew palaeographers have offered compelling work on the dating and style classification of the DSS, and the handwriting of the Second Temple period, a largely overlooked aspect in the palaeographic record

¹ Malachi Martin, *The Scribal Character of the Dead Sea Scrolls* vol. 1 (Leuven: Publications Universitaries, 1958), 4.

Solomon Birnbaum, John Trever, Nahman Avigad and Frank Moore Cross built on Albright's palaeographic work for the DSS manuscripts. John Trever, "A Palaeographic Study of the Jerusalem Scrolls," BASOR 113 (1949): 6–23 at 15; Solomon Birnbaum, "How Old are the Cave Manuscripts?," VT 1 (1951), 91–109; Nahman Avigad, "The Palaeography of the Dead Sea Scrolls and Related Documents," ScrHier 4 (1958): 56–87. Solomon Birnbaum, The Hebrew Scripts: Part 1, The Text / Part 2, The Plates (Leiden: Brill, 1971); Frank M. Cross "The Development of the Jewish Script," in Leaves from an Epigraphers Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy, HSS 51 (Winona Lake: Eisenbrauns, 2003). Of these studies, Cross' has proved the most influential. His type and style classifications for the DSS are as much part of the literary landscape of Qumran studies as the limestone cliffs are to the landscape of Khirbet Qumran.

Joseph Naveh's palaeographic work on the dating and development of the Aramaic script is on the eras before the DSS, but it is important as it situates the script of the DSS in its developmental history. Joseph Naveh, *The Development of the Aramaic Script*, PIASH 5 (Jerusalem: Ahva Press, 1970). Joseph Naveh and Shaul Shaked, *Aramaic Documents from Ancient Bactria (Fourth Century BCE): From the Khalili Collections* (London: The Khalili Family Trust, 2012). For further palaeographic work on this earlier time period, cf., also, Godfrey R. Driver, *Aramaic Documents of the Fifth Century.* 2nd ed. (Oxford: Clarendon, 1957).

The majority of the recent palaeographic work on the dating and style classification of ancient Aramaic / Hebrew / Jewish script belongs to Ada Yardeni. Ada Yardeni, *The Book of Hebrew Script. History, Palaeography, Script Styles, Calligraphy & Design* (Jerusalem: Carta, 1997); Bezalel

² William Albright's palaeographic study of the Great Isaiah Scroll offered one of the first insights on the origin of the DSS; they are as old as circa 150BCE. William F. Albright, "The Dead Sea Scrolls," in *The American Scholar* 2 (1952), 77–85; idem, "A Biblical Fragment from the Maccabaean Age: The Nash Papyrus," *JBL* 56 (1937), 145-176.

of the Qumran scrolls are the protagonists of Sukenik's remark: the scribes. The purpose of this study is to explore the Qumran scrolls through the lens of individual scribes, specifically, the practices of individual scribes responsible for penning two or more of the manuscripts.³ It gathers a plethora of previously ungathered data on the handwriting, spelling practices, codicological features and literary content of individual scribes. It compares and contrasts this data with theories and models in the field that offer reflections on the unknown and enigmatic origins of the DSS. This study explores how the data on scribes both supports and challenges various aspects of theories in the field that accept a sectarian origin for the Qumran manuscripts. The study concludes by discussing what the work of one scribe in particular contributes to conceptions of sectarian, scholar scribes at Qumran.⁴

Porten and Ada Yardeni, *Textbook of Aramaic, Hebrew and Nabataean Documentary Texts from the Judaean Desert and Related Material*. 2 vols. (Jerusalem: Hebrew University, 2000). Ada Yardeni, *Understanding the Alphabet of Dead Sea Scrolls: Development, Chronology, Dating* (Jerusalem: Carta, 2014).

Eibert Tigchelaar has offered the field a helpful account of the history of the palaeographic dating of the DSS. Eibert Tigchelaar, "Seventy Years of Palaeographic Dating of the Dead Sea Scrolls," in *Sacred Texts and Disparate Interpretations: Qumran Manuscripts Seventy Years Later*, ed. Henryk Drawnel, STDJ 133 (Leiden: Brill, 2020), 258–78.

Recent contributions from Drew Longacre move the field forward in terms of our thinking about dating and style classifications. Drew Longacre, "Reconsidering the Date of the En-Gedi Leviticus Scroll (EGLev): Exploring the Limitations of the Comparative-Typological Paleographic Method," in *Textus* 27 (2018): 44-84. Drew Longacre, "Disambiguating the Concept of Formality in Palaeographic Descriptions: Stylistic Classification and the Ancient Jewish Hebrew/Aramaic Scripts." *COMSt Bulletin* 5 (2019): 101–128; Drew Longacre, "Paleographic Style and the Forms and Functions of the Dead Sea Psalm Scrolls: A Hand Fitting for the Occasion?" *VT* 72 (2021), 1–26. Drew Longacre, "Comparative Hellenistic and Roman Manuscript Studies (CHRoMS): Script Interactions and Hebrew/Aramaic Writing Culture" *COMSt Bulletin* 7 (2021): 7-50.

This research for was carried out under the ERC Starting Grant of the European Research Council (EU Horizon 2020) 'The Hands that Wrote the Bible: Digital Palaeography and Scribal Culture of the Dead Sea Scrolls.' (HandsandBible, grant agreement no. 640497), principal investigator: Mladen

⁴ For examples of how the nomenclature and notion of scholar scribes has been applied in the field, see, among others, Sidnie White Crawford, *Scribes and Scrolls at Qumran* (Michigan: Eerdmans, 2019), 117–48. Mladen Popović, "Qumran as Scroll Storehouse in Times of Crisis? A Comparative Perspective on Judaean Desert Manuscript Collections," *JSJ* 3 (2012), 551-594. Jutta Jokiranta, "Sociological Approaches to Qumran Sectarianism," in *Oxford Handbook of the Dead Sea Scrolls*, eds. John J. Collins and Timothy H. Lim (Oxford: Oxford Press 2010), 201–27. Charlotte Hempel,

The provenance of the approximately one thousand Qumran scrolls and how they came to find their home in eleven caves (five limestone and six marl),⁵ on the western side of the Dead Sea, is difficult to determine definitively. On what evidence is it possible to base an answer? In Qumran studies, scholars have used scribes and scribal identification for supporting a range of theories pertaining to where and with whom the scrolls originated. There are eighteen previously identified Dead Sea scribes said to have penned two or more manuscripts.⁶ Of these scribes, there are six whose manuscripts were found in

[&]quot;Reflections on Literacy, Textuality, and Community in the Qumran Dead Sea Scrolls," in *Is there a Text in this Cave? Studies in Textuality of the Dead Sea Scrolls in Honour of George J. Brooke,* eds. Ariel Feldman, Charlotte Hempel and Cioatā Maria, STDJ 119 (Leiden: Brill, 2017), 69–82 at 82. Pieter B. Hartog, *Pesher and Hypomnema: A Comparison of Two Commentary Collections from the Hellenistic-Roman Period*, STDJ 121 (Leiden: Brill, 2017).

⁵ For discussions regarding the limestone and marl caves, and the important distinctions between them for understanding the archaeological context of the Qumran scrolls, see, Mladen Popović, "When and Why were Caves near Qumran and in the Judaean Desert Used?" in *The Caves of Qumran: Proceeding of the International Conference, Lugano*, STDJ 118 (Leiden: Brill, 2017), 175–83. White-Crawford, *Scribes and Scrolls*, 117–48.

⁶ Emanuel Tov listed eleven of these scribes, and there are at least seven others. See, Emanuel Tov, Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert, STDJ 54 (Leiden: Brill. 2004). 24: Frank Moore Cross. John C. Trever. Scrolls from Qumran Cave I: The Great Isaiah Scroll, The Order of the Community and The Pesher Habakkuk (Jerusalem: The Albright Institute of Archaeological Research and The Shrine of the Book, 1972), 4, n. 8; Eugene Charles Ulrich, "4QSamc: A Fragmentary Manuscript of 2 Samuel 14-15 from the Scribe of the Serek Hayyaḥad (1QS)," BASOR 235 (1979), 1-25 at 1-3; Eugene Ulrich, "Identification of a Scribe Active at Qumran 1QPsb-4QIsac-11QM in Meghillot; Studies in the Dead Sea Scrolls V-VI: A Festschrift for Devorah Dimant, eds. Moshe Bar-Asher and Emanuel Tov (Jerusalem: Bialik Institute, 2007), 201-210 at 201; Johannes P. M. van der Ploeg, "Une halakha inédite de Qumrân," in Qumrân: Sa piété, sa théologie et son milieu, ed. M. Delcor (Paris: Duculot, 1978), 107; Ada Yardeni, "A Note on a Qumran Scribe", in New Seals and Inscriptions, Hebrew, Idumean and Cuneiform, ed. Meir Lubetski (Sheffield: Sheffield Phoenix Press, 2007), 287-298; Józef T. Milik, The Books of Enoch: Aramaic Fragments from Qumran Cave 4 (Oxford: 1974), 5; James R. Davila, DJD 12: 57; Florentino García Martínez, Adam van der Woude, Eibert Tigchelaar, Qumran Cave 11 II 11Q2-18, 11Q20-31, DJD 23 (Oxford: Clarendon Press), 411; Józef T. Milik, "Milkî-reša dans les anciens écrits juifs et chrétiens," JJS 23 (1972): 95–144; Stephen J Pfann, Sarah Tanzer et al, Qumran Cave 4.XXVI: Poetic Texts and Miscellanea, Part 1, DJD 36 (Oxford: Clarendon Press), 334. Daniel Falk et al, Qumran Cave 4: Poetical and Liturgical Texts, Part 2, DJD 29 (Oxford: Clarendon, 1999), 23-24. Émile Puech, Qumrân Grotte 4 XXII Textes araméens première partie 4Q529-549, DJD 31 (Oxford: Clarendon, 2001), 376–77. Daniel Machiela, "Is the Testament of Qahat Part of the Visions of Amram? Material and Literary Considerations of 4Q542 and 4Q547," JSJ 52 (2021): 27-58. Eibert Tigchelaar, "4Q26b (4QLeviticus^g) Frag. 2," Textus 29 (2020): 53-56. John Allegro, Qumran Cave 4.1, 4Q158-

more than one cave (cf. Chapter 2, section 2.5). Scholars have used the identification of individual scribes penning more than one manuscript in more than one cave to argue for the homogenous nature of the collection as a whole, which includes all eleven caves in the vicinity of Khirbet Qumran. The challenge against this notion is that the number of these identified scribes is not high. Of the circa one thousand manuscripts most were penned in a different hand. This evidence has been used to argue particularly against ideas of Qumran as a hub for manuscript copying by a sectarian group.

I begin this study by outlining how scholars have used the identification of individual scribes to support ideas as to the origin and provenance of the DSS. This is followed by discussing the contributions this study hopes to the area of scribal identification by developing approaches and methods for scribal identification. This is followed by demonstrating how one can use the evidence of individual scribes to theorise about the origin, function and circulation of the Qumran manuscripts in their ancient Judaean context.

1.2 Scribal Identification in Qumran Scholarship and its Ramifications for Theories about the Origins of the Dead Sea Scrolls.

The small number of identified scribes penning more than one manuscript is used as supporting evidence for theories that the Qumran scrolls represent a contained and intentional collection of texts, and their origins in the caves trace back to a sectarian group residing at the site of Khirbet Qumran. Paradoxically, on the basis that the number of identified scribes is so small—and that the Qumran scrolls were penned by a large number of scribal hands—other scholars argue for the implausibility that this collection was the product of one sectarian

4Q186, DJD 5, 50; John Strugnell, "Notes en marge du Volume V des 'Discoveries in the Judaean Desert," RevQ 7 (1970): 163–276 at 218. Eibert Tigchelaar, "Scribal Practices as Attested in the Dead Sea Scrolls Manuscripts Written in a So-Called Rustic Semi-Formal Tradition," paper presented at the 2013 International Society of Biblical Literature meeting in St. Andrews (revised

version, 2018), 1–7, http://doi.org/10.5281/zenodo.1925681

group. Six scholars have used the evidence of scribes to support their arguments of a homogenous collection of scrolls for a sectarian group, discussed below. Following the discussion of these six scholars' arguments, I outline the counter perspective, which contends that the high number of scribal hands evidences that the origin of the Qumran scrolls includes multiple deposition contexts, and that the texts represent a cross-section of the wider Judaean literary culture.

Roland de Vaux, who excavated Khirbet Qumran after the discovery of the DSS, recognised the existence of a scribe who copied more than one scroll. He said, "Certainly manuscripts were copied in the scriptorium of Qumran, and in the case of several manuscripts it is possible to discern the hand of the same scribe." In this one sentence, de Vaux makes two big claims. That scrolls were certainly copied in the scriptorium and that there are manuscripts copied in the same hand. These observations prepare readers for his next claim. "We may suppose even before studying the content that certain works were composed at Khirbet Qumran." De Vaux directed readers to the conclusion that the manuscripts copied by the recognised scribe were penned in the scriptorium at Qumran without any analyses of either the scribe or the manuscripts he copied. This study offers a rationale for why it is possible that manuscripts copied by a recognised scribe were penned at Qumran, but only after sustained analyses of the handwriting, spelling practices and literary content of the scribe.

Florentino García Martínez and Adam van der Woude noted the relevance of the evidence of individual scribes penning more than one manuscript when developing their Groningen hypothesis. They saw it as significant that there are recognised scribes who copied sectarian, biblical and nonsectarian manuscripts, and that these manuscripts were found in different caves. They said, "That to this group belong not only the clearly sectarian texts,

-

⁷ Roland De Vaux, *The Archaeology and the Dead Sea Scrolls*, (Oxford: Oxford University Press, 1959), 55.

⁸ Florentino García Martínez and Adam S. van der Woude, "A 'Groningen' Hypothesis of Qumran Origins and Early History," in *The Texts of Qumran and the History of the Community: Proceedings of the Groningen Congress on the Dead Sea Scrolls, 20-23 August 1989, RevQ* 14 (1990), 521–41.

but all the texts of the library is shown by the fact that *MSS* coming from different caves, some of them biblical, some of them difficult to characterize, were copied by the same scribes who copied typically sectarian texts: for example, 1QS and 4Q175 were written by the same scribe who copied 4QSam^c, and 1QpHab and 11QTemple^b were written by the same hand."⁹

García Martínez and van der Woude contend that the scribe of 1QS, and the scribe of 1QpHab and 11Q20 are evidence that all of the manuscripts—not only the sectarian—belonged to the sect. 10 Their argument takes as fact that a group at Qumran copied the sectarian texts. In turn, the two scribes who copied both sectarian and nonsectarian texts evidences all of the collection belonged to this group. The strength of García Martínez and van der Woude's case is that it demonstrates the unlikelihood that the scribes made clear demarcations between sectarian and nonsectarian texts. However, the evidence of scribes who copied sectarian and nonsectarian texts found in different caves is not on its own proof that all of the manuscripts belonged to the sect at Qumran. It could just mean that the manuscripts copied by these scribes belonged to the sect, if it does mean that at all. This study continues to explore what it means that there are scribes who copied manuscripts classified as sectarian and nonsectarian, and also biblical and Aramaic. It does not insist the scrolls are/were a homogenous collection, but rather asks what these scribes' extant work means for models that encourage thinking in the dichotomies of sectarian and nonsectarian literary categories.11

-

⁹ García Martínez and van der Woude, "A 'Groningen' Hypothesis," 525. In later articles, García Martínez distances himself from the taxonomic categories he employs here—sectarian and biblical—arguing they are anachronistic. Florentino García Martínez, "Beyond the Sectarian Divide: The 'Voice of the Teacher' as an Authority-Conferring Strategy in Some Qumran Texts," in *The Dead Sea Scrolls: Transmissions of Traditions and Production of Texts*, eds. Sarianna Metso, Hindy Najman and Eileen Schuller, STDJ 92 (Leiden: Brill, 2010), 227-244. However, his subsequent arguments against sectarian and biblical categorisations of texts does not alter his contention that scribes penning manuscripts from different caves attests to a historical reality that one sectarian group compiled the collection.

¹⁰ García Martínez and van der Woude, "A 'Groningen' Hypothesis," 521–41.

¹¹ In particularly, cf., Chapters Five and Six.

Devorah Dimant suggested that the likeness of the compositional makeup of the eleven caves evidences one collection of scrolls compiled by one group. 12 This compositional makeup includes Rule texts, pesharim, Jubilees, biblical texts and Aramaic texts. Dimant argued that numerous deposition contexts for the scrolls would necessitate a higher degree of difference in the literary compositional makeup of the eleven cayes. 13 Dimant refers to a prolific scribe identified by Ada Yardeni, 14 who penned manuscripts from seven of the eleven caves for supporting her claims that it was one collection unearthed at Qumran, not multiple. 15 However, the claim from Yardeni about this scribe who copied fifty-four to ninety of the Qumran manuscripts (this is approximately five to ten percent of the collection), was an extremely large claim put forth in a short article with little palaeographic reasoning. For this study, we tested using Artificial Intelligence (AI) techniques the manuscripts Yardeni said belonged to the one scribe. 16 While the study confirmed that a small number of the tested manuscripts were copied by one scribe, ultimately it does not substantiate the claim of a scribe who copied manuscripts from seven of the eleven caves. 17

Eugene Ulrich suggested that two identified scribes were members of the Qumran community.¹⁸ He argued that the scribe who penned 1QS, and seven other manuscripts,¹⁹ was not a professional scribe but penned 1QS for teaching purposes, and that this scribe held a leadership position in the community

⁻

¹² Devorah Dimant, "The Qumran Manuscripts: Contents and Significance," *History, Ideology and Bible Interpretation in the Dead Sea Scrolls*, FAT 90 (Tübingen: Mohr Siebeck, 2014), 27–56.

¹³ Dimant, "The Qumran Manuscripts," 34–37.

¹⁴ Yardeni, "A Note," 281-92.

¹⁵ Dimant, "The Qumran Manuscripts," 35.

¹⁶ The AI techniques for hand-writer recognition were developed at the Faculty of Science and Engineering, Bernoulli Institute, University of Groningen. I worked in collaboration with Maruf Dhali (PhD Candidate, Artificial Intelligence and Cognitive Engineering), who was supervised by Mladen Popović and Lambert Schomaker (Professor, Artificial Intelligence and Cognitive Engineering). This research was carried out under the ERC-project 'The Hands that Wrote the Bible: Digital Palaeography and Scribal Culture of the Dead Sea Scrolls.' Cf. n 3.

¹⁷ Cf. Chapter 3 for all of the details.

¹⁸ Ulrich, "Identification of a Scribe," 201.

¹⁹ This scribe also copied 1QS, 1QSa, 1QSb, 4Q53, 4Q175, 4Q422, 4Q443 and 4Q457b.

situated at Qumran.²⁰ To cement his point, Ulrich argued that evidence for the importance of this scribe in the community is that it was possible for him to make corrections in the Great Isaiah Scroll.²¹

A second scribe that he discussed is a scribe he identified himself, who penned 1Q11 (Psalms), 4Q57 (Isaiah), and 11Q14 (*Sefer ha-Milhamah*).²² Ulrich argued that this scribe, whose work spreads across three different caves, confirms Dimant's insight regarding the homogeneity of the caves.²³ In addition, he suggested that this scribe worked at Qumran because the scribe copied sectarian and biblical literature, but not literature of a more general Jewish type. His argument was that if the scribe was working from Jerusalem, he would have copied biblical and general Jewish texts but not sectarian texts.²⁴ A final piece of evidence Ulrich uses to suggest that this scribe was working at Qumran pertains to the particular biblical books copied by him. He argued that it is significant that this scribe copied Isaiah and Psalms texts as these biblical texts, more than any others, are referenced and referred to in the sectarian manuscripts.²⁵

While it is possible the scribe identified by Ulrich worked at Qumran, I cannot take seriously the argument that the scribe not copying manuscripts of "a

²⁰ See also, Eibert Tigchelaar, "In Search of the Scribe of 1QS," in *Emanuel: Studies in Hebrew Bible, Septuagint, and Dead Sea Scrolls in Honor of Emanuel Tov*, ed. S.M. Paul, VTSup 94 (Leiden: Brill, 2003), 439–452, at 451–52. Tigchelaar tentatively opens up the possibility of this scribe holding a leadership position in the community.

²¹ Ulrich, "Identification of a Scribe," 208. Cf. also Chapter Two, questions are raised about the interlinear corrections being penned by the Scribe of 1QS.

²² Ulrich, "Identification of a Scribe,"201–10. Additionally, White Crawford notes that Ulrich suggested to her in private communication that this scribe also penned 4Q113. White Crawford, *Scribes and Scrolls*, 162. In Chapter Two, my palaeographic analysis of this scribe confirms that the scribe penned 4Q113 also.

²³ Ulrich, "Identification of a Scribe," 201.

²⁴ Ulrich, "Identification of a Scribe," 208.

²⁵ Ulrich, "Identification of a Scribe," 208. He says, "When one reflects that the books of Psalms and Isaiah were two of the most numerously attested and quoted works at Qumran, that the community composed several *pesharim* on each, found in caves 1 and 4; that 11QM in its description of the end of the eschatological war, just happens to have a quote from Isa. 10:34 – 11:1 and that the scribe's MSS were found in three different caves at large distances from each other, it is difficult to avoid the conclusion that this scribe worked at Qumran."

general Jewish type" operates as evidence for this. Is biblical literature not of a general Jewish type? Also, the four scrolls now associated with this scribe are certainly not the only texts this scribe would have copied in his lifetime. Furthermore, what evidence does Ulrich have that sectarian and biblical texts were copied at Qumran but not texts of this so-called general Jewish type? In Chapters Five and Six, I argue for the identity of a scribe who worked at Qumran, and this scribe copied texts from the sectarian, nonsectarian and Aramaic literary categories. I believe nonsectarian and Aramaic manuscripts would fall into Ulrich's category of general Jewish type.

Sidnie White Crawford used the evidence of individual scribes to suggest that the eleven Qumran caves represent one library.²⁶ She says: "That manuscripts penned by the same scribe turned up in different caves makes it difficult to argue that the caves are not connected to one another."²⁷ She paints an attractive picture of the library at Qumran being the work of elite "scholar-scribes" who made up the learned, literati of the ancient world.²⁸ Via the scribe identified by Yardeni, she situates one of these scholar-scribes at Qumran, saying: "Although we cannot be certain, it is not unreasonable to argue that this scribe could have been resident at Qumran itself, since Yardeni dates his hand to the late first century BCE."²⁹ My study does not confirm Yardeni's claim of a scribe who copied fifty-four to ninety of the Qumran manuscripts; rather it attributes a far smaller number of the manuscripts to the one scribe. It does though, in agreement with White Crawford, give several reasons for placing this scribe at the site Qumran.

De Vaux, García Martínez, van der Woude, Dimant, Ulrich and White Crawford point to an interesting phenomenon. It is possible to recognise scribes

²⁶ White Crawford, Scribes and Scrolls, 9.

²⁷ White Crawford, Scribes and Scrolls, 161.

²⁸ These 'scholar-scribes' copied the ancient classical Judaic literature, alongside new works that built on the Judaean cultural heritage, and also texts regarding calendar calculations, astronomy and astrology. White Crawford, *Scribes*, 9.

²⁹ White Crawford, Scribes and Scrolls, 262.

who penned manuscripts from more than one of the caves. In turn, this recognition led these scholars to conclude that the Qumran manuscripts are a homogenous collection and that these scribes were working at Qumran. However, there are a number of issues with these conclusions that need further exploration. First, there are no assessments of the handwriting of each of these identified scribes, particularly the scribe identified by Yardeni, said to have penned five to ten percent of the collection. Second, does the simple existence of these scribes really prove as much as the scholars claim? While in theory some of their conclusions reveal aspects of the truth, there are gaps left to fill to reach the conclusions. The aim of the book is to fill in the gaps by assessing the handwriting of the identified scribes, and by analysing the spelling practices, codicological features and literary content of a handful of these scribes. From these analyses tentative conclusions will be drawn, from the vantage point of individual scribes, regarding the origin and function of particular manuscripts in their ancient context.

What of the second piece of evidence pertaining to the scribal hands of the Qumran scrolls? How have the many scribal hands been used to argue the less dominant perspective in the Qumran story? The perspective that there are a range of diverse origins for the manuscripts, and that the textual compositions are a representative subset of the literature in circulation in ancient Judaea, as opposed to the contents of a sectarian library.

Scholars from the early reconstruction team recognised that the majority of scrolls were penned by different scribal hands. John Allegro said that of the approximately four-hundred manuscripts,³⁰ the same scribe penned few.³¹ Martin's notable study on scribal aspects of the scrolls included reflecting on the multiple hands involved in the production of the large Cave 1 manuscripts. He offered a conclusion based solely on the Cave 1 manuscripts that the variety of practices of these many scribes puts into question the framing of the Qumran

³⁰ The number of scrolls catalogued by that stage. By now the total is closer to one thousand.

³¹ John M. Allegro, *The Dead Sea Scrolls* (Harmondsworth: Pelican, 1956), 46.

scrolls in a locationally confined scribal milieu.³² Yet, it was not until Norman Golb—who earned a degree of notoriety in the field for opposing the dominant narrative of an Essene sect at Qumran³³—that observations regarding the number of scribal hands found centre stage in theories about the provenance and origin of the scrolls. Golb said, "Noticing that virtually each new one was in a different hand I was beginning to see that the growing number of scripts was starting to pose still a number of problems for the sectarian hypothesis. How many scribes after all could have lived at Qumran at any one time, even after three of four generations?"³⁴ The high number of scribal hands became one of the defining pieces of evidence on which Golb built his narrative that the field should trace the DSS back to the libraries of Jerusalem. He argued that the Qumran scrolls were hidden in the caves when their survival came under threat during revolts or wars in the capital of Jerusalem, removing the relationship of the site at Khirbet Qumran from the cache of scrolls.³⁵

In a similar vein, although more nuanced, Michael Wise argued that the provenance of the scrolls extends beyond Qumran, and that the texts are representative of a cross-section of ancient Judaean book culture, as opposed to representative of the specific ideology of one group. He said, "The facts seem to require the mass of the scrolls to have originated elsewhere, not at the Qumran site—indeed, possibly in many different towns and villages. If so, the

⁻

³² Martin, Scribal Character, 713-15.

³³ Norman Golb, *Who Wrote the Dead Sea Scrolls: The Search for the Secret of Qumran* (New York: Scribner, 1995). Here, Golb wistfully reflects on his experiences of becoming notorious for his vocal resistance to the dominant sectarian paradigm. See particularly, xii–xiii and 151–71.

³⁴ Golb, Who Wrote, 151.

³⁵ Precisely, Golb was not the first person to offer this opinion. Karl Rengstorf also rejected the claims that so many hundreds of scrolls could have been copied in the scriptorium at Qumran. His solution was that the scrolls were hidden due to threats of revolts and war in Jerusalem. Karl H. Rengstorf, *Hirbet Qumran und die Bibliothek vom Toten Meer* (Stuttgart: W. Kohlhammer, 1960). See also, Popović, "Qumran as Scroll Storehouse," 551-94.

³⁶ Michael O. Wise, Accidents and Accidence: A Scribal View of Linguistic Dating of the Aramaic Scrolls from Qumran," in *Thunder in Gemini and Other Essays on the History, Language and Literature of the Second Temple* Palestine, JSPSup 15 (Sheffield: JSOT, 1994), 103–51, at 123–25. See also, Michael O. Wise, *Language and Literacy in Roman Judaea: A Study of the Bar Kokhba Documents* (New Haven: Yale University Press, 2015), 31–34.

books necessarily constitute a kind of cross-section of what existed, a glimpse into the broader literary culture of late Second Temple Jewry."³⁷ As evidence, he refers to the expanse of scribal practices and book production techniques regarding aspects such as skin and ink preparation, the range of script types and styles, orthography and morphology, correction procedures, paragraphing and ways of writing the name of God. However, the evidence of the extremely high number of different scribal hands he found most compelling.³⁸

How do scholars who maintain that the scrolls are one collection belonging to a sect at Qumran handle the evidence of the high number of scribes? Philip Alexander suggested that no more than half of the manuscripts were written at Qumran, adding that this is a crude average of two scrolls / year. Although, he does not think that the most likely scenario would be "averagely speaking," and instead he suggests "bursts of copying" at Qumran in the first and last quarter of the first century BCE. Alexander suggests that the scribes were not trained in a scribal school at Qumran, but came with different training, and that is why there is such a wide range of script types.

Ulrich argues that only a minority of scrolls, as opposed to a majority, were penned at Qumran. He says that inkwells support suggestions that a small number of scribes penned a small minority of the scrolls at Qumran, but that the high number of scribal hands responsible for the collection means that they were not all copied there. He says:

³⁷ Wise, Language and Literacy in Roman Judaea, 33.

³⁸ Wise, "Accidents and Accidence," 125; Wise, Language and Literacy in Roman Judaea, 32–33.

³⁹ Phillip Alexander, "Literacy Among Jews in Second Temple Palestine," in *Hamlet on a Hill Semitic and Greek Studies Presented to Professor T. Muraoka on the Occasion of his Sixty-Fifth Birthday*, eds. M.F.J Baasten and W.T.H van Peursen, OLA 118 (Leuven: Peeters, 2003), 3–24, at 6. It initially read as strange to me that Alexander leads his readers to conclude that his suggestion of "no more than half" the scrolls copied at Qumran is conservative. However, his point of comparison was with Stegeman's suggestion of a scroll factory at Qumran.

⁴⁰ Alexander, "Literacy," 6.

⁴¹ Alexander, "Literacy," 14.

"The fact, however, that nearly 900 MSS were copied mostly by different scribes lends credence to the view that the MSS did not originate en masse at Qumran. But perhaps the best explanation is that numerous individuals came from Jerusalem and other places during the century-plus habitation of the site, bringing with them a few MSS that were meaningful to them, and thus the collection grew. In addition, as indicated by the inkwells, a certain amount of copying may well have been done at Qumran."⁴²

White Crawford also recognises that palaeographic evidence indicates that the majority of scrolls were penned outside of Qumran. This palaeographic evidence is the range of script types from the third century BCE to the first century CE in a range of styles from formal, semiformal, semicursive, cursive, and the different scripts of Aramaic square, palaeo-Hebrew, cryptic and Greek. However, she balances her conclusions that the majority of scrolls were penned outside Qumran with the evidence of individual scribes who copied scrolls from more than one cave. As discussed above, for a number of scholars these individual scribes demonstrate that some of the manuscripts were copied at Qumran.⁴³

These arguments from Alexander, White Crawford and Ulrich demonstrate that the high number of scribal hands changed early perceptions in the field that the *majority* of the manuscripts found in the caves were penned in an active scriptorium at Khirbet Qumran. The many hands exhibit a large range of scripts and scribal practices that makes arguing for a common place of origin for the scrolls virtually impossible. Why then the continued debate about one collection or multiple collections if it is clear that these scrolls cannot all share a single place of origin? The debate is due to the interrelated and yet separate levels of analysis involved. On one level, there is *where* the manuscripts were copied. On another level, there is *who* compiled the manuscripts and put them in the caves. There is the origin of particular *compositions* (e.g., *Serekh ha-Yahad*,

⁴² Ulrich, "Identification," 201–210 at 203.

⁴³ White Crawford, Scribes, 161.

Isaiah, Jubilees, New Jerusalem), and which were authored within the community, and which were authored without. There is the provenance of particular *manuscripts* (e.g., 1QS, 1QIsa³, 4Q27, 11Q18), and whether they were penned at Qumran, Jerusalem or possibly in other areas of greater Judaea, and again within or without of the sectarian fold. There is the question of whether the literary collection as a whole is representative of the broader Judaean book trade, or whether it supports one particular ideology and worldview, even if not all authored by the one group.

To make sense of these complexities, generally speaking the traditional, sectarian narrative remains intact, but an expanded version that includes multiple, related (Essene?) communities at different sites, not only Qumran.⁴⁴ Current theories do not take as their point of departure that the majority of the manuscripts were penned at Qumran; however, Jerusalem has not, therefore, become the focal point for the origin story of the scrolls. The content of the sonamed sectarian texts—e.g., the *Serekh ha-Yahad*, the War Scroll, the *pesharim*—portray a group with rules, practices, histories and ideologies distinct from Jerusalem. The Qumran scrolls are still largely understood as belonging to this sectarian group, community of movement that comes to life in the writings of the classified sectarian texts.⁴⁵

This study takes as its point of departure the material data of specific scribes copying specific manuscripts and explores what they can add to different aspects of Qumran scholarship. The first aspect is that of handwriting analysis, palaeographic assessment and scribal identification (Chapters Two and Three).

•

⁴⁴ See for a handful of examples among many: Alison Schofield, *From Qumran to the Yaḥad: A New Paradigm of Textual Development for the Community Rule*, STDJ 77 (Leiden: Brill, 2009). Charlotte Hempel, *The Qumran Rule Texts in Context: Collected Studies*. TSAJ 154 (Tübingen: Mohr Siebeck, 2013). White-Crawford *Scribes and Scrolls;* John J. Collins, "Tradition and Innovation in The Dead Sea Scrolls," in *The Dead Sea Scrolls: Transmission of Traditions and Production of Texts*, ed. Sarianna Metso, Hindy Najman, and Eileen Schuller, STDJ 92 (Leiden and Boston: Brill, 2010), 1–23. Jutta Jokiranta, "Essene Monastic Sect 70 Years After: Social-Scientific Notes on Scrolls Labelling," *Henoch* 19 (2017), 56–72.

⁴⁵ In Chapters Five and Six, I discuss and assess in much greater detail the literary classification of sectarian that is given to a portion of the Qumran manuscripts.

The second aspect is how individual scribes interact with taxonomic models in the field that categorise manuscripts in relation to a Qumran group (Chapters Four and Five). The third aspect is the historical reality of the work and world of individual scribes, and the potential that some of this work took place at Qumran (Chapters Five and Six).

1.3 Handwriting Analysis, Palaeographic Assessment and Scribal Identification

To modern readers of the Qumran scrolls, the individual scribes who penned them are nameless and unknown. In ancient Judaea, scribes would sign their names on documentary texts, but on literary works (which the Qumran scrolls are) the scribes offered no signatures. This means that there are no ground truths on which to establish the variability possible in the handwriting of one scribe, compared with the similarity possible in the handwriting of two scribes copying manuscripts in an analogous handwriting style. These two scenarios create challenges in drawing definitive conclusions about what differences and similarities in handwriting and letterforms mean. Variability in the handwriting of one scribe exists because of such aspects as the pace of writing, instruments used, and different levels of care applied to separate manuscripts. Similarity exists between two scribes because of the relationship between master and student, imitation practices in the copying process, and the perpetuation of script styles. ⁴⁶ In these veiled scenarios, what are palaeographers interested in scribal identification to do?

It is possible to begin to overcome the challenges associated with similarities between two scribes by conducting traditional palaeographic analyses that make explicit which graphical components distinguish a particular scribe's manuscripts from the categories of the type and style to which his

27

⁴⁶ Maruf Dhali, Mladen Popović and Lambert Schomaker, "Artificial Intelligence Generates New Evidence for the Scribes of the Great Isaiah Scroll (1QIsa^a), *PloS one* 16.4 (2021), 1–28.

handwriting belongs. Such analyses elucidate whether a form that one may think is idiosyncratic is indeed idiosyncratic, or whether it is a form of a particular type and style. Through these analyses it becomes possible to see precisely where a scribe differs from another writer penning manuscripts in the same type and style. Truly unique letter forms are rare at best; however, forms which indicate where a scribe consistently diverges from his type and style are more common. For example, if the scribe's type is Herodian, but he consistently uses one or two particular forms from an earlier period, this can be distinguishing. Or if his style consists of straight, rectilinear lines, but then he draws some particular letterforms associated with the wavy, curvilinear style, then this can be distinguishing. Chapter 2 demonstrates how such a method and methodology works by assessing seventeen of the previously identified scribes. (The eighteenth scribe is assessed digitally in Chapter Three).

Digital palaeographic tools can assist in distinguishing scribes. Digital palaeographic tools include the use of neural networks and feature extraction algorithms. Agents use neural networks for observational tasks such as recognising ink traces from background noise, or recognising allographs and the components of allographs. For performing measurement tasks, complicated and intricate neural networks are not always required and digital palaeographers can apply traditional software programming and coded algorithms. When applying digital tools, it is important that the process is explicit, as how can one claim to know that a common scribe penned two or more manuscripts based on digital tools if they cannot explain what the tools measured and how the tools further perceptions of what is a significant unit of handwriting for writer identification. Chapter Three explores a digital palaeographic process for scribal identification when assessing how closely matched the manuscripts are that Yardeni said were penned by one scribe. The chapter makes explicit precisely what the AI and digital tools measured, and potentially how this changes what should, and should not, be considered significant in terms of hand-writer identification.

The previously identified scribes of the Qumran scrolls were primarily put forth by means of palaeographic expertise and implicit criterion. While identification based on such expertise may be correct, broadly speaking there is

a lack of palaeographic reasoning on the level of the particular identifications, and on the level of the methods employed for such identifications. Beyond a general lack of published palaeographic reasoning for scribal identification, very few of the previously identified scribes have been considered or assessed by anyone other than the scholar who initially drew attention to them. This study investigates afresh the identified scribes and the manuscripts attributed to them. It addresses the paucity of palaeographic reasoning by shaping innovative palaeographic approaches and methods for scribal identification. These innovative approaches and methods exploit and expand upon both traditional palaeographic methods (Chapter Two) and digital tools (Chapter Three). In applying two complementary palaeographic methods for scribal identification, the study tests the validity of the previously identified scribes of Qumran manuscripts, and in the process fashions a current and precise list of Qumran scribes.

1.4 Taxonomic Models

The purpose of taxonomic models is to collate and categorise data into groups or types. In Qumran studies, the two most well-known taxonomic models categorise individual manuscripts into groups according to their relationship with the Qumran sect. The model offered by Dimant is a literary classification system, based on literary content, style and terminology. However, the content, style and terminology are either sectarian, nonsectarian or intermediary sectarian, with two additional categories of biblical and Aramaic. Emanuel Tov offered a different way of grouping manuscripts, based on the orthography, morphology and the scribal features they employ. However, the categories are the Qumran scribal practice (QSP), or not QSP. As is evident by the nomenclature of the categories an over-arching purpose of both these classification systems is to situate texts in relationship to a Qumran group. Dimant's theory has been particularly influential in Qumran scholarship. She herself states the field has accepted her classification, particularly in relation to how to distinguish sectarian

and nonsectarian texts.⁴⁷ Tov's QSP model is more controversial, but at least some consideration is given to the idea that a certain type of spelling practice on a manuscript may indicate it was penned in the Qumran community.

For this study, I collect data on the spelling and scribal practices, and the literary content of identified scribes and correlate this data with these two widely, but not universally, accepted theories pertaining to sectarian literature and manuscripts. The purpose is to assess whether the work of individual scribes and the manuscripts copied them reflect a situation in which these categories reflect an historical reality.

1.5 Outline and Main Thesis of the Present Study

This book consists of two parts, with the research from the first half (Chapters Two and Three) being the groundwork for the research of the second half (Chapters Four, Five and Six).

The purpose and main aim of Chapter Two is to explore a traditional palaeographic method as it relates to the identification of scribes. The chapter begins by situating hand-writer identification within the larger context of palaeographic research in the field of Qumran studies. This larger context includes the typological and style classifications of the Qumran manuscripts. The section following the opening of the chapter, offers palaeographic assessments of seventeen previously identified scribes of Qumran manuscripts using an approach, based on traditional palaeographic means, which I developed for hand-writer recognition. Using Strategy and demonstrate through the

⁴⁸ Script types relate to the typological sequencing of handwriting into dates and time periods. Palaeography is most well-known and adopted for the categorising of script types into dates. Style classification is different. Palaeographers observe and categorise similar graphical components in particular scripts that existed both synchronically and diachronically.

⁴⁷ Dimant, "The Qumran Manuscripts," 27-31.

⁴⁹ Ultimately, the study assesses eighteen scribes, but one of the scribes (cf., Chapter Three) is assessed using a digital, rather than traditional, palaeographic method.

application of this approach—that the handwriting of individual scribes should be assessed within, and then distinguished from, the handwriting type and style to which they belong.

Fifteen years ago, Tov helpfully offered a list of eleven identified scribes. ⁵⁰ Since then, there has not been an assessment of these eleven scribes, nor of the subsequent suggestions of seven more scribes responsible for penning two or more of the scrolls. ⁵¹ These scribes have been identified from 1949 to 2020. Chapter Two is the first of its kind to offer a comprehensive palaeographic assessment of the previously identified Dead Sea scribes. The chapter concludes by providing a current and up-to-date list of scribes from the Qumran collection who penned two or more of the manuscripts. This list shares some overlaps with the list given by Tov; ⁵² however, there are numerous and important differences.

While the purpose and main aim of Chapter Two is to explore traditional palaeography, the purpose and main aim of Chapter Three is to explore the application of digital palaeography. This study is the first of its kind to apply automatic hand-writer recognition techniques to the Qumran scrolls. With a specific focus on the suggestion by Yardeni of a scribe who penned fifty-four to ninety manuscripts, this study tests her claim through a digital palaeographic process. In an interdisciplinary team at the University of Groningen we created and applied a digital palaeographic method for assessing these manuscripts.⁵³

⁻

⁵⁰ Tov, *Scribal* Practices, 125–26.

⁵¹ Tigchelaar offered a brief assessment of the scribe identified by Yardeni, which did not agree about the prolific nature of this scribe. Eibert Tigchelaar, 2018. "Scribal Practices as Attested in the Dead Sea Scrolls Manuscripts Written in a So-Called Rustic Semi-Formal Tradition", presented at the *2013 International SBL meeting in St. Andrews* (Zenodo, 2018). Daniel Machiela offered an assessment of a scribe identified by Émile Puech, agreeing with Puech. Daniel Machiela, "Is the Testament of *Qahat* part of the Visions of Amram? Material and Literary Considerations of 4Q542 and 4Q547," *JSJ* 52 (2021): 27–58.

⁵² Tov, Scribal Practices, 125–26.

⁵³ This interdisciplinary team consisted of researchers and scientists from the Faculty of Science and Engineering, Bernoulli Institute, and the Faculty of Theology and Religious Studies, Groningen. Cf., n. 3 and n. 16 for further details.

To help with understanding where the project in Groningen fits in the broader context of interdisplinary projects between computer scientist and Qumran specialists, c.f, Daniel Stökl Ben

Chapter Three explores this method, but more than that, it engages how including digital tools in the palaeographic process helps palaeographers reflect on traditional palaeographic models. One applies digital tools for object analysis (in this case handwriting), but a second opportunity of digital tools is that they enable reflection on traditional palaeographic models. A third opportunity of digital palaeography is that it applies digital processes to palaeographic questions. Chapter Three explores a number of fundamental palaeographic questions hand-in-hand with the application of digital tools. Questions such as how much variability is possible in the hand-writing of one scribe? Is one letter (a perceived idiograph) enough to recognise a scribe? When do similarities reflect script types and styles and when do they reflect a scribal hand?

Chapter Four takes three of the scribes assessed and identified in Chapters Two and Three, and analyses their spelling and scribal practices. Since early readings of the Qumran scrolls, the range of spelling practices caught the attention of scholars. Attempts have since been made to categorise the spelling practices, and to explain why this cache of ancient Hebrew scrolls shows such a diverse orthography and morphology. Tov's QSP is the most well-known explanation, however, there are other theories and perspectives about the range of spelling practices. Tov's QSP—alongside other theories and perspectives—are explored in Chapter Four, in relation to and in correlation with the spelling and scribal practices of three individual scribes.

Molly Zahn offered an insightful paper on the spelling practice of the scribe of 1QpHab and 11Q20, and how it relates to QSP;⁵⁵ so, the endeavour of Chapter Four is not entirely unique. However, this study is more comprehensive

-

Ezra, "Interdisciplinary Perspectives from Material and Computer Sciences on the Dead Sea Scrolls and Beyond," *Manuscripts Cultures* 7 (2014): 92–103. In this article, Stökl Ben Ezra outlines a series of challenges when working with the scroll fragments from Qumran, which may be assisted by the use of digital tools. He outlines numerous collaborative projects that include IT tools, pattern recognition systems and AI to begin to address some of the challenges.

⁵⁴ Martin, *The Scribal Character*, 3–12.

⁵⁵ Molly Zahn, "Beyond Qumran Scribal Practice: The Case of the Temple Scroll," *RevQ* 29 (2017): 185–203.

regarding the number of scribes, and regarding the range of perspectives considered that concern the orthography, morphology and scribal practices of the Qumran scrolls. It takes three scribes and the manuscripts they copied, and compares and contrasts the spelling practices of these scribes with perspectives that explain the proliferation of the *matres lectionis* in the Qumran manuscripts. What does the evidence of the orthographic and morphological practices of scribes suggest about the scribal culture affiliated with the Qumran manuscripts?

Chapter Five collates data on the codicology and handwriting quality of the manuscripts copied by the scribe we identified using digital tools in Chapter Three, and correlates this data with the literary content of the manuscripts. Such a correlation between codicological and palaeographical data with the literary content of the texts copied by an individual scribe from Qumran has not been detailed and delineated before. The codicological features concern the size of letters, margins, the spaces between the lines and the format size. The quality of writing concerns aspects of skill, care and beauty that are measured by aspects of uniformity, consistency and balance.

Regarding the literary content, Chapter Five explores the subject matter of the scrolls copied by this scribe in relation to Dimant's categories of sectarian, intermediate sectarian, nonsectarian, biblical and Aramaic. Dimant conceived of her categorisation on the strong premise that the Qumran scrolls, "so unique and unprecedented, are deserving of a literary classification." Her work has given an analytical framework for classifying the DSS. Yet, the nomenclature, and the reasons that sit behind the nomenclature, remain problematic. Chapter Five explores how illuminating is the nomenclature of sectarian and nonsectarian when applied to the manuscripts copied by this scribe. Chapter Five concludes with a discussion of what the codicological features, the quality of the handwriting and the content reveal about the function of the manuscripts copied by this prolific Qumran scribe. Grouped together as copied by this one scribe, which manuscripts conform to what we might expect of their function, and which manuscripts offer surprises?

Chapter Six, concludes by discussing implications of the profile of the scribe we identified using digital technologies for scholarly conceptions of sectarian scribes. However, the language of sectarian scribes is nuanced. More precisely it is a discussion on what this scribe means for conceptions of sectarian scholar scribes, or scholar scribes associated with the Qumran movement, or the scholar scribes who worked at Qumran. The scribe we identified demonstrates a scribe who was *not* just interested in sectarian matters, and a scribe that did *not* have a hierarchy of texts that parallels modern perspectives of the importance of biblical and sectarian over nonbiblical and nonsectarian. However, the conclusion is not focused on what the scribe was *not* interested in. The conclusion is about what this scribe was interested in. Chapter 6 takes concepts such as intertextuality, and the web of relationships between texts, and marries them with the concerns and interests of the scribe.

2. Chapter Two

Identifying Dead Sea Scribes: A Traditional Palaeographic Approach

"In order to understand what we see, we have to learn how to examine the letter-signs and their strokes and to analyze the components of the letter-sign." ⁵⁶

2.1 Introduction

The identification of individual scribes has not been systematically or comprehensively dealt with in Qumran scholarship. As it is not self-evident how to determine the identity of a scribe complexities surround such a task. Scribal identification is a palaeographic pursuit, but while palaeography is a discipline based on observation, method, and analysis it has gained a reputation as being a discipline based on expertise and implicit criteria. Accordingly, most of the previously identified scribes recognised as having penned two or more of the Qumran manuscripts were put forth with little explanation. While there are no axiomatic answers to the question of how to know and show the identity of scribes, ⁵⁷ the aim of this chapter is to assess the previously identified scribes of the Qumran scrolls. It fashions and applies an innovative palaeographic approach that determines the identity of individual scribes by recognising features of their handwriting that differ from other writers penning manuscripts in the same type

⁵⁶ Yardeni, The Book of Hebrew Script, 131.

⁵⁷ Collette Sirat acknowledges that at first glance it might seem strange to assert that such a process is difficult as most of us can recognise handwriting familiar to us. To demonstrate, she quotes from a correspondence from Cicero to Atticus who says, "I come to your letters, a spate of which reached me simultaneously, each more agreeable than the last—those that were in your own hand. I liked Alexis' hand because it so nearly resembles your own, but again I do not like it because it showed you are unwell." (Ad Atticum VII, 2,3).

This correspondence shows that although Alexis was imitating Atticus' hand, Cicero could distinguish the difference. However, Sirat rightly says, for us reading these letters many centuries later it would be near impossible to distinguish the differences. Colette Sirat, *Writing as Handwork: A History of Handwriting in Mediterranean and Western Culture*, Bibliologia 24 (Brepols: Turnhout, 2006), 487.

and style. The chapter concludes by providing an up-to-date list of identified Dead Sea scribes and the manuscripts they copied.

The initial sections of the chapter are on general palaeographic matters. It opens with a brief description of palaeography as a discipline. This is followed by explanations of several ambiguous and tangled palaeographic terms, such as typological dating, style classification, ideal forms, formal, informal, and professional vs. common hand. The aim is that these explanations provide clarity for when I apply the terms in my descriptions of the handwriting of scribes. The discussion on nomenclature is followed by the particular palaeographic challenges unique to writer-identification.

The chapter then moves to the specifics of the type and style classifications of the "Jewish script" of the Qumran manuscripts. In palaeographic analyses of individual scribes, it is pertinent to be aware of and make reference to the date and style categories of the hand. Much can be gleaned about a scribe by categorising his handwriting, such as when he was writing and the script style he engaged. In this chapter, I interact with the work of Nahman Avigad, Frank Moore Cross, Ada Yardeni, Esther Eshel, Eibert Tigchelaar and Drew Longacre for discussing typological dating and style classifications of the Dead Sea Scrolls.

-

⁵⁸ As there does not exist in the academic record the existence of female scribes who penned Hebrew or Aramaic scrolls from the Hellenistic and Roman periods, and nor could I find evidence to prove otherwise, I continue to work under the assumption that the scribes at the centre of this study were male.

⁵⁹ Avigad, "The Palaeography," 56–87. Frank M. Cross, "The Development of the Jewish Scripts," in *The Bible and the Ancient Near East: Essays in Honor of William Foxwell Albright*, ed. George E. Wright (Garden City: Doubleday, 1961), 133-202. Here I will refer to the slightly revised reprint of this article in *Leaves from an Epigrapher's Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy*, HSS 51 (Winona Lake: Eisenbrauns, 2003), 3-42. Naveh, *Early History of the Alphabet: An Introduction to West Semitic Epigraphy and Palaeography*. Ada Yardeni, *The Book of Hebrew Script*; idem, *Understanding the Alphabet of the Dead Sea Scrolls: Development, Chronology*, Dating; Esther Eshel, "Paleography of the Semitic Judean Desert Scrolls," in *An Eye for Form: Epigraphic Essays in Honor of Frank Moore Cross*, ed. Jo Ann Hackett and Walter E. Aufrecht (Winona Lake, IN: Eisenbrauns, 2014), 334–51. Longacre, "Disambiguating," 101–128. Tigchelaar, "Seventy Years of Palaeographic Dating," 258–78.

Yet, recognising the type and style of a scribe is only the first step. Individual scribes need to be analysed within—but then distinguished from—the type and style to which they belong. Such analyses are at the core of this chapter, which assesses the previously identified Qumran scribes. Furthermore, beyond just assessing the identifications, the purpose of the palaeographic analyses is to demonstrate a method for scribal identification through which palaeographic reasoning can be explicated. The method presented herein, insists that hand-writer recognition requires defining the differences between scribes penning manuscripts in one and the same style. The importance of this has been previously recognised, ⁶⁰ but up until now has not been demonstrated in practice.

2.2 Palaeography

Palaeography can be described as the archaeology of handwriting. It is the discipline through which scholars of handwritten artifacts formalise and standardise features of handwriting. ⁶¹ Palaeography operates as an art and a

-

⁶⁰ Yardeni, *The Book of Hebrew Script*, 133.

⁶¹ For palaeographic studies that relate directly to the Dead Sea Scrolls and the Jewish script, cf. n. 59. Additionally, see also, Solomon Birnbaum, *The Hebrew Scripts: Part 1, The Text / Part 2, The Plates* (Leiden: Brill, 1971); John Trever, "A Palaeographic Study of the Jerusalem Scrolls," 6-23. For articles on how to discuss and describe letterforms, see for example, Peter A. Stokes, "Describing Handwriting, Part I," *DigiPal Project Blog* (2011), http://www.digipal.eu/blog/describing-handwriting-part-i/. Edna Engel, "The Analysis of the Letter: A New Palaeographical Method," in *Methoden der* Schriftbeschreibung, ed. Peter Rück, Historische Hilfswissenschaften 4 (Stuttgart: Thorbecke, 1999), 43–50.

For several beautiful books on palaeography more generally, see for example, Sirat, Writing as Handwork; Raffaela Cribiore, Writing, Teachers and Students in Graeco-Roman Egypt, BASP 36 (Atlanta: Scholars Press, 1996); Edward Johnson, Formal Penmanship and other Papers, ed. Heather Child (London: Lund Humphries, 1971); Julian Brown, A Palaeographers View: The Selected Writings of Julian Brown, eds. Janet Bately, Michelle P. Brown and Jane Roberts (London: Harvey Miller, 1993). Malcolm B. Parkes, Their Hands before our Eyes, (Oxford: Ashgate Publishing, 2008); idem, Scribes, Scripts and Readers: Studies in the Communication, Presentation and Dissemination of Medieval Texts (London: Hambledon Press, 1991). Michelle P. Brown, A Guide to Western Historical Scripts from Antiquity to 1600 (London: The British Library, 1990); E.G. Turner, Greek Manuscripts of the Ancient World, (Oxford: Clarendon Press, 1971).

science. 62 As with any art, those applying the art of palaeography possess observational skills and aptitudes through which to practice it. As with any science, the discipline requires careful observation, developing hypotheses and then testing these hypotheses. Palaeographic observations are based on the shapes and strokes of letterforms. Palaeographers look for similarities and differences pertaining to such things as the omission and addition of elements, positional shift of strokes, the shapes of particular strokes as rectilinear or curvilinear, the movements of the ductus, the length and the width of strokes, the stance and inclination, the angles of the strokes in relationship to each other and the letter size. 63 Based on observing such aspects of letter forms, palaeographers make hypotheses pertaining to what the similarities and differences mean in terms of when, where and by whom a manuscript was written. There are three palaeographic functions—identifying typological developments, categorising script styles and writer-identification have distinct aims and purposes. These functions are distinct; yet, methodologically they overlap as palaeographers are always observing and appraising the shapes and the strokes of graphemes, allographs, idiographs and graphs.⁶⁴

_

⁶² Turner's framing aligns with this framing of palaeography as both art and science. He says, "Subjective illusions can be guarded against by basing classification on considerations which can be apprehended objectively. The whole classificatory process may then be thought too mechanical. The dilemma is a real one. This is because palaeography is neither a science nor an art, but works through a continual interaction of the methods appropriate to the both approaches." Turner, *Greek Manuscripts*, 24.

The purpose of framing palaeography as both art and science is for balancing the subjective and objective in the palaeographic method.

⁶³ For an even more detailed list of the particularities assessed by palaeographers pertaining to the strokes, shapes and the intersection points of the graphemes of the Aramaic / Hebrew script, see: Yardeni, *The Book*, 149.

⁶⁴ Tom Davis, "The Practice of Handwriting Identification," in *The Library: The Transactions of the Biblical of the Bibliographical Society* (Oxford: Oxford University Press, 2007), 251–76, at 256. "The grapheme /a/ is the letter considered independently of any particular realization of it. An allograph is an accepted version of that grapheme: 'a' and 'a' are allographs of /a/. An idiograph is the way (or one of the ways) in which a given writer habitually writes /a/. A graph is a unique instance of /a/, as it appears on a particular page." When apt, I will utilise this terminology of graphemes, allographs, idiographs and graphs. Although, often in palaeographic discussions more than one of

While the aim and focus of this chapter is writer identification, this task is intimately linked with palaeographic discussions of *typological dating* and the *classification of script styles*. Typological dating identifies developments in handwriting and tracks the changes in allographs across time. Style classification observes and categorises similar graphical components in particular scripts that exist both synchronically and diachronically. Typological dating is the most well-known and adopted aspect of palaeography, as it operates as a tool for manuscript specialists interested in ascertaining from when a manuscript came.

Yet, while some palaeographers advocate that there is a linear progression in handwriting, which makes precise typological dating possible,

65 there are others who are more cautious regarding such claims.

Typological dating is linked to

the terms could apply at a given moment. At these times the more straightforward term of letterform is better.

Cross, clearly influenced by Albright whom he described as a 'master of typological development,' did with the Jewish script what Albright did with the Nabatean and the Palmyrene script. Additionally, he offered a methodological rationale for typological dating. Cross argued that indeed it is possible to take as fundamental that human artifacts change over time, either accidently and spontaneously or due to creative innovation; but that at the same time each type is continuous with its antecedent type. Frank Moore Cross, "Alphabets and Pots: Reflections on Typological Method in the Dating of Human Artifacts," in *Epic to Canon: History and Literature in Ancient Israel* (Baltimore: Johns Hopkins University Press, 1998), 233–40, at 235–38.

⁶⁷ Bruce Zuckerman and Lynn Swartz Dodd are cautious with linear models of typological developments that date manuscripts in small windows of time, because of the scarcity of evidence in which palaeographers work, and that we cannot assume common typologies. They suggest a methodological principle of typology—"the assumption of complexity." However, they

⁶⁵ As an example, Longacre and Tigchelaar discuss possible implications of palaeographic dating for those wanting to date biblical compositions. E.g., the early palaeographic dating of 4Q70 (Jer^a), a text close to MT Jeremiah, demonstrates that the long version of Jeremiah already existed in pre-Maccabean times. Drew Longacre, Eibert Tigchelaar, "Hebrew and Aramaic Palaeography (Ancient)," *Textual History of the Bible Online* (2017).

sequencing, as it relates to the early Semitic scripts. For example, Albright dates the Nash Papyrus from among the Aramaic and Hebrew papyri and ostraca from Egypt through alignment with his typological sequencing of the Nabatean script. He saw a striking similarity between the Nash Papyrus and what is likely the oldest Nabatean inscription. (A dedicatory text from Khálasah, dated by a likely link to Arestias II). He could, therefore, place both manuscripts in the second half of the second century BCE. In this article Albright traces the development of two scripts that he sees as geographically related; the Nabatean and the Palmyrene from the second century to the turn of the era. William F. Albright, "A Biblical Fragment of the Maccabean Age: The Nash Papyrus, *JBL* 56 (1937), 145–176.

style classification as dates are made relative to script styles. For example, developments in a book-hand script or a cursive script are not understood to be on the same trajectory.

The focus of style classification is the script, in and of itself. The study of handwriting style interplays the minute details of the stroke formations of graphs with the overall appearance of the script. Palaeographers studying style explore how different strokes and graphic characteristics affect what they observe when they look generally at a manuscript.

For the scribes themselves, script styles could operate as models or as precedent for their rendering of letterforms. At the high end of writing—for example, calligraphic writing or that penned by experienced scribes—the scribes adhered in a consistent fashion to the models. When moving down the style spectrum, one finds a range of scripts in which the style is not deeply connected to the writers' consistent production of ideal letterforms. Here the styles are not so much discreet categories of intentional design, yet they are still studied by palaeographers as style. The following paragraphs outline terms employed by palaeographers in their descriptions of script styles.

Across palaeographic disciplines, the two overarching style categories are the book-hand and the cursive script.⁶⁹ Within these two categories

acknowledge that while typological endeavours may not be accurate renditions of the past, it is not an unreasonable striving to order complex data sets. Bruce Zuckerman and Lynn Swartz Dodd, "Pots and Alphabets: Refractions of Reflections on Typological Method," *Maarav* 10 (2003), 89–133.

See also, Drew Longacre, Eibert Tigchelaar, "Hebrew and Aramaic Palaeography (Ancient)," *Textual History of the Bible Online* (2017). They say that "Cross leaves little room to account for the real-life complexities of individual scribes and their complex relationship to broader typological developments."

See also, Greg Doudna, *4QpNahum: A Critical Edition*, JSPSup 35 (2001), 675–82. He says that scribal activity and the training of scribes was presumably more decentralised and unstandardized than linear models allow.

⁶⁸ Parkes, Their Hands, 154.

⁶⁹ Yardeni, *The Book of Hebrew Script*, 57; Cribiore, *Writing, Teachers and Students*, 97; Brown, *A Guide to Western Historical Script*, 14–15; Turner, *Greek Manuscripts*, 1.

palaeographers recognise gradations. These gradations leave palaeographers needing to create further style categories and terms to define the script style. To list a few terms—formal, informal, semiformal, consistent, inconsistent, professional, common, calligraphic, beautiful, rough, vulgar, undisciplined, adherence to idea forms, curvilinear, rectilinear, ornate, simple, careful and hastily produced. Many of these terms overlap to degrees in meaning, while others are constructed as opposites. All of them to greater and lesser degrees are subjective.

As it currently stands, the meanings of these terms are not standardised and terminological questions arise. At what point does a handwriting move from formal to informal, or from common to professional? How do you recognise haste vs. care? At what point is a script regular enough to call it consistent or irregular enough that it is called inconsistent? It is not the purpose of this chapter to address the existential crises palaeographers feel in relation to these questions, and the extensive issues of terminology in the palaeographic discipline. Yet, the chapter aims at explicating palaeographic reasoning, and I thus diverge for a moment to definitions of a handful of the terms, particularly those that I use. These definitions are not a dictionary of palaeographic terms per se, but rather demonstrate how these terms interact, and how they are applied, or can be applied, when defining a handwriting style or writer's hand.

Ideal forms operate on the level of allographs. Ideal forms are the forms writers were taught to produce and then consequently aimed to reproduce.⁷⁰ Ideal forms are specific to a style, and are particularly obvious in formal scripts.⁷¹ In Qumran studies, Cross used formal as a style category,⁷² but broadly speaking, formal refers to the impression a script engenders regarding aspects of skill, care,

-

⁷⁰ Cribiore discusses at length the relationship between teacher and student in the writing process. See particularly, Cribiore, *Writing, Teachers, Students*, 97, where she states that pupils were taught to imitate the letters of their teachers. See also, Longacre, "Disambiguating," 104. Sirat, "Writing as Handwork," 65–66.

⁷¹ Longacre, "Disambiguating,"110.

⁷² Below, when directly addressing the palaeographic classification system of the Jewish script, I discuss the formal script as the major style category of the Jewish script.

and indeed adherence to ideal forms. Consistency and strict adherence to ideal forms evidence highly skilled, professional hands.⁷³

The term professional hand is widely used, though not necessarily clearly defined. Professional in a modern context is linked to payment. 74 However, when palaeographers speak of professional hands, they allude not so much to payment but to what Sirat called a "schooled professionalism." There is an abundance of evidence for schooling for students of the craft of writing. 76 The term professional scribe could then refer to either a writing master (supervisor or teacher) or a schooled writer. When I refer to a professional hand or professional scribe, I cannot know the precise particularities of the scribe's professional life, but I can see evidence in the execution of his writing that suggests he was more than a beginner student or simply a literate writer. The term literate writer works as an opposite to those professionally schooled because when Sirat speaks of alphabet spreading without schooling, she references a literate group of people who for a range of reasons and needs, memorised the shapes and the letters of writing.⁷⁷ As an opposite to professional, Longacre describes the "common hands" that were practical, legible and catered for everyday purposes, but not calligraphic.⁷⁸ Turner's opposite to the professional hand is the personal hand.⁷⁹

_

⁷³ Longacre, "Disambiguating," 108.

⁷⁴ Regarding payment for copying manuscripts there is some evidence from antiquity. Turner quotes an edict from Diocletian for how much professional scribes could be paid in denarii, and from Oxyrhynchus the price in drachmas. Turner, *Greek Manuscripts*, 1.

Whether there were exchanges of money behind the copying of the Qumran scrolls is unknown. From the common handwriting applied to a significant number of the Qumran texts, one may assume that only a small number, if any, were commissioned.

⁷⁵ Sirat, Writing as Handwork, 65.

⁷⁶ Sirat, Writing as Handwork, 57–79; Cribiore, Writing, Teachers and Students, 13–33.

⁷⁷ Sirat, Writing as Handwork, 69.

⁷⁸ Longacre, "Disambiguating," 121.

⁷⁹ Turner, *The Greek Manuscripts*, 4. To quote, "This is a competent professional hand, its cursively formed capitals are regular, though informal, it maintains bilinearity. It is in complete contrast to the personal hand of its sender who wrote the first postscript, and whose documentary cursive, hastily penned and who abandons regularity."

Trying to grasp precisely informal handwriting is tricky for two reasons. First, there are the widely spread gradations of informality in handwriting; second, there are the different ways that scholars use and understand the term. For example, Sirat places what she calls the 'family of informal, rapid script' within the tradition of scriptura cursiva. 80 This differs from most palaeographers who also apply informal to book-hands, and not only cursives. For example, Longacre considers informal on a spectrum with formal, with the spectrum being based on things such as morphological complexity, and accuracy with respect to ideal forms.81 Turner's perspective of informal seems to be based on it being unstylised and with rounded strokes, which he sometimes refers to as cursive.82 Although unlike Sirat, he does not mean cursive as in rapid writing, but writing with rounded, curvilinear strokes. The terms rounded and informal are sometimes used interchangeably, but this is imprecise. As demonstrated in this paragraph, the involvedness with the term informal is that sometimes it is applied to the shape of the strokes; sometimes it refers to very poorly executed and unskilled handwriting; sometimes it may just refer to an inconsistent script, produced with speed, but still legible. However, it maintains value as an opposite to consistent, calligraphic, formal hands and styles.

A final term I would like to touch upon is beautiful. A thorny, subjective and unscientific term in palaeographic descriptions, yet, it would be a loss for palaeographic studies to have to remove it, as handwriting can indeed be beautiful. Predominantly, beautiful aligns with consistency and regularity. Yardeni says that "Our visual impressions are still dominated by our sense of balance and symmetry and our feeling of harmony." Whether the strokes of the allographs of the scripts are curvilinear (wavy) or rectilinear (straight), consistency in the production of those strokes embodies beauty. Messy and vulgar operate as the opposite of beauty, implying irregularity. Differing to

⁸⁰ Sirat, Writing as Handwork, 351.

⁸¹ Longacre, "Disambiguating," 107.

⁸² Turner, Greek Manuscripts, 5

⁸³ Yardeni, The Book, 125.

degrees from Yardeni, Turner suggests that maybe beauty does not only belong in the realm of calligraphic, regularity and formality, and that informal scripts can also be beautiful.⁸⁴

After that brief detour into the complex world of palaeographic terminology, it is possible to turn back to the subject of writer identification, typological dating and style classification, with an increased awareness of the breadth of meaning of palaeographic terms.

Scribal identification differs from assessing type and style. Rather than pinpointing what the similar characteristics are between subsets of manuscripts, the work of writer-recognition must seek what distinguishes a scribal hand from the larger frame of his type and style. While one may think this is a self-evident principle, rarely is it implemented. When palaeographers give descriptions of individual hands, they often sound precisely like descriptions of type and style. Standards his manuscripts but neglects what is similar about the scribe's hand across his manuscripts but neglects to say what distinguishes the scribe from other scribes writing in the same style. When thinking about the difference between identifying typological developments and identifying scribes, this comment from Yardeni is useful. She says, "The study of styles can help to date manuscripts according to the phase of evolution of the script and the differences between the local styles. The study of personal hands seeks to define the differences between writers in the formation of the letter-signs in one and the same style."

Two particular challenging and confusing aspects of writer-identification pertain to the potential amount of variability possible *within* the handwriting of

⁸⁴ Turner, The Greek Manuscripts, 3.

⁸⁵ See, for example, Ulrich, "Identification of a Scribe" 201–210; Puech, DJD 31: 376–77. The descriptions from these palaeographers are detailed and helpful when thinking about the likeness of manuscripts to each other. Indeed, these two palaeographers have been two of the most descriptive when identifying scribes. It is just their descriptions were not clear in what distinguished the scribe from his type and style. One may assume their implicit knowledge on what distinguishes the scribe from his type and style, but they did not make this knowledge explicit.

⁸⁶ Yardeni, *The Book of Hebrew Script*, 133.

one scribe, as compared with the similarity possible *between* scribes writing in the same typological style. The issue of variability and variation,⁸⁷ and what meaning (i.e., same scribe or different) to ascribe to similarities and differences in handwriting features are constants for palaeographers working in the area of writer-identification.

Regarding variability *within* the handwriting of a scribe, when writing palaeographic descriptions, one notices that in the majority of cases it is not possible to write a description of any particular graph that is true for every case of the appearance of that letter. Often the variability is on the level of the length of a stroke, or the intersection point of one stroke with another, or the angle of a stroke, or the movement of the stroke, but as letter strokes are millimetres long the subtle variations are hard to put in words. Regarding the similarities *between* two scribes, palaeographers recognise that similarity on the level of letterforms is to be expected, which is how it is possible to identify typological developments and script styles.

This juggle—within writer variability, and the similarity between writers of the same type and style—gets to the heart of the complicated nature of a scribal identification. Dhali, Popović and Schomaker articulate the matter saying, "One of the main problems regarding traditional palaeography of the Dead Sea Scrolls, and also for writer identification in general is the ability to distinguish between variability within the writing of one writer, and similarity in style—but with subtle variations—between different writers." Questions among palaeographers are how much variability can be accounted for in the handwriting of scribe? And, in stylistic pursuits, how similar to each other will two scribes write? Here, I engage the ideas of Yardeni, and Dhali, Popović and

-

⁸⁷ Scientifically speaking, variability refers to differences that exist within the one group or strata; variation refers to variances between different groups or strata. In hand-writing analysis, variability refers to the differences within the handwriting of one scribe. Variation refers to the differences between different scribes.

⁸⁸ Dhali, Popović and Schomaker, "Artificial Intelligence Generates New Evidence," 1–28.

Schomaker, and Sirat, alongside my own perspectives, to explore potential answers to these questions.

On the one hand, Yardeni implicitly suggested if there is one letter, a perceived idiograph that is similar across the manuscripts, this letter is enough to recognise a scribe, even when the other letters are written considerably differently across the manuscripts. ⁸⁹ On the other hand, Dhali, Popović and Schomaker produced independent evidence that the Great Isaiah Scroll, which had generally thought to be copied by one scribe, ⁹⁰ was more likely copied by two. ⁹¹ Consequently, that two scribes working on the same manuscript could produce close to identical handwriting. The question explored by Yardeni was a different one to that of Dhali, Popović and Schomaker, in that the question of the latter researchers pertains to how similar two scribes handwriting can be; whereas for Yardeni it was how different can one scribe be. Yet, the questions are interrelated and the answers poles apart, creating a complex picture for those interested in scribal identification. The sometimes-uncomfortable palaeographic truth is that it is difficult for the human eye to tell.

Sirat suggests that given the variability possible in the handwriting of a scribe, it is not possible to prove that any two manuscripts are from the same hand, adding that a tool of persuasion is to give others the *feeling* it is the same

٠

⁸⁹ Yardeni, "A Note." This is the theme of the whole article, however, see particularly where she says that the scribe can be recognised through his *lamed*, pg. 282.

⁹⁰ E.Y. Kutscher, *The Language and Linguistic Background of the Isaiah Scroll: 1QIsa*^a (Leiden: Brill, 1974); Hugh G.M. Williamson, "Scribe and Scroll: Revisiting the Great Isaiah Scroll from Qumran," in *Making a Difference: Essays on the Bible and Judaism in Honor of Tamara Cohn Eskenazi*, ed. David J. A. Clines, Kent H. Richards, and Jacob L. Wright, HBM 49 (Sheffield: Sheffield Phoenix, 2012), 329–342; Drew Longacre, "Developmental Stage, Scribal Lapse, or Physical Defect? 1QIsaa's Damaged Exemplar for Isaiah Chapters 34–66," *DSD* 20 (2013): 17–50.

⁹¹ Dhali, Popović and Schomaker, "Artificial Intelligence Generates New Evidence," 21–28. Their finding was in line with what Tov and Brooke had previously considered the likely scenario for 1QIsa^a. Emanuel Tov, "Scribal Features of Two Qumran Scrolls," in *Hebrew in the Second Temple Period: The Hebrew of the Dead Sea Scrolls and of Other Contemporary Sources*, eds. Steven E. Fassberg, STDJ 108 (Leiden: Brill, 2013), 241–258. George J. Brooke, "The Bisection of Isaiah in The Scrolls from Qumran," JSSSup 16 (2005), 73–94.

hand.⁹² Dhali, Popović and Schomaker raise a related question of how does one persuade others, and whether this is best done through pictorial form, verbal descriptions, palaeographic charts or a combination thereof.⁹³ I raise a further question. Is rigorous palaeographic method or experience more persuasive? One may assume that rigorous method is the most persuasive, but it would be difficult to overestimate the influence of the authoritative, expert voice in any academic discipline.

In regards to the nature of the handwriting of the Qumran manuscripts, I do not agree with Yardeni that the variability possible in a handwriting of scribe changes so much between his manuscripts that his hand becomes unrecognisable, besides one, maybe two, letterforms or features. At that point, I would observe the similarities to be because the handwriting of the two manuscripts belongs to the same typology and/or style.

My conclusion is that the amount of variability possible in the handwriting of a scribe can be gaged through the variability present in one of his manuscripts. In other words, the level of variability in one manuscript should primarily match and overlap with the level of variability in another. Viewed this way, the similarities between two manuscripts copied by one scribe will outweigh the differences. If the identification of a scribe said to have copied two or more manuscripts is based on one or two features, but the differences between the manuscripts outweigh the similarities, then it is not the same scribe.

One might offer a counter argument, which claims that such a suggestion is unduly limiting. The problem with such an argument is that as it currently stands the evidence suggests close correlations between different scribes writing in a similar type and style. ⁹⁴ Evidence for scribes who, for one reason or another, greatly changed the way they wrote between manuscripts is less forthcoming. To

⁹² Sirat, Writing as Handwork, 493.

⁹³ Dhali, Popović and Schomaker, "Artificial Intelligence Generates New Evidence," 2.

⁹⁴ Dhali, Popović and Schomaker, "Artificial Intelligence Generates New Evidence," 1–28.

argue against the suggestion that for scribal identification the scribe's manuscripts need to show more similarity than differences, one would first need to explain in which circumstances, and how and why the handwriting of a scribe changes so much. Second, they would need to be transparent about what makes one or two letters or letter features a personal characteristic, as opposed to being typical of a type and style. This may not prove easy, as the influence and imitation of type and style explain why one or two graphs can be similar in two different hands.

The above discussion speaks to the limitations of palaeographic observation, but at the same time points to the exciting possibility of creating new approaches for handwriting analysis, and deepening the explication of palaeographic reasoning to tackle these limitations. One of these approaches is when doing hand-writer recognition palaeographers need to distinguish and define their scribe from other scribes writing in the same type and style.⁹⁵

2.3 Typology and Style Classifications of the Qumran Manuscripts

If the task is to distinguish between writers in one and the same style, what then are the handwriting styles of the Jewish script of the Qumran Scrolls? ⁹⁶ For all

95 Section 2.4.1 of this chapter demonstrates such a process.

⁹⁶ Despite calling his book *The Hebrew Scripts*, Birnbaum raised terminological problems with the title of Hebrew script when referring to the Aramaic script used for the Hebrew language, because Hebrew is not the only language to use the Aramaic script. He suggested the title Jewish script, although his category of Jewish script extended well beyond Qumran. For Qumran his main category was the 'Palestinian Square.' Birnbaum, *The Hebrew Scripts*, 126.

Avigad distinguished the Aramaic script of the Qumran scrolls from the palaeo-Hebrew and the early Aramaic scripts by calling it the 'Hebrew Square.' Avigad, "The Palaeography," 58.

The title of Jewish script to refer specifically to the writing of the Qumran scrolls comes from Cross. Alongside the Nabataean and Palmyrene scripts, Cross recognised the Jewish script emerging from the early Aramaic cursive script. The rise of the Jewish script from the early Aramaic script aligns with the earliest Qumran scrolls. Cross, "The Development," 24. This is how one can identify the earliest Qumran scrolls, through recognising in them the influences of the early Aramaic, evident in the fourth century Aramaic documentary texts. See, for a clear example,

intents and purposes scholars agree upon the general typological sequence of Archaic, Hasmonean and Herodian for the Jewish script. Avigad initiated the palaeographic sequencing of the Qumran scrolls that included the categories of Archaic, Hasmonean and Herodian script. His attention to the details of the typological developments in the Second Temple period remain impressive, but Avigad was reluctant to set precise dates. ⁹⁷ Cross did not share this reluctance, and building on Avigad, he categorised the Jewish script of the Qumran scrolls into 100 to 120-year periods:

- 1) The proto-Jewish or Archaic script (ca. 250 150BCE)
- 2) The Hasmonean script (ca. 150 30BCE)
- 3) The Herodian script (ca. 30 BCE 70 CE). 98

The titles—Hasmonean and Herodian—are political ones. There is an argument to be made against assigning a script typology to a political period, as clearly developments in handwriting do not correspond with political realities. However, there is a heuristic value in such a classification system. Additional to these three distinct typological categories are the early, mid and late examples, e.g., late Hasmonean. Cross argued that in the Hasmonean and Herodian periods the script evolved so fast that even within the broad historical script types one can

Aramaic Papyri, Discovered at Assuan, eds. A.H. Sayce and A.E. Cowley (London: Alexander Moring, 1906).

⁹⁷ Avigad, "The Palaeography," 57–86.

⁹⁸ Cross "The Development," 3–43. In terms of the origin of these dates, internally dated manuscripts exist on the outer limits of this typology of the Jewish script. For example, the official Persian Aramaic documents from the Fifth and Fourth Centuries BCE, which palaeographers observe the Jewish script evolving from. There are also documents and inscriptions dated to the First and Second Centuries CE.

Between these outer limits of internally dated manuscripts, Cross placed manuscripts from the Qumran scrolls, based on how he envisioned the linear evolution of script development. He placed a number of the predominantly biblical manuscripts from the Qumran collection as palaeographic pegs for the particular periods of Archaic, Hasmonean and Herodian. However, as is well recognised, there are no internally dated manuscripts within the Qumran collection, leaving question marks over the idea that there are manuscripts in the collection that it is possible to set with any degree of certainty as palaeographic pegs for the particular periods.

assign manuscripts to early, mid and late, which means a break down into 25 to 50-year time frames. Of this claim of 25 to 50-year timeframes, Tigchelaar says that perhaps it may hold true for the latest book hands, but should be rejected for the earlier hands. ⁹⁹ Tigchelaar is correct. There are too many variables in handwriting, related particularly to individuals who maintain older forms, and also so-called developed forms occurring in so-called early manuscripts, to work under the assumption that there is a linear script development that one can determine the rules for, which operates within the rubric of 25 to 50-year time frames. ¹⁰⁰ That said, there are patterns one can learn for working within centuries.

Alongside detailing typological developments, Cross outlined a number of script styles—the formal, Hasmonean semiformal, Herodian round semiformal, semi-cursive and cursive. 101 Yet, one may observe that these style categories are less well-defined, less understood and less embraced than the three typological categories used for dating. The following paragraphs explore confusions around, firstly, semiformal as a discrete category and, secondly, the terminology of formal as a style classification in the Qumran scrolls. These topics are important for hand-writer recognition, as scribes are discussed in terms of, but also distinguished from, the particular style their handwriting belongs.

Semiformal as a style category for handwriting is contested. In particular there is confusion around the Hasmonean semiformal. Yardeni does not discuss the semiformal as its own special style. Rather she sees two distinct styles; the calligraphic book-hand, with variations in earlier and later stages, and the cursive script, to which several versions belong. She adds that, "Together with these two main styles, several intermediate scripts of various degrees of fluency and in

_

⁹⁹ Tigchelaar, "Seventy Years," 275.

¹⁰⁰ Cf., for further discussion on this point, n. 67.

¹⁰¹ Cross, "The Development," 3–43. Frank Moore Cross, "The Palaeography of the Dead Sea Scrolls," in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment, Vol. 1*, eds. Peter W. Flint and James C. Vanderkam (Leiden: Brill 1998), 379–402.

various phases of evolution exist in the documents."¹⁰² Eshel's three types of Jewish script include the formal book-hand, the Aramaic cursive and the palaeo-Hebrew.¹⁰³ In 1961, the semiformal occupied a prominent place in Cross' conceptions of the development of the Jewish script.¹⁰⁴ Pertaining to the Hasmonean semiformal, he described it as a "special style."¹⁰⁵ Cross did not clearly define the characteristics of the Hasmonean semiformal script, but he outlined its place in the evolution of the Jewish scripts. Tigchelaar explains that, "Unfortunately, whereas Cross thoroughly discussed the so-called archaic semiformal hands, he largely refrained from describing the Hasmonaean semiformal, even though he invokes this script to explain developments."¹⁰⁶ This may help to explain why in 1998 Cross did not refer to a Hasmonean semiformal either, seemingly incorporating it into the formal script.¹⁰⁷

The question of the so-called Hasmonean semiformal is a tricky one, as in all likelihood it was not a style in terms of being a discrete and intentional design of handwriting with ideal forms that scribes conform to. However, there are features pertaining to the level of care and the shape of the strokes that distinguish the handwriting classed as Hasmonean semiformal from contemporary formal manuscripts. According to Cross' system, without a separate style category of semiformal, the semiformal manuscripts become formal manuscripts. Alternatively, Yardeni would class the Hasmonean semiformal as a Hasmonean book-hand.

-

¹⁰² Yardeni, *The Book*, 57.

¹⁰³ Eschel, "Palaeography," 334.

¹⁰⁴ Cross argued that the semiformal was formed by the influence of the third century cursive on the formal script, and continued as a fully formed style until the end of the Hasmonean era. Cross, "The Development," 22. Additionally, in 1961, Cross gave the semiformal style a significant place in the development of the other national scripts—the Palmyrene and Nabataean—which developed from the third century alongside and independently from the Jewish script. Cross, "The Development," 23.

¹⁰⁵ Cross, "The Development," 22.

¹⁰⁶ Tigchelaar, "Seventy Years," 267.

¹⁰⁷ Cross, "The Palaeography of the Dead Sea Scrolls," 379–402.

Longacre offers a solution to the problem by thinking in categories of morphology and execution. Regarding morphology Longacre perceives that the letterforms and the strokes that define them are best described as rectilinear (straight), curvilinear (wavy), simple (not calligraphic), and ornate (with ornamentation). Execution is complicated to measure and classify into categories because every handwriting is different, and therefore logically, one could argue that gradations of execution are infinite. However, Longacre classifies levels of execution into three categories of calligraphic, common and current. Calligraphic hands are artistic, elegant and carefully produced. Common hands lack the aesthetic appearance of the calligraphic, but are practical and legible. The level of skill is varied and contains both schooled and unschooled hands. Manuscripts penned in common hands could be written in haste. Current hands show a disregard for legibility and clarity. 110

The categories of morphology and execution allow palaeographic descriptions a higher degree of precision than the broad and all-encompassing categories of formal, cursive or intermediary allow. For example, within the different gradations of formal script one can distinguish the dominant stroke type as rectilinear or curvilinear. They can define calligraphic hands from those that are poorly executed. They can describe the level of perceived skill of a scribe and the care they put into a manuscript. If applying the categories of morphology and execution directly to the contested Hasmonean semiformal hands, one could apply terms of morphology such as curvilinear and simple (lacking ornamentation). Hasmonean semiformal manuscripts were executed by common hands. Aspects of morphology are tied to type and style, whereas aspects of execution are bound to an individual hand.

Another way of thinking about aspects of execution or standards of skill comes from William Johnson. He divided the Oxyrhynchus papyri into three

¹⁰⁸ Longacre, "Disambiguating," 101–128.

¹⁰⁹ Longacre, "Disambiguating," 110–19. Ornate strokes are a developed feature of the Jewish script.

¹¹⁰ Longacre, "Disambiguating," 119–22.

handwriting categories: *deluxe* or elegant, everyday professional and substandard. Mladen Popović drew on these categories when considering possible and appropriate ways of assessing the handwriting quality of the Isaiah and *Serekh* manuscripts. I find the distinction between elegant and every day professional helpful when thinking about formal scripts. These two levels of execution distinguish between the formal manuscripts of very high standard with those that are well produced by skilled scribes, but without the same level of beauty as the *deluxe* and elegant manuscripts. The category of substandard is for the remaining manuscripts, produced with less care for the handwriting quality.

2.4 Scribal Identification

In 2004, Tov compiled a list of eleven scribes identified by scholars as having penned more than one manuscript.¹¹³ I add seven more scribes from Eugene Ulrich, Sarah Tanzer, Émile Puech, Daniel Falk and three from Eibert Tigchelaar.¹¹⁴ In total, there are eighteen previously identified scribes. In this chapter, I assess seventeen of these scribes. First, I discuss the process of identification by each scholar for each scribe. Second, I offer a traditional palaeographic analysis of each scribe's handwriting. The eighteenth scribe, the most prolific of all them, will be assessed in the following chapter, through applying digital tools for handwriting recognition.¹¹⁵

-

¹¹¹ William A. Johnson, *Bookrolls and Scribes in Oxyrhynchus* (Toronto: University of Toronto Press, 2004), 7, 102–103, 122–23, 155–56.

¹¹² Mladen Popović, "Book Production and Circulation in Ancient Judaea as Evidenced by Writing Quality and Skills in the Dead Sea Scrolls Isaiah and Serekh Manuscripts," *The Dead Sea Scrolls and Ancient Media Culture*, ed. Travis B. Williams, Loren T. Stuckenbruck, and Chris Keith, STDJ (Leiden: Brill, *forthcoming*).

¹¹³ Emanuel Tov, *Scribal* Practices, 24.

¹¹⁴ Even with the additional six, the list may not be exhaustive

¹¹⁵ Due to the prolific nature of this scribe, I assess him differently, and using advanced digital technology (cf., Chapter 3, "Identifying Dead Sea Scribes: A Digital Palaeographic Approach.") Yardeni suggested that this scribe penned fifty-four to ninety of the Qumran manuscripts. Yardeni,

In this chapter, the scribe of 1QS, the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 and the scribe of 1QpHab and 11Q20 are given particularly lengthy analyses. I chose these three scribes to go deep with for numerous reasons. First, because they are the most well-known and discussed in the field; second, each of these scribes penned manuscripts from more than one cave; third, each scribe belongs to a different handwriting type. Following the lengthy palaeographic analyses of these three scribes, I give somewhat briefer written descriptions of the remaining fourteen. Although, the same thinking and process of observation goes into all assessments.

Of the three palaeographic functions—namely, typological development, style classification and writer identification—writer identification has received the least attention in terms of methodology. In her tome on the Aramaic Ostraca from Idumea, Yardeni listed a set of graphic criteria to distinguish the features of scribes, adding that "only a few will apply to each scribe": ¹¹⁶

- 1. Graphic appearance of key words and numerals
- 2. Angle of writing (upright, slanted down to left, mixed)
- 3. Line spacing
- 4. Size of letters
- 5. Letter- and word-spacing
- 6. Thickness of strokes
- 7. Unique letter shapes

[&]quot;A Note," 281–92. This number of manuscripts far exceeds the other seventeen scribes, said to have penned from two and up to eight of the Qumran manuscripts.

¹¹⁶ Bezalel Porten, Ada Yardeni, *Textbook of Aramaic Ostraca from Idumea*, Vol. 1 (Penn State University Press, 2014), XXV.

Indeed, this list is a helpful list of criteria for palaeographic endeavours. However, when it comes to the scribes of the literary manuscripts of the Dead Sea Scrolls, the graphic appearance of key words and numerals are not particularly relevant for scribal identification. Regarding letter size, thickness of strokes and line spacing, often these differ between the manuscripts penned by the same scribe. Therefore, from the list above, only the angle of the writing and letter shapes are helpful for distinguishing the scribes of the DSS' cache.

The approach presented herein is a new one in terms of considering how to use traditional palaeography to identify scribes. I am reluctant to formulate this approach into a "three easy steps" program. I understand this can be a helpful, and popular, way of doing things, but I am unconvinced that palaeography operates as such. The process of observation rather than being a linear step by step process, must go back and forth numerous times, as one tries to figure out what is significant in what is being observed. I imagine when Yardeni was writing her list of criteria (above), she was thinking about how she could formulate into a list what palaeographers observe, while knowing that no list of criteria could capture all of what one sees. Here I attempt to formulate a process of observation to help with writer identification, while acknowledging that the process of observation is more complex than lists and formulations allow.

In my approach for writer-identification, it is important to be able to recognise the type and style to which a scribe belongs, according to known classification systems. The scribe can then be distinguished from others penning manuscripts in the same type and style. Advantages to the whole concept of distinguishing a scribe from his type and style is that it creates clarity on whether a letterform, which at first glance might seem unique to the scribe, is in fact unique. Furthermore, it opens up possibilities for finding graphical characteristics that are typical of the scribe, even if those characteristics are not unique across the board. For example, one can recognise when a scribe who predominantly employs a rectilinear script pens particular strokes that are curvilinear. Curvilinear strokes in predominantly rectilinear scripts may be distinguishing of a

scribe. Or when a scribe who predominantly employs late forms employs forms that are considered earlier. The way that a scribe mixes so-called early and late features can be significant. Below, I assess the accuracy of the previously identified Dead Sea scribes. I do this by an approach that attempts not only to distinguish unique forms (as unique forms are rare at best), but by recognising whether there are graphical components that distinguish the scribes' manuscripts from the categories of the type and style to which they belong.

Due to the considerable size of the Qumran scroll cache, it is not possible when making comparisons to include all examples of potential comparative manuscripts. Within a certain script type (e.g., early Herodian), it is possible to assign potentially a hundred or more scribes, and each of them will differ in some respects from the other ones. Therefore, I cannot describe what distinguishes a scribe via comparisons with all the other scribes in each particular type. Is the process, therefore, methodologically sound? Can I make a claim that a particular Hasmonean scribe's ayin distinguishes him from other scribes if I have not compared all of them? What if there is another Hasmonean scribe somewhere that employs that avin? This is possible. However, the problem this approach aimed at solving is palaeographic descriptions of scribes sounding precisely like palaeographic descriptions of a type and style, and therefore readers of these descriptions not being able to discern what is particularly distinguishing of the scribe. The approach I propose here makes clear what distinguishes the scribe from other scribes penning manuscripts in the same type and style. Moreover, it allows one to discern features that are overwhelmingly distinguishing of the scribe, even if there may still exist isolated examples to prove it wrong. The palaeographer aims at their statements being broadly accurate, even if absolute statements are difficult. In regards to deciding which manuscripts to make comparisons with, this was done on the basis of aspects such as the size, preservation, legibility and familiarity of the manuscript.

2.4.1 An Assessment of the Previously Identified Scribes of the Qumran Manuscripts

2.4.1.1 The Scribe of 1QS, and 1Q28a (1QSa), 1Q28b (1QSb), 4Q175 (4QTestimonia), 4Q53 (4QSamc), 4Q443 (4QPersonal Prayer), 4Q457b (4QEschatological Hymn), 4Q422 (4QParaphrase of Genesis and Exodus), and Interlinear corrections in 1QIsaa, Cols. XXXIII and XXXVIII.

The scribe of 1QS is an important scribe in the field of Qumran studies. He was the first scribe recognised for penning more than one manuscript. His manuscripts were found in Cave 1 and Cave 4. Moreover, the manuscript of 1QS is significant in the field for the role that its literary content plays in envisioning the world of the people behind the scrolls. Here, I discuss how the identity of this scribe was recognised in Qumran scholarship.

The first observation made was that the scribe who penned 1QS penned the interlinear corrections in 1QIsa³. John Trever in a palaeographic study from 1949 on the four large scrolls from Cave 1 (1QIsa³, 1QS, 1QpHab and 1QgenApocr) said that the interlinear corrections in Col. XXXIII 7 "is almost certainly the hand which prepared *Sect.*" (*Sect* = 1QS). 117 Cross followed by adding the interlinear additions in XXVIII 15 (left margin), and potentially, also one letter *taw* in Col. XLIV. 118 Recent challenges by Årstein Justnes and Mladen Popović that the corrections in 1QIsa³ are not the scribe of 1QS encourages having a closer look; 119 but, this will come below in the palaeographic analysis of the handwriting of the scribe.

¹¹⁷ John Trever, "A Palaeographic Study of the Jerusalem Scrolls," 15.

¹¹⁸ Frank Moore Cross, John C. Trever, *Scrolls from Qumran Cave I: The Great Isaiah Scroll, The Order of the Community and The Pesher Habakkuk* (Jerusalem: The Albright Institute of Archaeological Research and The Shrine of the Book, 1972), 4, n. 8.

¹¹⁹ Årstein Justnes, "The Hand of the Corrector in 1QIsa^a XXXIII 7 (Isa 40, 7–8): Some Observations," *Semitica* 57 (2015), 205–210; Popović, "Book Production and Circulation," forthcoming.

In 1955, Milik said that 1QS, 1QSa and 1QSb represent three collections, all penned in the hand of one scribe. Proceeding, in 1968, Allegro briefly noted that 4Q175 was written by the same scribe as 1QS. The reason he offered was the use of the four dots for the Tetragrammaton in line 1 of 4Q175. In 1972, Jonathan Siegel challenged the assignment of 4Q175 to the scribe of 1QS based on the mix-up of medial and final *mem*. This famous mix-up in 4Q175, where the scribe on occasions employs medial *mem* in final position and final *mem* in medial position is difficult to explain. Siegel adds that the bizarre orthography of 4Q175 supports his argument that the scribe of 1QS and 4Q175 are different. Tigchelaar acknowledges Siegel's challenge but he does not agree that it is a different scribe. Siegel is correct that of all of the manuscripts assigned to this scribe, 4Q175 is the most distinct.

In 1972, Cross assigned to the scribe of 1QS also 4Q53 (4QSam^c). Unfortunately, Cross gave no handwriting analyses, only describing this scribe as energetic.¹²⁶ In a study of 4Q53, Ulrich outlines a number of significant features of the handwriting of 4Q53 that aligns with 1QS, including the four dots to represent the Tetragrammaton and frequent corrections.¹²⁷ He describes the handwriting as small, cramped and undisciplined and that the characters show

_

¹²⁰ J.T. Milik, D. Barthélemy, *Qumran Cave* 1. DJD 1 (Oxford: Clarendon, 1955), 107–08. The direct quote is as follows, "Il s'agit donc pour le scribe de deux recueils distincts suivis eux-mêmes (cf. couture à la fin 1QSa) d'un troisième recueil: 1QSb."

¹²¹ John M. Allegro, *Qumran Cave 4.1, 4Q158–4Q186, DJD 5* (Oxford: Clarendon, 1968), 58.

¹²² Jonathan P. Siegel, *The Scribes of Qumran. Studies in the Early History of Jewish Scribal Customs, with Special Reference to the Qumran Biblical Scrolls and to the Tannaitic Traditions of Massekheth Soferim* (Brandeis University, Ph.D., 1972) 129.

¹²³ Siegel tried to explain for three of the examples אליהםה, אחיהםה, אחיהםה אליהםה that the scribe squeezed in the *he*s as an afterthought. Siegel, "The Scribes of Qumran," 149. Tigchelaar disagrees that the *he* was squeezed in, and three times in a row is not an afterthought. Tigchelaar, "The Scribe of 1QS," 249.

¹²⁴ Siegel, *The Scribes of Qumran*, 129. See also Chapter 4 of this book for a discussion of the orthography and morphology of 4Q175.

¹²⁵ Tigchelaar, "The Scribe of 1QS," 249.

¹²⁶ F.M. Cross, Scrolls from Qumran Cave I. 4 n.8.

¹²⁷ Eugene Charles Ulrich, "4QSam^c: A Fragmentary Manuscript of 2 Samuel 14-15 from the Scribe of the Serek Hay-yaḥad (1QS)," in the *BASOR* 235 (1979): 1-25 at 1-3.

multiple diverging forms.¹²⁸ He says that the scribe of 4Q53 never distinguishes between medial and final forms of *pe* and *tsade*.¹²⁹ This holds true for all the manuscripts penned by this scribe. Ulrich describes for the scribe an intermediary final *mem* appearing in final position in 4Q53 that is closed, but the left downstroke is a diagonal instead of vertical.¹³⁰ In 4Q175, line 19, this intermediary *mem* with the diagonal left stroke appears in medial position.¹³¹

Strugnell suggested that 4Q441, 4Q443 and 4Q457b are in the same hand as 1QS.¹³² Tigchelaar offers his support to 4Q443 and 4Q457b being the same scribe as 1QS.¹³³ He says, "I will not compare the hands of these documents, but shall proceed from the commonly held view that 1QS, 1QSa, 1QSb, 4Q53, some of the corrections in 1QIsa³ as well as the less carefully written 4Q175, were written by the same scribe. I think it is plausible that 4Q443 and 4Q457b were written by the scribe of 1QS, whereas not enough of 4Q441 remains for judgment."¹³⁴

A manuscript previously overlooked as copied by the scribe of 1QS is 4Q422.¹³⁵ This manuscript exhibits all the palaeographic characteristics of the scribe of 1QS, as well as twice mirroring the idiosyncrasies of 4Q175, which is to

¹²⁸ If referring to the terminology I defined above, multiple diverging forms means the scribe does not strictly adhere to ideal forms, is inconsistent, and possibly informal.

¹²⁹ Ulrich, "4QSamc," 3.

¹³⁰ Ulrich, "4QSamc," 3.

 $^{^{131}}$ The drawings of Birnbaum or Avigad for the manuscript of 1QS do not include this intermediary final mem.

¹³² Stephen A. Reed, Marilyn J. Lundberg (eds.), *The Dead Sea Scrolls Catalogue. Documents, Photographs and Museums Inventory Numbers* (Atlanta, GA: Scholars Press, 1994), 114.

¹³³ Eibert Tigchelaar, "In Search of the Scribe of 1QS," 440.

¹³⁴ Tigchelaar, "In Search of the Scribe," 440. Eric Reymond, in the same vein as Tigchelaar, reiterates that scholars agree with the existence of the scribe, but he does not offer palaeographic reflections. Eric D. Reymond, "The Scribe of 1QS, 1QSa, 1QSb, 4Q53 (4QSamc) 4Q175 and Three Features of the Orthography and Phonology," *DSD* 25 (2018): 238–54 at 239. Reymond suggested vaguely that 'other scholars' are more hesitant about 4Q175, but the only person I found to express such hesitancy is Siegel. Cf. n. 122.

¹³⁵ I discovered this manuscript copied by the scribe of 1QS when I was analysing Hasmonean manuscripts, and trying to understand better the handwriting category of Hasmonean as reflected in manuscripts categorised as such. While at this stage I was researching similarities in style, this manuscript revealed itself as same scribe.

pen הםה with the final *mem* in the middle. This characteristic in 4Q175 was mentioned above briefly, as Siegel used it to suggest 4Q175 was a different scribe. It is significant then to find another manuscript in the same type of handwriting that repeats this idiosyncrasy. 136

The discussion above demonstrates that despite a couple of comments here and there, the many scholars involved in this scribe's identification did not elaborate or describe in detail the specifics of the handwriting of the scribe of 1QS that includes all of his manuscripts. If one would like to read beautifully detailed palaeographic descriptions of 1QS they can do this in Trever, Birnbaum and Avigad, but these analyses were for the purpose of dating only the one manuscript, not for the purpose of identifying a scribe of more than one manuscript.¹³⁷

Below, I offer a palaeographic analysis of the handwriting of the scribe of 1QS, 1Q28a, 1Q28b, 4Q175, 4Q53, 4Q443, 4Q457b, 4Q422, and the interlinear corrections in 1QIsa^a (Cols. XXXIII and XXXVIII). The analysis takes into account all the manuscripts previously ascribed to him, which I concur on the basis of this analysis are correct. For general descriptions of the overall appearance of the scribe's handwriting, I frame the analysis around Longacre's categories of morphology and execution. (These terms were discussed above.) For distinguishing the scribe from others writing in the same period of time, I make comparisons of the graphs.

¹³⁶ Chapter 4 explores in detail the spelling practice of the scribe of 1QS.

¹³⁷ Trever, "A Palaeographic Study," 7–14; Birnbaum, *The Hebrew Scripts*, 86. Avigad, "The Palaeography," 71. It is intriguing to compare though, where their observations both overlap and differ with each other. Regarding complicated letters such as *he* or *shin*, these three scholars were not all in agreement of the scribe's ductus. In my palaeographic descriptions below of the scribe of 1QS, I compare some of these differences.

Morphology

This scribe's hand is recognised typologically as mid to late Hasmonean. His hand is developed as compared to the early Hasmonean, but it is not developed enough so as to associate it with the Herodian periods. For examples, the scribe is moving towards standardisation in letter size, but there are no bended tips on the tops of any letters such as *ayin* or *shin*, which are customary in the Herodian period. In regards to letterforms, his roof of *he*—with its thin (not double stroked) horizontal, and with predominantly a very short additional stroke that slants downwards on the left side—is typically Hasmonean. 139

The differing and changing opinions regarding the Hasmonean semiformal as a script style offer challenges to discussing this scribe's handwriting style in a way that can be generally agreed upon. Cross' 1961 article is the most read article on Qumran palaeography, 140 which means that the hand of 1QS is commonly known as a Hasmonean semiformal. The editors of the Serekh manuscripts in the DJD series described the handwriting as a Hasmonean semiformal. 141 Also Tigchelaar in his article on the scribe of 1QS. 142 Yet, as previously discussed, the Hasmonean semiformal is not recognised across the

¹³⁸ Avigad, "The Palaeography," 71; Cross, "The Palaeography," 27. As discussed by Tigchelaar, it is difficult to understand the breadth of the handwriting from the Hasmonean period from the specimen provided by Cross in his seminal article, as 4Q30 is the only manuscript provided for the Hasmonean period, with also 4Q51 acting as a late Hasmonean/early Herodian. Tigchelaar, "Seventy Years," 262–64. It would have helped Cross and future editors to have for example 1QIsa³, 4Q176, 4Q524 and the manuscripts penned by the scribe of 1QS as a broader representative sample for the Hasmonean script.

¹³⁹ This roof of *he* has been one of the least understood features in previous palaeographic analysis. Yardeni observed that it was made from two strokes, a horizontal, with tiny stroke added on the end. However, previous analyses from Avigad and Birnbaum drew one single curved stroke and Trever described a stroke that moved right to left and the doubled back to the left vertical. In Cross' drawing of the Hasmonean *he* the roof is thick. I imagine this must have caused some confusion over the years as this was the specimen of *he* on which to date Hasmonean manuscripts. ¹⁴⁰ Tigchelaar, "Seventy Years," 270, explains that the 1990's guidelines for DJD editors were to date according to the specimens in Cross' 1961 article.

¹⁴¹ Philip Alexander and Geza Vermes, *Qumran Cave 4: Serekh Ha-Yaḥad and Two Related Texts*, DJD 26 (Oxford: Clarendon, 1999), 21.

¹⁴² Tigchelaar, "In Search of the Scribe," 439.

board as a discrete script style. However, I suggest that continuing to describe his hand as semiformal may prove helpful, even if one does not view semiformal as a strict style category with clearly demarcated ideal forms. Rather, if one thinks of formality and informality on a spectrum, then the scribe of 1QS is around the middle of that spectrum. His stroke production is simple, curvilinear and inconsistent, which are traits more readily associated with informal writing. However, his writing is legible, and his scrolls can be lengthy and significant, and informal would not be an appropriate description either. Therefore, semiformal may continue to work as a descriptive word for the general appearance of the script, which sits between formal and informal on a spectrum, but less so as a strict palaeographic category for script style.

Execution

The scribe of 1QS is a common, everyday professional hand. His handwriting is practical and legible, although it lacks the quality of a calligraphic, elegant hand. There is a fluidity and freedom in his writing, and as a consequence it lacks consistency; he does not adhere strictly to ideal forms. The handwriting of 4Q53, 4Q175 and 4Q457b evinces poorer execution than 1QS and 4Q443, which were produced with more care. This scribe demonstrates that across the one hand different levels of execution exist.

Distinguishing the hand of 1QS from other Hasmonean hands

To distinguish this hand from other Hasmonean hands, I compare the manuscripts of 1QS, 1Q28a, 1Q28b, 4Q175, 4Q53, 4Q443, 4Q457b, 4Q422 with 1QIsa^a, 4Q462, 4Q524 and the papyrus opisthograph of 4Q433a/4Q255. These manuscripts cover the range of Hasmonean from early to late and from formal to semiformal to informal. This analysis is done on the level of individual

¹⁴³ For further palaeographic analyses of the two hands of 4Q433a and 4Q255, see Ayhan Aksu, "A Palaeographic and Codicological (Re)assessment of the Opisthograph 4Q433a/4Q255," *DSD* 26 (2019): 170–88.

letterforms. ¹⁴⁴ I believe there are six features significant in distinguishing the scribe of 1QS et al. with other hands from the same period. ¹⁴⁵

Tet — The left and right rounded strokes meet in-line with the centre point of the *tet*. Unlike with the more common form of *tet*, whose centre of gravity is on the left, the scribe of 1QS centres it in middle. This form is not entirely unique to this scribe, but it is certainly the rarer form, with the form shown here from 4Q524 the more dominant form.









40175 1.4

1Q28b III, 7

4Q422 III, 6

4Q5243,5

Lamed – The hook on the *lamed* is a prominent feature of the scribe of 1QS. ¹⁴⁶ It is thin, varies in length, and juts out obliquely or runs almost parallel to the mast. His hook is the most prominent hook in the scrolls. (The scribe/s of 1QIsa^a may offer a point of contention to this statement as many, although far from all, of the hooks on *lamed* in 1QIsa^a are prominent also). The mast on the *lamed* of our

¹⁴⁴ As I have said before, completely unique forms are very rare, however, describing several letter forms, and how these differ from other scribes penning manuscripts in the same type and style, offers a way of tapping into the regular habits of this scribe.

¹⁴⁵ Due to the variability that is unavoidable and always present when dealing with a prolific scribe of a common hand of relatively large manuscripts, no description of a graph can be true of every example. The role of the palaeographer is to recognise and make choices regarding what is significant, which I have done to the best of my ability.

¹⁴⁶ The hook is the stroke off the mast. Trever called it a narrow loop or flag, while Birnbaum called it an upstroke. I am not convinced this stroke was drawn upwards. The term 'loop' works to describe some examples of this stroke and when it loops back around over the mast; but it does not do this for the majority of times. Other palaeographers also like the terminology of 'flag', but 'hook' describes better the long vertical strokes of this scribe which descend from the mast.

scribe stands straight,¹⁴⁷ while the body¹⁴⁸ varies in terms of its length and depth. Sometimes the body is a short line to the right, and then a descending oblique line, while other times the trajectory of the ductus extends wider and gently curves around.









1Q28b III. 4

4Q433 1, 4.

4Q422 III, 6

4Q462 1, 13

Final mem – A large final mem is typical of the Hasmonean script. Cross' specimen (4Q30) for the Hasmonean script, the final mem tends toward small;¹⁴⁹ but in Hasmonean manuscripts, 1Qlsa³, 4Q462, 4Q524 and 4Q433a/4Q255 they tend towards large. The scribe of 1QS is moving towards the final mem being of a similar size to all the other letters. Take the first column of 1QS for example; line 9 has a small final mem in תעודותם; then two lines down in line 11 there is a larger final mem in הנדבים. In lines 12, 13, 14 the numerous final mems are small, but then at the end of line 18 in הכוהנים is a large final mem again. However, across all of his manuscripts predominantly final mem is smaller than the more common form for handwriting of this period, as evinced by 1Qlsa³, 4Q176, 4Q462, 4Q524 and 4Q433/4Q255. Therefore, this size, to a degree distinguishes him from his counterparts. Also, the scribe of 1QS has a habit of penning a high, widely open, rounded serif that sits atop the roof of final mem. I picture three here, from 1Q28b, 4Q433 and 4Q422, compared with 4Q462.

 $^{^{147}}$ Birnbaum called it slightly oblique, which is accurate for some of the masts, but predominantly the mast of this scribe stands upright.

¹⁴⁸ The stroke/s of the *lamed* that sit below the ceiling line.

¹⁴⁹ Cross, "The Development," 8.







4Q433 1, 7



4Q422 III, 8



4Q462 1, 12

Ayin – While the final *mems* of the scribe of 1QS are comparatively small, the *ayins* are comparatively large. In Cross' specimen (4Q30) the size of *ayin* varies but is predominantly small, and also with other manuscripts of this period, 1QIsa^a, 4Q176, 4Q462 4Q524 and 4Q433a/4Q255, the *ayin* remains among the smaller of the letter forms.

The scribe of 1QS' ayin has a right stroke that curves deeply. The stroke descends to the imaginary baseline, and to differing degrees traverses it. The left stroke curves, touching the right around its middle. A couple of exceptions to this, are seen in 1QSa Col. I, line 8 and line 13; however, pictured here is the more common form of the scribe of 1QS, as compared with 4Qlsa^a. 1Qlsa^a preserves the older, smaller, angled form



4Q443 1, 2



4Q457b 2, 3



4Q422 III, 5



IQIsaa I, 5

Shin – The scribe of 1QS' shin stands out for two reasons. The centre of gravity is towards the centre, as the junction point between the right and left strokes is at their bottom tips. This differs from the common junction point above the bottom of the left stroke. Due to the roundedness of the junction points of the shin, Trever thought this shin was drawn in two movements. The right and left stroke

being one movement and the middle stroke the second, but the images below show it was a three-stroke *shin*. ¹⁵⁰

A second feature of this scribe's *shin* is that the left and right strokes are of similar length. This is unusual; more predominantly in other manuscripts the right stroke of *shin* is considerably longer than the left. (The exceptions to the rule for the manuscripts assigned to the scribe of 1QS are 4Q175, and the interlinear addition of 1Qlsa^a, which I discuss further below).









1QS I, 4

1Q28b V, 12

4Q422 I, 1

4Q462 1, 12

Tetragrammaton

A final standout feature of this scribe is the use of the four dots for the Tetragrammaton. To be specific, they occur in his manuscripts of 1QS, 4Q53, 4Q175, 4Q443 (only two dots remaining), and the interlinear corrections in 1QIsa^a. Ulrich observed the appearance of these dots in another manuscript (4Q176), but he suggested that the formation and arrangement of the dots in 4Q176 is different from when the scribe of 1QS pens them.¹⁵¹ This is not obvious; in 4Q176, the dots may be closer than in 1QS and 4Q175, but it is not significant enough to say a different formation and arrangement. Following Ulrich, Tigchelaar listed more manuscripts that employ the dots for the Tetragrammaton, which are 4Q196, 4Q382, 4Q391, 4Q462, and 4Q524. Therefore, these dots are not purely a feature used by the scribe of 1QS. Tigchelaar noted that he may be the only scribe to use them for biblical

¹⁵⁰ Trever, "A Palaeographic Study," 9.

¹⁵¹ Ulrich, "4QSamc," 2.

manuscripts or quotations.¹⁵² Although, such a claim rests on whether this scribe penned the interlinear corrections in 1QIsa^a. From here, I discuss if recognising the hand of 1QS in the interlinear corrections of 1QIsa^a is still viable.

Trever based his opinion that the scribe of 1QS penned the interlinear additions in 1QIsa^a based on what he calls the almost identical forms of *aleph*, *bet*, *dalet*, *he*, *kaph* (medial), *lamed* (note flag), final *mem* (note small size), 'ayin and *tsade*.¹⁵³ This statement, i.e., identical forms, may be correct regarding the *he* and *ayin*, and as discussed above, *lamed* and *ayin* are particularly significant to identifying this scribe. However, Justnes and Popović are correct in recently pointing out that this claim of almost identical forms for most of these letters is inaccurate.¹⁵⁴

Justnes and Popović regarding the interlinear correction in 1QIsa^a XXXIII 7, took a different approach to Trever. They observed the many differences. The differences Justnes recognised are that are that the scribe of 1QS consistently uses more ligatures; the left leg of *aleph* is consistently higher in 1QS; 1QS does not as clearly distinguish between *waw* and *yod*; final *nun* is longer in 1QS; in the interlinear corrections of 1QIsa^a *shin* has a straight, close to 90 degrees left down stroke, which is curved in 1QS.¹⁵⁵ His final claim is that the hand of 1QS is later than the interlinear corrections in 1QIsa^a.¹⁵⁶

Popović recognised that regarding the execution of individual letterforms, and also the arrangement and proportioning of the letter forms in relation to each other between 1QS and the interlinear corrections are different. He gives specific examples of *shin* following *nun*, or *bet* following *shin*, or *shin* following *bet* or of whole words that occur in both manuscripts, such as העם or ביא/בי

¹⁵² Tigchelaar, "In Search of the Scribe," 3

¹⁵³ Trever, "A Palaeographic Study," 15.

¹⁵⁴ Justnes, "The Hand," 208–09; Popović, "Book Production and Circulation," forthcoming.

¹⁵⁵ Justnes, "The Hand," 209–10.

¹⁵⁶ Justnes, "The Hand," 208. This is accurate, but this just means the addition was added later.

¹⁵⁷ Popović, "Book Production and Circulation," forthcoming.

matters and scribal markings. Although both these pieces of evidence, while offering interesting comparisons, do not give a clear picture. The scribe of 1QS more commonly uses lengthened בי, although on rare occassions he use בי. In the interlinear corrections the short form is applied. The four dots of the Tetragrammaton are found in the interlinear corrections, which 1QS is known to regularly apply, however, this scribe is not the only scribe to use these dots. 158

Methodologically, the largest problem we as palaeographers face regarding these interlinear corrections the limited amount of letterforms. However, when it comes to the weight of evidence regarding the differences and similarities, it does appear that the differences outweigh the similarities. There are the differences pointed out by Justnes (listed above), of which I can see he is particularly astute regarding waw, yod and shin. There are the differences pointed out by Popović, which indicate that there is different letter arrangement and proportioning between the interlinear corrections and the scribe of 1QS. I would add also that the body of the lamed is more rectilinear in the interlinear corrections. This observation can be further carried to other letters such as the aleph, which is also more rectilinear in the correction of 1QIsa^a XXXIII 7 than in other writings of this scribe.

Given that the differences appear to outweigh the similarities and that the similarities could be accounted for by a similarity in style, it is more than likely that that the interlinear corrections in 1QIsa^a are a different scribe than the hand of 1QS. While it has long been held in the scholarly community that these interlinear corrections are the hand of 1QS, as demonstrated above Trever's claim of "almost identical" letterforms is not backed up by detailed analysis. Due to the detailed palaeographic analyses offered by Justnes and Popović, the burden of proof that these interlinear corrections are the scribe of 1QS now lies on the one who wishes to continue to make this claim.

¹⁵⁸ Popović, "Book Production and Circulation," forthcoming.

To conclude this discussion on the hand of 1QS. Palaeographically this scribe can be distinguished from other scribes of the Hasmonean period. This scribe copied 1QS, 1QSa, 1QSb, 4Q53, 4Q422, 4Q443 and 4Q457b. 4Q175 is questionable, although for now there is enough similarities to link 4Q175 with the scribe of 1QS (for example, *tet*, final *mem*, *lamed*, *ayin*). However, the palaeographic differences with the interlinear corrections seem too great to continue to repeat the notion that the scribe of 1QS made interlinear corrections in 1QIsa^a.

2.4.1.2 The Scribe of 1Q11, 4Q57, 4Q113 and 11Q14

In the history of scholarship on the Dead Sea Scrolls, the recognition of this scribe came at a date much later than the scribe of 1QS. Ulrich published his identification of the scribe in 2007, contending that the significance of this scribe is that his manuscripts are spread across three caves and arguing that this demonstrates homogeneity in the contents of the caves. ¹⁵⁹ In his article, Ulrich identified the scribe as penning 1Q11, 4Q57 and 11Q14. However, in a footnote from White Crawford we learn that Ulrich also thinks 4Q113 was copied by this scribe. In my palaeographic analysis below, I assess 4Q113 also. ¹⁶⁰

Ulrich's contribution in his 2007 article that pertains to the palaeographic process of writer identification is significant. He acknowledged, "The claim of identity between the hands is primarily intuitive," but then correctly adds that "since scripts can be quite similar without being identical, that intuition needs to be grounded by the support of detailed comparison." ¹⁶¹ Ulrich proceeded to offer descriptions of what he saw as significant characteristics of the graphs of this scribe across all three of his manuscripts. ¹⁶² A positive of these descriptions is that they are detailed. Unfortunately, Ulrich fails

¹⁵⁹ Ulrich, "Identification of a Scribe," 201.

¹⁶⁰ White Crawford, Scribes and Scrolls, 162.

¹⁶¹ Ulrich, "Identification of a Scribe," 205.

¹⁶² Ulrich, "Identification of a Scribe," 209–10.

to distinguish the hand in his palaeographic reasonings from other hands of the late Herodian formal, and thus his descriptions sound very like descriptions of the Herodian formal. Adding to Ulrich's work, I offer further palaeographic reflections on this scribe that distinguish him from the Herodian formal.

Morphology

In his discussion of this scribe, Ulrich did not date nor classify the hand in terms of any of the broader type and style classifications of the Jewish script. Yet, the formal, rectilinear, ornate and uniform strokes of this scribe's handwriting are features that align this handwriting with the late Herodian period. In this period, the formal Jewish script is characterised by regularity in line quality and letter size, and a strong adherence to the roof and baselines. Early Herodian is distinguished, as a general rule, from late Herodian due to the *keraiai*. In the late Herodian formal, the *keraiai* are employed as intentional, calligraphic features. Longacre classed the script that proliferates the *keraiai* in a consistent fashion as ornate. Stroke formation in the early Herodian formal employs simpler strokes, but the graphs of the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 are adorned with the *keraiai*, hence the categorising of his handwriting as late Herodian, and rectilinear ornate.

Execution

This hand is a calligraphic hand. Starting with Ulrich's observations of this scribe, he said, "The script is among the most careful, stately and elegant seen in the Qumran collection; the size of the script and physical characteristics (such as the distance between the lines) are the same." ¹⁶⁴ I agree with his observations of careful, stately, elegant and uniform, and from these draw additional conclusions about execution. When the palaeographer observes carefulness, this means the manuscript was not produced in haste. Uniformity suggests that the scribe was committed to the ideal forms of his script type. Furthermore, his handwriting

 $^{^{\}rm 163}$ Longacre, "Disambiguating," 115–17.

¹⁶⁴ Ulrich, "Identification," 204.

aims to go beyond legibility and into the realm of beauty. These aspects put together allow one to make the claim that this scribe was a highly skilled, professional scribe.

<u>Distinguishing the hand of 1Q11, 4Q57, 4Q113 and 11Q14 from other late</u> Herodian formal hands

Ulrich took fourteen graphs from the three manuscripts, offering palaeographic descriptions for each. For example, he described *he* by saying "the top horizontal is doubled, appearing split at the left end, and protrudes at the top and right side." *Lamed* he said has a "thickened top, slanting at an angle and a curled bottom stroke." *Qof* he said has a "protrusion of ink at top left and a slight curve of the downstroke." Of *shin* he said that, "often the middle strokes does not reach the "V" and the pointed bottom often curls left." The accumulation of details builds up a picture of a scribe's handwriting, but regardless these descriptions do not make clear what are the significant features of this scribe and how he is distinguished from his contemporaries. The descriptions describe many *hes*, *lameds*, *shins* and *qofs*.

Distinguishing a scribal hand from style is challenging; a challenge yet to be acknowledged in descriptions of scribes in the Qumran scrolls. It is particularly difficult when working with scribes of the rectilinear, formal and uniform script of the Herodian period. Yet, if Ulrich had been looking to build up distinguishing features of this scribe from his contemporaries, this could be done by comparing the script with 11Q5 and 11Q19, other Herodian formal manuscripts that can also be attributed to schooled professional scribes. Below I describe four distinguishing features of the scribe, which determine that indeed 1Q11, 4Q57, 4Q113 and 11Q14 were all written by him.

He – The hes of both Ulrich's scribe and the comparison scribes of 11Q5 and 11Q19 are double stroked. However, the roof of he of the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 is noticeably longer than that of 11Q5 or 11Q19, especially

¹⁶⁵ For these descriptions and others, see Ulrich "Identification," 209–210.

when in final position, although also in medial. Most scribes of this late period of the Jewish formal script contained what had previously been the long roof of *he*, moving it ever closer to the square shapes; whereas, the scribe of 1Q11, 4Q57, 14Q113 and 11Q14 maintains the length of the earlier periods.



Lamed – Regarding the *lamed*, a discerning palaeographer of the letterforms of Jewish scripts may notice that the *lamed* Ulrich describes with the "curled bottom stroke" echoes the terminology that Yardeni used to distinguish the *lamed* of her prolific scribe, with "a curled lower part." Therefore, a feature for the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 is that at times he employs in a rectilinear script a *lamed* whose body represents a *lamed* more suited to the curvilinear scripts. This *lamed* is not entirely unique in and of itself, but it is unique in the late Herodian rectilinear formal hands. The rectilinear and angled body of the *lamed* of 11Q5 is pictured; a similar *lamed* is also found in 11Q19 although the descender of the body is mostly longer. This scribe in 1Q11, 4Q57 and 11Q14 curves the lower part, although this is less obvious in 4Q113.

¹⁶⁶ Yardeni, "A Note," 289.













1Q11 1, 1 4Q57 6, 4. 11Q14 1ii: 10. 4Q113 4, 9 11Q5 I 6

Qof – The most distinguishing feature of the qof of this scribe is not as in Ulrich's descriptions, the descender, nor the *keraiai* in the top left corner that he called a protrusion of ink. All manuscripts of this script type have the *keraiai* in the left corner. It is the occasional closed *qof* that stands-out as different for this late period. ¹⁶⁷ If the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 was following the trend of developments in the late Herodian period, then the head of his *qof* would be much wider open. ¹⁶⁸ I acknowledge in the only example of the 1Q11 the *qof* is open, but the scribe can employ a slightly open, as well as a closed form of *qof*.











1Q113,2

4Q57 6, 2.

11Q14 1ii, 14

4Q1136, 2

11Q5 II, 9

Shin – Regarding the shin, the scribe of 1Q11, 4Q57, 4Q113 and 11Q14 has an unusual and varying middle stroke. Sometimes it does not touch the left stroke,

¹⁶⁷ See for example, 11Q14, Col. ii, line 7, 13.

¹⁶⁸ See for example the majority examples of *qof* in 11Q5 and 11Q19.

which also is seen in 11Q5, although not in 11Q19. However, the short, and almost vertical middle stroke of this scribe is distinctive. (The verticalness is causes because its trajectory is to the junction point of the left and right strokes). In other manuscripts of this script type the middle stroke meets the left higher up, and is oblique.











10113.2

4Q57 6, 5

11Q14 1ii, 6

4Q113 4 11

11Q5 I, 2

2.4.1.3 The Scribe of 1QpHab and 11Q20

Johannes van der Ploeg, as editor of 11Q20, was the first to notice a correspondence between 1QpHab and 11Q20, and the possibility of them being the same scribe. Initially, van der Ploeg simply noted a resemblance between the two manuscripts, referencing in particular the X-signs. Later he claimed that it is undeniable that the same scribe penned both, due to the identical handwriting, and again the X-signs. García Martínez, van der Woude and Tigchelaar concurred with the identification. They reflected palaeographically that the scribe's handwriting does not clearly distinguish between waw and yod, and that the strokes vary between short and long downstrokes and short, long, thin or thicker ticks. For further evidence, they added codicological connections of the two manuscripts, such as the minimal spaces between words and the position of the letters in regards to the upper and lower horizontal lines. 171

Oriental Society, ed. P.W. Pestman (Leiden: Brill, 1971), 43-45 at 45

des sciences des Pays-Bas," Acta Orientalia Neerlandica: Proceedings of the Congress of the Dutch

¹⁶⁹ J.P.M. van der Ploeg "L'édition des manuscrits de la Grotte XI de Qumrân par L'académie royale

¹⁷⁰ Van der Ploeg, "Une halakha inédite de Qumrân," 107.

¹⁷¹ Florentino García Martínez, Adam van der Woude, Eibert J.C. Tigchelaar, *Qumran Cave 11, Part II: 11Q2-18, 11Q20-31*, DJD 23 (Oxford: Clarendon Press, 1998), 364.

hope my descriptions below offer further understandings of the handwriting of the scribe.

Morphology

The script of 1QpHab and 11Q20 is an early Herodian formal. This scribe writes with simple, rectilinear lines; although not rigidly rectilinear. These manuscripts lack the adorned strokes of the later Herodian periods, although every now and then in 11Q20 it is possible to see the beginnings of the ornamentation that finds its footing in the later periods, such as the tips of the right arm of *aleph*.

Execution

There are aspects pertaining to execution in which the scribe varies between 1QpHab and 11Q20. For example, 11Q20 has wide and regular line spacing, whereas 1QpHab has tighter more irregular line spacing. In 1QpHab, the scribe's relationship to his ceiling line is inconsistent; even in just one word, his graphs will sit both on and under the line. In 11Q20, the scribe is more careful with placing the tips of the letters on the line, although sometimes just under the ceiling line also. This matters as adherence to ceiling lines elevates the beauty and elegance of the script. Additionally, as discussed previously, consistent reproduction of ideal forms elevates the beauty of a script. The graphs penned by this scribe are prone to vary, decreasing the elegance of these manuscripts.

It is perplexing that 11Q20 earned the title of *deluxe* scroll (1QpHab did not) by Emanuel Tov, among a list of the most beautiful Qumran scrolls: 1QM, 1Qlsa^b, 11QPs^a, 11QT^a and 11QT^b. His main criterion for this title was wide margins. To an extent, whether you consider 11Q20 a *deluxe* edition depends on the criteria you consider as *deluxe*. However, fine, elegant, consistent

 $^{^{172}}$ Tov, Scribal Practices, 126; Zahn reiterates that 11Q20 meets Tov's criteria for deluxe. Zahn, "Beyond Qumran," 200.

¹⁷³ Tov, *Scribal Practices*, 126–27.

¹⁷⁴ Tov's main criterion for *deluxe* scrolls are wide margins; alongside large writing block, fine calligraphy, proto-rabbinic text form of Scripture, and little scribal intervention. Tov, *Scribal Practices*, 126.

handwriting should likely be a stay for *deluxe* manuscripts, and this particular criteria 11Q20 does not meet.¹⁷⁵ All this said, this scribe has surpassed the common hand, and I would describe him as a trained and professional scribe.

<u>Distinguishing the Hand of 1QpHab and 11Q20 from other Early Herodian Formal</u> Hands

Three comparable manuscripts to 1QpHab and 11Q20 are 4Q84 (4QPs^b), 4Q260 (4QS^f) and 1QM. The execution of these four hands differ, but all of these manuscripts were penned by trained scribes with the simple, rectilinear strokes of the early Herodian formal.¹⁷⁶

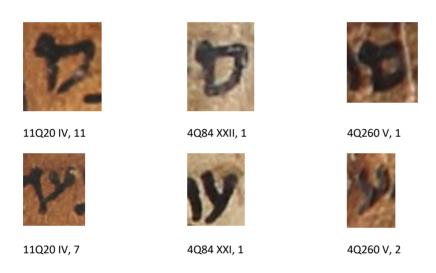
When making comparisons between these hands, I recall García Martínez, van der Woude and Tigchelaar's comments about the scribe of 1QpHab and 11Q20 not distinguishing clearly between waw and the yod. In 4Q84, 4Q260 and 1QM these two graphs are distinguished (although sometimes the scribe of 4Q84 pens longer waw like yods). Two further easily distinguishable graphs of the scribe of 1QpHab and 11Q20 are his consistently open samekh and

In a different study, Johnson details suggests that fine script is the main criterion. He prefaces that excepting the fine execution of a script, a *deluxe* manuscript may be like an everyday manuscript in other aspects. However, he also offers the following traits that also may distinguish a *deluxe* book-roll. "(1) a short height for the column, particularly if the text is verse written to a wide column or a prose text written to a narrow column; (2) an excessively large upper and lower margin of 6-7 cm or more; (3) a large script written in a tight format, that is, with no more vertical space between lines than one finds for a smaller script; (4) a roll of excessive length, which will be impressively large to the hand when rolled up (this last is more speculative). A strikingly sumptuous roll, far from being a tall roll with tall columns of amply spaced text as some imagine, was more likely to be a roll of middling height with a narrow band of text bordered by dramatic large bands of blank space at top and bottom, the script a large one, tightly written such that it better defines the written block against the white space that frames it." Johnson, *Bookrolls and Scribes in Oxyrhynchus*, 156.

 $^{^{175}}$ See also, Popović, Book Production and Circulation," for a critique of the category of *deluxe* as applied in Qumran studies.

¹⁷⁶ For a more detailed discussion on the hand of 4Q260, see Popović, "Book Production and Circulation," forthcoming. Here Popović describes the scribe for this manuscript as having attained more than a basic level of writing skills, but that he also shows flaws. Such a description is comparable to the scribe of 1QpHab and 11Q20.

small, reclining *ayin*. (These are pictured below from 11Q20 and in comparison with 4Q84 and 4Q260, but 1QM also employs a closed *samekh* and an *ayin* of similar size to the surrounding letters). The open *samekh* and small, reclining *ayin* are not unique to this scribe, but they were common in archaic and early-mid Hasmonean scripts, and were not common this late. The scribe of 1QpHab and 11Q20 can often be distinguished by his mixture of so-called early and later forms.



2.4.1.4 The Scribe of 4Q207 (4QEnf) and 4Q214ab (4QTLevief)

Milik briefly stated that 4Q207 was written by the same copyist as 4Q214ab. 4Q207 is a small fragment, containing only a portion of letters from the whole of the alphabet. For this analysis, I compared *aleph*, *dalet*, *he* and *yod* from 4Q207

¹⁷⁷ Józef T. Milik, *The Books of Enoch: Aramaic Fragments from Qumran Cave 4* (Oxford: 1974), 5. To be clear, there was a change in the numbering system of some of the Qumran Testament of Levi manuscripts between Milik's identification of this scribe and the publication of the 4QTLevi manuscripts. Michel Stone and Jonas Greenfield et al., *Qumran Cave 4.XVII: Parabiblical Texts, Part 3*, DJD 22 (Oxford: Clarendon, 1996). Where Milik referred to Levi^b, Stone and Greenfield referred to Levi^{ef}.

and 4Q214ab with 4Q30 and 1QIsa^a. Cross dated 4Q30 to 125–100BCE, which aligns with Milik's date for 4Q207 and 4Q214ab. Milik's identification is supported by several similar features that 4Q207 and 4Q214ab share with each other, which they do not share with other manuscripts of the type and style.

Aleph – The long curved left stroke of aleph is identical in 4Q207 and 4Q214ab. It intersects the middle stroke a touch above its centre, and descends consistently below the imaginary baseline. In 4Q30 the left stroke is shorter descending above or up to the baseline. In 1QIsa^a it descends precisely to the baseline.

Dalet – The deep, wide head on the *dalet* of 4Q207 and 4Q214ab is not unique. Nevertheless, there are parallels between 4Q207 and 4Q214ab regarding the heads' depth and width that 4Q30 or 1QIsa^a do not mirror.

Yod – The triangle shaped yods with two thin strokes mirror each other in 4Q207 and 4Q214ab. The intersection points between the two strokes differ in 4Q30 and 1QIsa^a.

The similarities between 4Q207 and 4Q214ab—and that these similarities distinguish the scribe from comparable manuscripts—lends one to conclude that these two manuscripts were penned by the same scribe.





2.4.1.5 The Scribe of 4Q6 (4QGenf) and 4Q7 (4QGeng)

James Davila commented briefly that the late Hasmonean formal hands of these two manuscripts are identical and probably by the same scribe. However, from an analysis of *aleph*, *he*, *lamed* and *ayin*, even when taking into account variability, I find significant differences between these two manuscripts.

Aleph – Firstly, the size differs greatly between these manuscripts. Secondly, the middle stroke of the *aleph*s differs between the two manuscripts. In 4Q6 it is a predominantly wavy stroke that curves slightly at both its top and bottom tips; whereas 4Q7, at best has a small curve at the bottom tip.

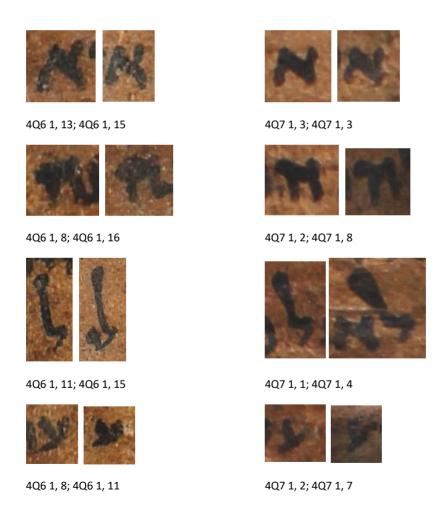
He – The roof of he in 4Q7 is longer than in 4Q6, and the angle of the roof differs between the two manuscripts meaning that the roof of 4Q7 sits higher. Furthermore, on the roof of 4Q7 the small additional stroke on the left-hand side is prominent.

¹⁷⁸ James R. Davila et al., *Qumran Cave 4.VIi: Genesis to Numbers*, DJD 12 (Oxford: Clarendon), 57.

Lamed – In 4Q6 the mast of the *lamed* extends straight up, or is slightly angled, and reaches high enough to almost touch the baseline of the previous line. In 4Q7 the mast is angled, and although long, does not reach up to the baseline above it.

Ayin – Ayin varies considerably in 4Q6 and less so in 4Q7. The ayin of 4Q7 is made up of two rectilinear strokes that do not match the more curved lines of 4Q6.

In conclusion, I am inclined to say two different scribes penned these scrolls.



2.4.1.6 The Scribe of 11Q12 (11QJub) and 11Q21 (11QTemplec) 179

Before addressing the handwriting of these two manuscripts, I discuss if the two fragments attributed to 11Q21 by the editors belong to the same manuscripts. I was struck by differences between fragments 1 and 3 of 11Q21. The spacing between the lines is far less in fragment 3 than in fragment 1. There is also evidence of different pen nib, as the shading is far more obvious in fragment 1. Finally, one notices that in fragment 1 the ink is consistently thinner. This problem does not occur in fragment 3. There are differences in the graphs between these two fragments, particularly *lamed*. The *lamed* in fragment 1 is short and with a curved body, whereas the *lamed* in fragment 3 has a long straight mast and a rectilinear body. This difference with the length of the *lamed* again attest to the fact that the spacing between the lines in fragment 1 is less than in fragment 3 (see, the following image).





11Q21 1 11Q21 3

One also notes that the text of fragment 1 of 11Q21 corresponds directly with that of 11Q19, whereas that of fragment 3 does not. Fragment 3 reads:

81

¹⁷⁹ García Martínez, van der Woude, Tigchelaar, DJD 23: 411.

לבוא אל עירי To come to my city

תרנגול לוא תגד[לו] A rooster you will not raise

וn all the Temple

The Temple

This four-line fragment with nine words contains the word המקדש twice. Understandably, with the word Temple occurring twice the editors thought to combine it with a Temple Scroll fragment. However, it does not overlap with the Temple Scroll. Given the differences in the line spacing, the change of pen, and that fragment 3 does not correlate with 11Q19, it is possible these fragments belong to a different manuscript. 180

What though of the handwriting? Even if they are from a different manuscript, are they the same scribe? Where does 11Q12 fit into the picture? What does a comparison of the letterforms of 11Q21 and 11Q12 with 11Q10 (Targum Job), which is also a late Herodian formal manuscript from Cave 11, contribute?

Aleph –The small, horizontal, calligraphic stroke penned at the bottom of the left stroke of the *aleph* is a mirror image between 11Q12 and fragment 3 of 11Q21. If one looks closely this same stroke can be seen on fragment 1 of 11Q21 also. On 11Q10, there is an extra stroke on the bottom left stroke, but it is not horizontal.

He – The roof of he between fragment 1 and fragment 3 of 11Q21 match each other. This thin roof with the thin keraia that sits atop the roof is rare. The same form is found in 11Q12, although the pen nib used on 11Q12 was thicker and so

¹⁸⁰ The identification of fragment 3 as belonging to 11Q21 was made by Elisha Qimron. Elisha Qimron, Florentino García Martínez, *The Temple Scroll: A Critical Edition with Extensive Reconstructions*, Judean Desert Studies (Beer Sheva: Ben-Gurion University of the Negev Press, 1996). In personal communication, Eibert Tigchelaar told me that García Martinez was reluctant to

accept the identification, but that when preparing the edition he followed it.

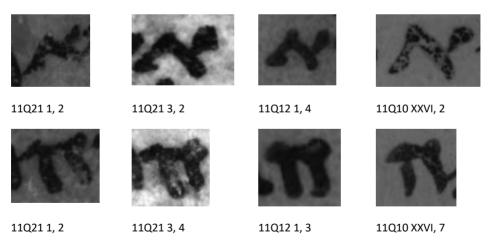
82

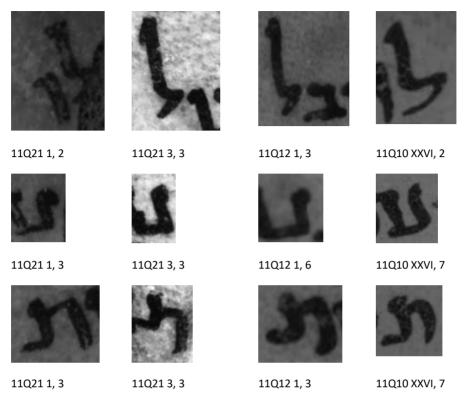
creates a somewhat different look. The *he* of 11Q10 employs the double-stroked roof of *he* that is more common for this period.

Lamed – The hook on the lamed of 11Q12 and fragment 3 of 11Q21 match. So too does the long, upright mast and rectilinear lines that make up the body of the lamed match on both these fragments. The lamed differs in 11Q21 fragment 1, but again, this may be due to the small space between the lines in this fragment. In 11Q10 the mast is short and the body of the lamed in 11Q10 is significantly larger than the body of lamed in 11Q12 and 11Q21.

Nun – The nun across all of these manuscripts has the keraia that appears on the nun of the late Herodian formal style. The shape and size of the keraia mirrors precisely between 11Q12 and fragment 3 of 11Q21.

Taw – This scribe is consistent with taw regarding the foot that sits high above the baseline; normally in a late Herodian formal script it runs along the baseline (see 11Q10). In 11Q21 fragment 1 and 3, the thin roof is consistent and a rare feature for taw. In fragment 3 the foot is also penned with the thin angle of the nib. In 11Q21 fragment 3 and 11Q12 there is an intentional curve at the bottom tip of the right vertical, that is not present in 11Q21 fragment 1.





In conclusion, the closest match between the letterforms is 11Q12 and 11Q21 fragment 3. This means that there is a common same scribe who penned two Cave 11 manuscripts—a copy of Jubilees and a copy of the Temple Scroll. Due to the discussed differences between fragment 1 and fragment 3 of 11Q21, I considered if two different scribes penned them. However, the uniqueness of the roof of *he*, and the shading that appears in both fragments on other letters such as *taw* (which is rare in the Jewish script of the Qumran scrolls), suggests that they were likely penned by the same scribe, even if not, as I have argued, from the same manuscript. ¹⁸¹

¹⁸¹ An aspect of scribal identification that I do not address in further detail in this book is its potential use for rethinking fragment placement within manuscripts. As Tigchelaar encourages us to ask, "why did editors bring together certain fragments and to what extent is each grouping definite, possible, plausible or even unlikely?" Eibert Tigchelaar, 'Constructing, Deconstructing and

2.4.1.7 The Scribe of 4Q390 (Jeremiah Apocryphon C^e), 4Q280 (4QCurses), 5Q11 (5QSerekh) and 5Q13 (5QRule)

Milik's suggestion regarding 4Q280 and 4Q390 being written by one scribe is indisputable. ¹⁸² 5Q11 is a tiny fragment, but despite having very few letters to go on, there are no obvious reasons to make the claim that 5Q11 is the same scribe as 5Q13. Regarding whether 5Q13 and 4Q390 were penned by the one scribe, this is tricky because the letters are smaller in 5Q13. However, my palaeographic analysis below, confirms 4Q390, 4Q280 and 5Q13 as the same scribe.

2.4.1.8 4Q390 (Jeremiah Apocryphon C^e), 4Q424 (Instruction-like composition B)

Sarah Tanzer suggested that 4Q424 was penned by the same scribe as 4Q390. (She did not comment on Milik's suggestion and whether she thinks 4Q280, 5Q11 and 5Q13 were penned by the scribe)¹⁸³ She argued that anything one could say about the graphs of 4Q390, they could say about 4Q424 also. I agree. Tanzer added that 4Q272 was in the same style, but I would argue that 4Q272 is also the same scribe. 4Q272 is quite damaged, meaning that on the level of general appearance, 4Q272 does not look as similar as 4Q280, 4Q390 and 4Q424, but then neither does 5Q13. In addition, 4Q272 does not as consistently employ the hook on the *lamed* (which causes a characteristic bulge), as in the other four manuscripts. However, 4Q272 shares many other characteristics with

Reconstructing Fragmentary Manuscripts: Illustrated by a Study of 4Q184 (4QWiles of the Wicked Woman)," in *Rediscovering the Dead Sea Scrolls: An Assessment of Old and New Approaches and Methods*, (Michigan: Eerdemans, 2010), 26–47, at 33.

Distinguishing palaeographic features of a scribal hand is one aspect of understanding, and questioning (if needed) the placement of fragments into manuscripts. For two articles, among others, of scholars using palaeographic analysis and the identification of scribal hands to 'reconstruct' the placement of fragments of manuscripts, cf., Daniel Stökl Ben Ezra, "Palaeographical Observations Regarding 1Q5—One or Several Scrolls?" in *Qumran Cave 1 Revisited*, eds. Daniel Falk, Sarianno Metso, Daniel Parry and Eibert Tigchelaar, STDJ 91 (Leiden: Brill, 2010), 259–57; Hanneke van der Schoor, "The Assessment of Variation: The Case of the Aramaic Levi Document," *DSD* 28 (2021): 179–206,

¹⁸² Jozef T. Milik, "Milkî-reša dans les anciens écrits juifs et chrétiens," *JJS* 23(1972): 95–144. ¹⁸³ Stephen J. Pfann, Sarah Tanzer et al, *Qumran Cave 4.XXVI: Poetic Texts and Miscellanea, Part 1*, DJD 36 (Oxford: Clarendon, 2000), 334.

the other four manuscripts. See below the images of *aleph*, *ayin* and the general shape of *lamed* (if not precisely the same hook).

In combining the observations of Milik, Tanzer and myself, I suggest this scribe penned 4Q272, 4Q280, 4Q390, 4Q424 and 5Q13.

Aleph – All three of aleph's strokes match in the five manuscripts. Cf., the short, curved left vertical stroke; the middle stroke that curves at the top; the high right arm with a gentle curve.

Ayin – The ayin of this scribe is comparatively small (in particular short, as sometimes it is wide) for this late script type. In each of the five manuscripts, the intersection of the right bottom arm with the vertical stroke of the proceeding letter is precisely the same across all five manuscripts.

Lamed – The hook off the mast of the *lamed* of this scribe creates an idiosyncratic bulge on the *lamed*. That this bulge is not so prominent in 4Q272 leads to questions whether this manuscript was copied by this scribe. However, if one looks closely there is often variability with this hook stroke (see also 4Q390), not only in 4Q272. The long, curved mast, and the wide rectilinear body is consistent across all five manuscripts.













4Q280 2, 1

4Q390 1, 4

4Q424 1, 2

4Q272 1ii, 1

5Q132,7

A final comment regards distinguishing this scribe from the style in which he is categorised. The curvilinear strokes that make up the graphs of this scribe echo the Herodian round semiformal style, although this scribe lacks the elegance of many of the manuscripts penned in this style, such as 4Q161 for example. Moreover, the famous curved lower part of the *lamed* of the Herodian round semiformal separates this scribe from counterpart manuscripts penned in the Herodian round semiformal.

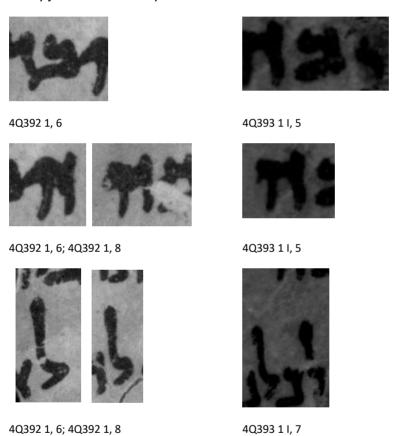
2.4.1.9 The Scribe of 4Q392 (4QWorks of God), 4Q388 (4QpsEzek^d), 4Q388a (4QapocrJer C^e), Hand A of 4Q393 (4QCommunal Confession)

In the DJD edition of 4Q392 when referring to the work of Strugnell, Daniel Falk suggests that the hand of 4Q392 is the same as 4Q388 (4QpsEzek^d), 4Q388a (4QapocrJer C^e), Hand A of 4Q393 (4QCommunal Confession). ¹⁸⁴ Regarding Hand A of 4Q393, Strugnell argued that 4Q392 and 4Q393 were originally the same scroll. He observed a similarity in the line spacing, letter size, handwriting, and material aspects such as joins and similar damage on the parchment. ¹⁸⁵ In terms of the palaeographic aspects of this argument, line spacing, letter size and handwriting, I do not see it. For example, in the images below of *lamed*, it is

¹⁸⁴ James Davila, Daniel Falk et al, *Qumran Cave 4: Poetical and Liturgical Texts, Part 2*, DJD 29 (Oxford: Clarendon, 1999), 23–24.

¹⁸⁵ Falk, DJD 29: 23.

possible to see the different line spacing between 4Q392 and 4Q393. Moreover, regarding the images below of *bet*, *he* and *lamed* the spacing between these graphs and the surrounding letters is different. Finally, the angles of the letters are different, see the base stroke of *bet* or the roof of *he* or the shoulder on the body of *lamed*. Therefore, I do not agree that these two manuscripts were initially joined or that they were the same scribe.



Regarding the other suggestion that 4Q392, 4Q388 and 388a were the one scribe, Falk lists particular features on the *aleph*, *kap*, *lamed*, *ayin* and *qop* to tie them together. 186

¹⁸⁶ Falk, *DJD XXIX*, 26.

Aleph – Falk describes the upright and angular inverted-v aleph, which is apt for 4Q388, and sometimes 4Q392, but the alephs of 4Q388a are not upright, nor are they always V-shaped. Lamed – The body of the lamed in 4Q388 has a vertical, slightly curved descender off the angled shoulder. The body of the lameds in 4Q388a and 4Q392 do not precisely overlap, however they both mix between curvilinear and straight descenders.

Qof – The qof in 4Q388 is not easy to see in the picture below, but it is possible to see that the head is narrow. The qofs of 4Q388a and 4Q392 are wide. Furthermore, the qofs of 4Q388a and 4Q392 show a similar kind of variability in that sometimes they have a straight descender and at other times it curves gently. That there is an overlap regarding how the qofs vary between the two manuscripts is a good indicator to suggest a common hand between them.

Ha'aretz – This word is found in both 4Q388 and 4Q388a. The he, aleph, resh and final tsade all differ between the two manuscripts.

In conclusion, there are similarities between 4Q392 and 4Q388a regarding the bandwidth of variation between letters such as *lamed* and *qof*, and to a degree *aleph*. This overlap with the bandwidth of variation suggests that these two manuscripts were penned by the same scribe. Regarding 4Q388, there reasons that suggest this manuscript was penned by a different scribe than 4Q392 and 4Q388a.







4Q388 6, 7; 4Q388 6, 8

4Q388a 7, 2; 4Q388a 7, 5

4Q392 1, 1; 4Q392 1, 6



2.4.1.10 Hand B of 4Q393 and the Scribe of 4Q368 (4QapocrPent)

In the DJD edition, Falk's identification of these two manuscripts being the same scribe originated from Strugnell grouping the two together. Falk reasonably describes several features these manuscripts have in common, for example, *het*, which across the two manuscripts appears as both the goal shaped and the N-shaped *het*; and final *kap*, which in both has a narrow-ticked head and an extremely long descender. Would add as a characteristic of this scribe the unusual habit of at times crossing over the intersecting strokes of *tsade* and

¹⁸⁷ Falk, DJD 29: 46-47.

¹⁸⁸ Falk, DJD 29: 47.

aleph pictured below, which while more prominent in 4Q368 is echoed in 4Q393. For a comparison manuscript, I chose 4Q51 which Cross offered as a specimen for the late Hasmonean early Herodian formal script. 189

Tsade – The tsade of 4Q368 and Hand B of 4Q393 has a slightly curved right stroke that crosses over the left vertical. This left vertical descends to the imaginary baseline and then a third, straight, horizontal stroke extends from the bottom of the vertical, running parallel to the baseline. In 4Q51 the left vertical stroke descends slightly to the right, and then bends sharply to the left as it descends to the baseline.

Aleph – The aleph of 4Q368 and 4Q393 have a short, right stroke that on occasions crosses over the middle stroke. The aleph stands upright. The left stoke intersects the diagonal at its top tip, and it is curved and short. The aleph of 4Q51 differs in every aspect. Its right stroke is predominantly higher, its middle stroke descends at a wider angle from the left stroke. The left stroke intersects below the tip of the middle stroke and descends to touch, or almost touch, the baseline.

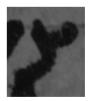
Lamed – The hook on the mast of the lamed of 4Q368 and 4Q393 is variable, in that sometimes the thin line is separate from the mast and other times it melds into it. The upright mast, and the thin body with a high curved shoulder is found in both 4Q368 and 4Q393. In 4Q51 the mast is more angled, the body wider and the shoulder more sharply angled.



4Q368 2, 4

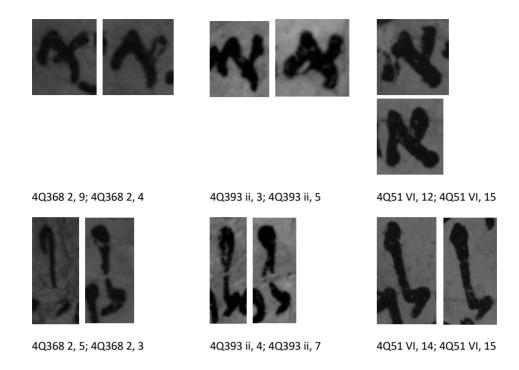


4Q393 1ii, 6



4Q51 VI, 14

¹⁸⁹ Cross, "The Development," 9.



2.4.1.11 The Scribe of 4Q542 and 4Q547

Émile Puech proposed this scribe,¹⁹⁰ and Daniel Machiela in a recent article supported Puech's identification, arguing further that not only were they the same scribe, but they belonged to the same manuscript.¹⁹¹ Here I compare 4Q542 and 4Q547 with 4Q109, asking if the two manuscripts of 4Q542 and 4Q547 are the same in ways that differ from 4Q109.¹⁹²

Aleph – The right strokes of aleph are straight and upright in 4Q542 and 4Q547, and more curved in 4Q109. For all three the intersection point of the right stroke with the middle is very low down the middle stroke. However, the intersection

¹⁹⁰ Puech, DJD 31: 376-77.

¹⁹¹ Daniel Machiela, "Is the Testament of *Qahat* Part of the Visions of Amram? Material and Literary Considerations of 4Q542 and 4Q547," *JSJ* 52 (2021): 27–58.

¹⁹² Cross used 4Q109 as his specimen for an Archaic or Early Hasmonean semiformal script.

point for the left and middle stroke is again low down in 4Q542 and 4Q547, but is higher up with 4Q109. The left stroke of the 4Q109 *aleph* is more common for manuscripts that border the Archaic / early Hasmonean period, whereas this stroke in 4Q542 and 4Q547 has a unique feel.

Dalet – The straight and angled lines of *dalet* in 4Q542 and 4Q547 are at rigidly strict right angles to each other. In 4Q109 one finds softer curves.

Lamed – Puech observed the hook on the *lamed* as distinguishing. Certainly, one does not see such hooks on 4Q109.

Qop – Puech's second observation of the similarities between these manuscripts was the qop, and what he called the rounding, looping top stroke and the distinctive leftward tick at the tip of the descender. This leftward tick is more prevalent in 4Q542 but one can see remnants of it in 4Q547. The qof of 4Q109 does not have this rounding, looping top stroke. Furthermore, the qof is open at both the top and bottom tips of the head in 4Q109. The qof of 4Q542 and 4Q547, which is only open at the bottom of the head is the more common type.

Samekh – Machiela saw the 'entire formation' of samekh as being striking in its similarity between 4Q542 and 4Q547. The formation of this stroke is similar across the two manuscripts. The large bulge on the right side of samekh is created by two overlapping strokes. The first of these overlapping strokes is the serif on the top stroke of the samekh, and the second stroke is a slightly curved vertical one, that descends but does not touch the right curved vertical stroke, creating an open samekh.











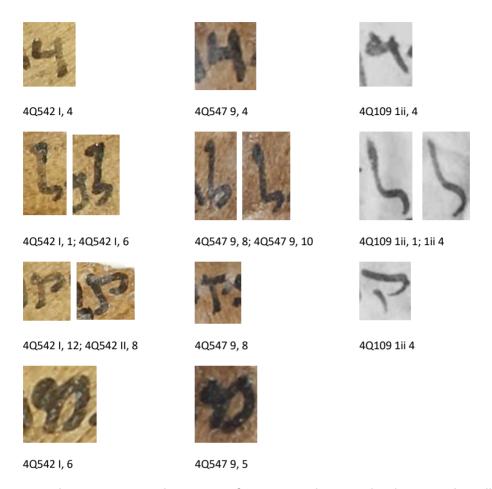


4Q542 I, 4; 4Q542 I, 9

4Q547 9, 5; 4Q547 9, 9

⁴Q109 1i, 1; 1ii 3

¹⁹³ Machiela, "Is the Testament of Qahat Part of the Visions of Amram," 29.



In conclusion, 4Q542 and 4Q547 are far more similar to each other regarding all features than with 4Q109. Therefore, there is no need to question whether these manuscripts were penned by the same scribe. However, one may note that the differences between 4Q542 and 4Q547 are more prevalent between the manuscripts than within them (see the roof of *dalet*, the hook of *lamed* or the tail of *qof*, for example), which brings into question whether the two manuscripts once belonged to the same manuscript.¹⁹⁴

¹⁹⁴ For another palaeographic discussion on 4Q542 and 4Q547 as either being the one hand or the one manuscript, see, Hanneke van der Schoor, "Qumran Scholarship Through the Lens of the

2.4.1.12 The Scribe of 1Q1. 1Q27 and 4Q26b

This scribe was proposed by Tigchelaar in an article exploring 4Q26b.¹⁹⁵
Tigchelaar observed that 4Q26b is the only fragment in the collection that uses both the square script and the palaeo-Hebrew for the Tetragrammaton.¹⁹⁶ He noticed further similarity between the hand of 4Q26b, 1Q27 and 1Q1, arguing that one scribe penned these three manuscripts. Similarities he observed are with *aleph*, *yod* and *lamed*. As a way to distinguish whether the similarities are related to hand or to script style, I compared these three manuscripts of 1Q1, 1Q27 and 4Q26b with the manuscript of 4Q171. These manuscripts are comparable as they are all early Herodian. While the lines of 4Q171 are curvilinear in most aspects, 1Q1, 1Q27 and 4Q26b use a mixture of curvilinear and rectilinear lines. 4Q171 uses the paleo-Hebrew for the Tetragrammaton, as does 1Q27 and 4Q26b.

Aleph – Tigchelaar described the left leg of aleph as an "idiosyncratic form," and "curved and sometimes hooked and not descending as much as the diagonal." This aleph is similar in some senses to the curvilinear alephs found in the Herodian round semiformal. However, as Tigchelaar points out the left leg is distinguishable, due to the curves and the shortness.

He – One observes the developed double stroked roof of he, with the short keraia on its left tip in 1Q1, 1Q27 and 4Q26b, but also in 4Q171. However, the thickness of this roof stroke is particularly prominent in 1Q1, 1Q27 and 4Q26b, but the length is not prominent, with 4Q171 clearly penning a longer roof of he. The curved tips at the bottom of he, characteristic of this script type as

Testament of Qahat (4Q542): An Assessment of the Models of Text and Community," PhD diss., Leuven University, 2022). In her dissertation she argued that only frags. 1–2 of 4Q547 were collected on the same manuscript as 4Q542. As the letters I segmented here are from fragment 9, this would align with my questioning that 4Q542 and 4Q547 were the same manuscript. As for fragments 1–2 only being the same manuscript as 4Q547 see, van der Schoor, Qumran Scholarship Through the Lens of the Testament of Qahat," 31–34, 173–178.

¹⁹⁵ Eibert Tigchelaar, "4Q26b (4QLeviticus^g) Frag. 2," *Textus* 29 (2020): 53–56.

 $^{^{196}}$ The parchment of 4Q26b is dark and the ink faded, making if a difficult fragment to read. 197 Tigchelaar, "4Q26b," 56.

demonstrated in 4Q171, is seen on the hes of 1Q1 and 4Q26b, although less so in 1Q27. There is no doubt though that the he of 1Q1, 1Q27 and 4Q26b mirror each other.

I amed – The characteristic feature of this scribe is the lamed with the horizontal stroke of the body drawn above the ceiling line. 198 This is rarely seen in other manuscripts; normally the body of the lamed begins at the ceiling line. This scribe draws the body to sit conspicuously above the line. Also, the sharply angled mast with the bulging hook exists in all three manuscripts. All these aspects differ from 4Q171, which has a wide curvilinear body.

Paleo-Hebrew – The paleo-Hebrew script is not well preserved in 1Q27 and 4Q26b, and only one letter is preserved on 1Q27. Yet, that 1Q27 and 4Q26b use the paleo-Hebrew, and that a similar basic form of the palaeo-lamed is seen in both peaked Tigchelaar's interest when considering whether these two manuscripts were penned by the same scribe. 199

















1Q1 3, 2; 1Q1 4, 3

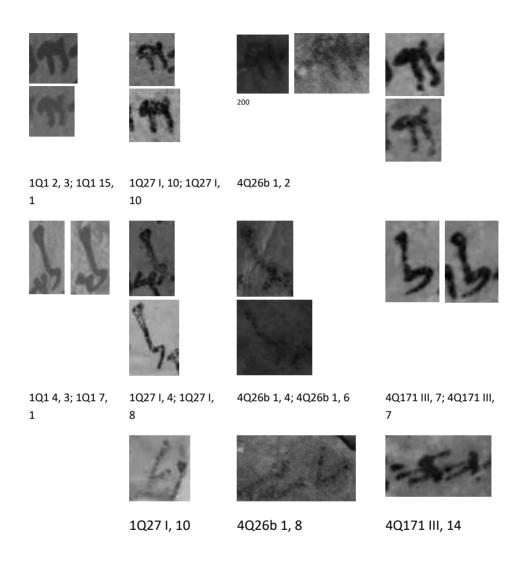
1Q27 I, 2; 1Q27 I,

4Q26b 1, 3; 4Q26b 1, 5

4Q171 III, 9; 4Q171 III,

¹⁹⁸ Tigchelaar, "4Q26b," 55.

¹⁹⁹ Tigchelaar, "4Q26b," 56.



This analysis concurs with Tigchelaar's findings that the three manuscripts belong to the one scribe.

²⁰⁰ Same as above. Same *he*, different lighting.

2.4.1.13 The Scribe of 4Q161 (4Qplsa^a), 4Q166 (4QpHos^a), 4Q171 (4QPs^a)

These three manuscripts are on the list compiled by Yardeni as the one scribe. Strugnell and Allegro put them together as the one scribe well before Yardeni compiled her list. ²⁰¹ Strugnell and Allegro offered little analysis. I will discuss in details these three manuscripts as belonging to the one scribe in the following chapter. Just to say now, the early identification that the one scribe penned these three significant *pesharim* stands as correct after thorough analysis.

2.4.1.14 The Scribe of 4Q397 (4QMMT^d), 4Q475 (4QRenewed Earth) and 11Q18 (11QNJ)

From Yardeni's list Tigchelaar suggested that the same scribe penned these three manuscripts.²⁰² Our digital palaeographic study on the manuscripts Yardeni identified as the one scribe suggested that 4Q397 and 11Q18 are the same scribe, and also that the same scribe as the above 4Q161, 4Q166, 4Q171. It is not impossible that the same scribe also penned 4Q475, but in this case, I think the similarities are due to similarities in style. This manuscript is similar, but also the scribe of 4Q475 appears to be amplifying the curvilinear aspects of the Herodian round semiformal, in a way that the other manuscripts do not.²⁰³

2.4.1.15 The Scribe of 4Q259 (4QSe), 4Q319 (4QOtot)

Tov included this scribe on his list. It is correct that the same scribe penned these fragments. However, the editors convincingly argue that in all likelihood they belonged to the same manuscript.²⁰⁴ This means that this is not a scribe who penned more than one manuscript.

²⁰¹ Allegro, DJD 5: 50; John Strugnell, "Notes en Marge du Volume V des 'Discoveries in the Judaean Desert," *RevQ* 7 (1970): 163–276 at 218.

 $^{^{202}}$ Tigchelaar, "Scribal Practice as Attested in the Dead Sea Scroll Manuscripts," 1–7.

²⁰³ My decision is influenced by the tests we conducted using digital tools, which are laid out in full in Chapter 3.

²⁰⁴ Milik first said these two separate manuscripts belonged to the one scribe. The editors differ. They say this is not one scribe writing two manuscripts, but that at one point they both belonged to one scroll. Alexander and Vermes, DJD 26: 133–34. Ben-Dov, DJD 21: 195–97.

2.4.1.16 Two Accidently Named Scribes

- Tov listed 4Q166, 4Q167 (4QpHos^b) and 4Q168 (4QpMic),²⁰⁵ as identified by Strugnell to be from one scribe. However, this is incorrect. Strugnell suggested the possibility that the two *pesher* Hosea manuscripts belonged to the same scroll— with perhaps also 4Q168—but that were penned by two different scribes.²⁰⁶
- Tov listed 1QH^a and 4Q266 (4QDamascus^a) identified by Annette Steudel as being penned by the same scribe. However, Steudel said that these two manuscripts both had two scribes involved in their penning. Not that they were both penned by the same scribe.²⁰⁷

2.5 A New List of Dead Sea Scribes

The analyses above confirm eleven previously identified scribes. Confusingly, there are also eleven scribes on Tov's list of identified scribes. However, the list below—while sharing points in common with Tov's—is a new and different list of scribes. Only three of the scribes (the scribe of 1QpHab and 11Q20; the scribe of 4Q207 and 4Q214; the scribe of 11Q12 and 11Q21) are found on Tov's list precisely as they are also listed here.

There are five reasons that cause this list to differ much from Tov's. First, three of the suggestions on Tov's list were not in actuality scribes who penned more than one manuscript. Second, I assessed seventeen scribes, so six I

²⁰⁵ Tov, Scribal Practices, 24.

²⁰⁶ Strugnell, "Notes en marge du Volume V," 11. His precise comment was, "Les deux manuscrits sont de l'école Rustic semiformal hérodienne developpée, mais écrit par deux scribes d'idiosyncrasies distinctes. Bien que l'une des mains (No 167) soit légèrement plus ancienne du point vue typologique on ne peut pas exclure que l'un des scribes a pris la relève de l'autre, et que les Nos 166 et 167, dont la repartition paléographique est très facile, ne formassent originellement qu'un seul rouleau (peut-être avec le 168 aussi voir ci-dessous)."

²⁰⁷ Annette Steudel, "Assembling and Reconstructing Manuscripts," in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment, Vol. 1*, eds. Peter W. Flint and James C. Vanderkam (Leiden: Brill, 1998), 516–34 at 519.

²⁰⁸ Tov, Scribal Practices, 23–24.

assessed were not on Tov's list in the first place. Third, for two of the suggestions of scribes I have added manuscripts to them (see the scribe of 1QS, and the scribe of 4Q272 et al). Fourth, for the scribe of 4Q392, I removed two of the manuscripts that Strugnell and Falk said he penned. Fifth, Davila's suggestion of a scribe I removed altogether.

This list is also distinguished methodologically. These scribes are substantiated through palaeographic analyses, which drew out the distinguishing characteristics of each scribe by comparing each one with manuscripts of a similar type and style.

- The scribe of 1QS, 1QSa, 1QSb, 4Q175, 4Q53, 4Q443, 4Q457b and 4Q422.
- The scribe of 1Q11, 4Q57, 4Q113 and 11Q14
- The scribe of 1QpHab and 11Q20
- The scribe of 4Q207 and 4Q214
- The scribe of 4Q272, 4Q280, 4Q390, 4Q424 and 5Q13
- The scribe of 11Q12 and 11Q21.
- The scribe of 4Q392 and 4Q388a
- Scribe B of 4Q393 and 4Q368
- The scribe of 4Q542 and 4Q547
- The scribe of 1Q1, 1Q27 and 4Q26b.
- The scribe of 4Q161, 4Q166, 4Q171, 4Q397, 11Q18 + 4Q215, 4Q439 and 4Q474.²⁰⁹

100

²⁰⁹ Cf., Chapter 3 for all of the details pertaining to the identification of this particular scribe.

2.6 Conclusions

Turner wrote, "we should very much like to look over our scribe's shoulder, see him at work, and ask him questions about his craft." An evocative musing that if were possible, would change the nature of palaeographic pursuits. As it is, we cannot look over the shoulder of the scribes we are interested in, leaving palaeographic analysis to operate as an entry point to them.

The theme of this chapter was palaeographic analysis, and how one may employ the tools of the craft of palaeography to recognise scribes. While the chapter addressed important aspects of the palaeographic discipline as it applies to the DSS, such as dating, style classification and palaeographic nomenclature, there were two more significant, overarching and intertwined aims. To demonstrate and establish an innovative approach for scribal identification that engages traditional palaeography, and to assess and explicate palaeographic reasoning as it applies to the identified scribes from the Qumran collection. The outcome of meeting these aims was the creation of a much needed and up-to-date list of Dead Sea scribes.

While exploring what it might mean to deepen our palaeographic reasoning a question came to the fore. If acknowledging that individual scribes show variability, but also that scribes emulate each other's handwriting style, what is needed to know and show the identity of a scribe? As Yardeni observed, "The more a handwriting resembles a certain script-style and is executed by a skilled hand, the less personal features it displays." To overcome such challenges, I suggested and demonstrated in this chapter that what is needed is to distinguish the handwriting of individual scribes from their type and style. If one simply describes the similarities between two manuscripts that they think were penned by one scribe, this list of similarities does not distinguish the scribe from his contemporaries. Consequently, the descriptions sound like those of a script type and/or style, and it is difficult for the reader to understand what

²¹⁰ Turner, *Greek Manuscripts*, 7.

²¹¹ Yardeni, The Book, 133.

differentiates the scribe. When using traditional palaeography to answer the question of how to know and show the identity of scribes, palaeographers need to be able to handle his variability, recognise the scribe's significant features, and explicate palaeographically the subtle differences of the scribe from the broader handwriting type and style that he belongs.

When conducting these palaeographic studies, another question arose that I find tricky and complex to answer. How does one persuade others of a common hand? Sirat raised the notion that persuasion of others is linked to creating in them a *feeling* that it is the same scribe. Peter Stokes expressed concern at such sentiment; he questioned if giving someone a *feeling* is academic? In my opinion, both Sirat and Stokes have a point. To argue that persuasion is based on giving a feeling, rings of the unscientific. Yet, I appreciate the honesty inherent in naming that feelings are influential in the palaeographic process as much as any other process. Sirat's point is that palaeographers do not stand on certain ground. Nevertheless, Stokes' concerns raise the point that palaeography can be too subjective. My hope is that by attentively and scrupulously following an approach that enabled me to distinguish scribes from others writing in the same type and style, my palaeographic assessments have taken steps towards objectivity or at least intersubjectivity.

Another way to explore what it might mean to know and show the identity of a scribe is through applying Artificial Intelligence techniques. While this chapter has acknowledged the beautiful and artistic elements inherent in the palaeographic discipline, the following chapter, in its dive into digital palaeography goes deeper into the scientific. The proceeding chapter continues the discussion on scribal identification, but moves from the realm of traditional palaeography into the realm of digital palaeography.

²¹² Sirat, Writing as Handwork, 493.

²¹³ Peter Stokes, "Computer-Aided Palaeography," in *Codicology and Palaeography in the Digital Age*, eds. Malte Rehbein, Patrick Sahle, Torsten SchaBan (Norderstedt: Books on Demand, 2009), 309–338 at 311.

3. Chapter Three:

Identifying Dead Sea Scribes: A Digital Palaeographic Approach

3.1 Introduction

Chapter Two operated on three overlapping levels. On one level, it explored a number of the concepts that sit behind traditional palaeography. On a second level, it explored an approach for scribal identification using traditional palaeographic methods. On a third level, it offered an assessment of seventeen of the previously identified scribes who penned more than one of the Qumran manuscripts. This chapter, Chapter 3, operates in ways that mirror the previous chapter. On one level, it explores the concepts, questions and concerns that sit behind digital palaeography. On a second level, it explores a method for scribal identification using digital palaeographic methods. On a third level, it offers an assessment of an eighteenth scribe; the scribe identified by Yardeni whom she suggested penned fifty-four to ninety of the Qumran manuscripts.²¹⁴

The scribe identified by Yardeni, and the fifty-four to ninety of the manuscripts she said that he copied, offered those of us working on the interdisciplinary project at the University of Groningen a workable size data set to which to apply digital tools for hand writer recognition. Moreover, of this data set—and through applying a digital palaeographic process to it—we could ask a number of broader questions relevant to the discussion on hand-writer recognition. How much variability is possible in the handwriting of one scribe? How do we distinguish between similarities that are suggestive of a common

²¹⁴ The reason that the number of scrolls assigned to this scribe is *between* fifty-four to ninety is that Yardeni created two lists. 1) "Lists of scrolls/fragments, apparently copied by this scribe," which contained fifty-four manuscripts. 2) "Lists of scrolls/fragments, perhaps also copied by this scribe," which contained thirty-six scrolls. Yardeni, "A Note," 281–92.

²¹⁵ Cf., n. 3 and n. 16 for details of the interdisciplinary project.

scribe and those that are suggestive of a type and style? What modes of thinking can be tested by employing a digital component to hand-writer recognition? How do digital tools support the work of palaeographers?

The first part of this chapter opens with a discussion on what one might mean when they talk about digital palaeography, and what are some of the questions that one can apply to digital processes. This is followed by an introduction of the scribe identified by Yardeni, to whose manuscripts we applied digital tools. The second part of the chapter outlines a digital palaeographic method we designed at the University of Groningen for hand writer recognition. We designed this method to see if a digital palaeographic process would reach similar conclusions as Yardeni about whether one scribe penned such a large selection of the Qumran manuscripts. The results are presented in the conclusion.

3.2 Digital Palaeography

Compared to the discipline of palaeography that dates back to at least the 16th century, ²¹⁶ digital palaeography is a relatively new interdisciplinary field. ²¹⁷ I would like to frame digital palaeography in two ways. First, as a method or process and second as a conversation. The processes and methods of digital

.

²¹⁶ Sigismondo Fanti, *Theorica et Practica de modo scribendi fabricandique omnes litterarum species* (1514). Collete Sirat lists Jean Mabillon's work *De re diplomatica* (1681) as pioneering for the discipline of palaeography. Bernard de Monfauco published *Palaeographia Graeca* in 1708. Sirat suggests this book anglicised the term palaeography. Sirat, *Writing as Handwork*, 511–513. ²¹⁷ The first use of the term digital palaeography is traced to Ariana Cuila. See, Ariana Cuila, "Digital Palaeography: Using the Digital Representation of Medieval Script to Support Palaeographic Analysis," *DM* 1 DOI: http://doi.org/10.16995/dm.4 (2005).

Additionally, Dominique Stutzmann and Ségolene Tarte observed that the digital palaeographic research community emerged in the early 2000s. However, computer scientists and palaeographers were exploring the methods associated with digital palaeography before the term was coined or the research community found its foothold in manuscript studies. Possibly though, the early 2000's offers a discretionary point in time for envisioning the expanding of the discipline into a community. See, Tal Hassner, Robert Sablatnig, Dominique Stutzmann and Ségolene Tarte Digital Palaeography: New machines and old texts, DROPS 4 (2014).

palaeography range on a spectrum from simply a representational focus to heavy computational manipulations. For example, tasks, processes and tools include, but are not limited to, minute examinations of manuscripts under the lens of computational tools; segmenting letters from the manuscript context; labelling data and classifying handwriting in a database; showing frequencies of letters; enhancing damaged documents; optical text recognition; computer-assisted transcription; binarisation; feature extraction algorithms; classification tools that match a given document to a large set of paleographic samples; and handwriting matching tools for joining fragments by the same scribe.

Happening over all of these different processes and methods is a conversation. This conversation exists between palaeographers, manuscript specialists, GLAM specialists (galleries, libraries, archives and museums) and computer scientists. One may also say that the AI systems are part of this conversation, although on a different level. Humanities scholars can bring their questions to computer scientists and ask how an AI system would go about exploring and answering the questions. To be clear though, the reason for creating digital palaeographic methods is not to reinstate human observation with the digital lens, nor can artificial types of intelligence succeed traditional palaeographic skills of appraisal and evaluation. Rather, digital palaeography enables palaeographers "to explore a different, complementary methodology."²¹⁸

A common question we have been asked and moreover asked ourselves is whether we should trust the results from computers. This is not a new question; palaeographers have always been challenged as to whether their observations can be trusted. One way to approach the question of trust is through an examination of the pathways through which either the computational intelligence or the palaeographer came to their results. For computational intelligence, this means addressing the black-box problem—

²¹⁸ Arianna Ciula, "Digital Palaeography: Using the Digital Representation of Medieval Script to Support Palaeographic Analysis," *DM* 1 (2005) DOI:10.16995/dm.4

summed up by input goes in and output comes out, but without clarity on how the network is making decisions—through employing networks and algorithms in which users can know the pathways that lead to the production of the evidence. However, the issue of trust goes deeper than simply whether one can understand, or not, the networks and the algorithms. The barrier is that mostly there is not the information needed to prove any of the generated results.

Stokes comments on the question of trust and digital tools in relation to hand-writer identification. He says: "Rather than having the computer announce that Hand A and Hand B are by the same scribe, it seems much more useful to state that Hand A and Hand B both have an average inclination of X° and an average proportion of width to height of Y, and ascenders of relative length Z, and so on. This sort of meaningful information is perhaps more likely to be trusted than vast quantities of meaningless data or electronic pronouncements of scribal identity."²¹⁹ To an extent, my thinking aligns with Stokes. Certainly, if one proceeds with "the computer told me it was the same scribe," they are likely not going to convince their colleagues. Moreover, the information gathered from engaging digital tools, which can be interpreted and given meaning is important.

Where my thinking diverges from the comment above from Stokes is that I wonder what it means to use digital palaeography as a method of analysis and reflection on traditional palaeographic models. This framing comes from Ciula who says, "The digital models are used to analyse the objects they are models of, but are also self-reflective tools to question those same models." If one follows Stokes' idea that we use computers to tell us more precisely and quickly the average inclination of X° and an average proportion of width to height of Y, then digital palaeography simply becomes a more efficient way of doing traditional palaeography. However, if digital palaeography is just a more

-

²¹⁹ Peter Stokes, "Computer-Aided Palaeography," in *Codicology and Palaeography in the Digital Age*, eds. Malte Rehbein, Patrick Sahle, Torsten SchaBan (Norderstedt: Books on Demand, 2009), 309–338 at 323.

²²⁰ Arianna Ciula, "Digital Palaeography: What is the Digital about?" *Digital Scholarship in the Humanities*, ADHO 32 (2017), ii89–ii105 at ii95.

efficient way of doing traditional palaeography the potential for the analysis and reflection that Ciula spoke about diminishes.²²¹ While Ciula did not necessarily offer concrete examples for this self-reflection, I imagine the reflective process includes a critical examination of the palaeographic models that decide what is a unit of handwriting, and what is a significant unit of handwriting. If one is careful not to over-zealously train the computer with information that has already set the criteria for what are significant measurements for writer identification, then the potential for the analysis and reflection process is deepened.

Framing digital palaeography in this way raises potentially more interesting questions than framing it around to trust or not to trust. One can instead ask: which, and how do, particular models influence our thinking? What models are being tested in the process of applying digital tools? What reflections on the traditional palaeographic process are possible from including a digital component? Digital palaeography offers new pathways of analysis, and tools for reflecting on what are sometimes entrenched modes of working. In the conclusion of this chapter, I will reflect on how the process of applying a digital palaeographic method challenged two previously suggested ways of doing scribal identification.

3.3 The Scribe Identified by Ada Yardeni

The seeds for the identification of the scribe by Yardeni came from her work on 4Q397.²²² She made the palaeographic chart for this manuscript, for volume 10 of the Discoveries in the Judaean Desert series.²²³ After completion of this work, Yardeni noticed other manuscripts written in a similar style with a *lamed* akin to the one found in 4Q397.²²⁴ She deduced that this particular *lamed*, with a

²²¹ Ciula, "Digital Palaeography: What is the Digital about?" ii93–95. ²²² 4Q397 is one of the copies of the *Miqṣat Maʿaśe Ha-Torah* (MMT).

²²³ Elisha Qimron and John Strugnell with contributions from Ada Yardeni, *Qumran Cave 4: V: Miqṣat Maʿaśe Ha-Torah*, DJD 10 (Oxford: Clarendon, 1994), 22–25.

²²⁴ Our results did not confirm a scribe whose proliferation of manuscripts was within the range of five to ten percent of the collection. However, our results corroborate Yardeni's initial judgement

"curved and pressed lower part" was unique to this scribe.²²⁵ An idiograph of the scribe, if you will.²²⁶ When introducing this prolific scribe of fifty-four to ninety manuscripts, she published in a short article a palaeographic chart alike to that which was made for only 4Q397.²²⁷

The article contained two lists for arranging the manuscripts copied by this scribe. The first list she entitled "apparently copied by the scribe;" it contains fifty-four manuscripts. ²²⁸ The second list she entitled "perhaps also penned by the scribe;" it contains thirty-six manuscripts. ²²⁹ This takes the total number of manuscripts suggested to be penned by this scribe to somewhere between fifty-four to ninety. If correct, this scribe is by a very wide margin the most prolific to be identified from the collection. The problem is that on the level of both general appearance and graphic components, there are extensive differences recognisable in the handwriting across the manuscripts.

Given the variation between these fifty-four to ninety manuscripts, one would have expected Yardeni's palaeographic chart for the scribe, and her analyses of the letter forms to have changed considerably from her earlier work on 4Q397, but it did not. Instead Yardeni argued that extensive palaeographic analyses were unnecessary as the *lamed* was idiosyncratic enough to identify this scribe and that the many other differences can be explained as due to implements, changes, in conditions over time, degree of carefulness and haste of writing.²³⁰ While this may be possible, it would have been interesting to hear

that the scribe of 4Q397 penned other manuscripts in the Qumran collection (see below for more details).

²²⁵ Yardeni, "A Note," 281.

²²⁶ Davis, "The Practice of Handwriting Identification," 255. An idiograph is a deviation of a grapheme unique to an individual.

²²⁷ Tigchelaar pointed out the similarities between the two charts. Eibert Tigchelaar, "Scribal Practices as Attested in the Dead Sea Scrolls Manuscripts Written in a So-Called Rustic Semi-Formal Tradition," paper presented at the 2013 International Society of Biblical Literature meeting in St. Andrews (revised version, 2018), 1–7 at 4. http://doi.org/10.5281/zenodo.1925681

²²⁸ Yardeni, "A Note," 283.

²²⁹ Yardeni, "A Note," 284.

²³⁰ Yardeni, "A Note," 281.

from her precisely how these differences manifest in this scribe's handwriting. As it stands, neither the charts nor the palaeographic descriptions account for the range of variation of the graphs across all of the fifty-four to ninety manuscripts. Nor did the article address the possibility that this particular *lamed* was an ideal form, ²³¹ employed by scribes penning manuscripts in the same script type and style. Therefore, one of the themes explored in this chapter is how much variability is probable in the handwriting of this scribe, and the role that script types and styles play in perpetuating similarities in the handwriting of different scribes.

In terms of scholarly reception, Yardeni published her article in 2007, the same year as Ulrich published his article on the scribe of 1Q11, 4Q57 and 11Q14. ²³² Given the sheer size of manuscripts that Yardeni assigned to her scribe, her scribe has garnered more attention than the scribe from Ulrich. Although, not as much attention as one may expect. White Crawford published an article about how this scribe connects the site of Qumran and Masada, but with no mention of, or reflection on, the large differences in the handwriting of the manuscripts assigned to this prolific scribe. ²³³ As discussed in the Introduction of this book, White Crawford and Dimant used the identification of this scribe by Yardeni, as well as the scribe by Ulrich, as support evidence for ideas that the caves represent a homogeneous library. ²³⁴ In terms of challenges to the identification, Tigchelaar noted the scribe was put forth on the grounds of expertise, with little explication of palaeographic reasoning. For example, Yardeni did not adequately explain the variation between the manuscripts and

²³¹ Ideal forms are those that scribes were taught to produce and then consequently aimed to reproduce. See for example, Cribiore, *Writing, Teachers and Students*, 97. Here, she discusses at length the relationship between teacher and student and how students were taught to imitate the letters of their teacher. See also, Longacre, "Disambiguating," 2019, 104–05. He discusses the relationship between ideal forms and aspects of handwriting style.

²³² Ulrich, "Identification of a Scribe," 201–210. See also Chapter 2 of this book, where this scribe and his identification is discussed in detail.

²³³ Sidnie White Crawford, "Scribe Links Qumran and Masada," *Biblical Archaeology Society* (2014): 15–20.

²³⁴ Dimant, "Qumran Manuscripts," 35. White Crawford, *Scribes and Scrolls*, 162.

why the *lamed*, which she argued was so indicative of this scribe, was not subject across the manuscripts to the type of variation seen in all the other graphemes.²³⁵

Apart from Tigchelaar, scholars have asked no further questions about this scribe. Given that the number of manuscripts assigned to him corresponds with five to ten percent of the Qumran collection, this is surprising. One would expect that the anomaly of such a scribe would raise more questions. Therefore, these questions have been picked up in the ERC-project, 'The Hands that Wrote the Bible.' However, before we dive into broader research questions about the implications of scribe who penned five to ten percent of the collection there are groundwork questions to be answered. Did one scribe copy all these manuscripts or is the *lamed*, and the curvilinear strokes, reminiscent of a particular type and style?

The type and style of the manuscripts identified by Yardeni as belonging to one scribe fall into the scholarly category of the so-called Herodian round semiformal script.²³⁶ Pertaining to the style of the scribe, Yardeni says that "his script seems to fit" Cross' round semiformal style.²³⁷ In this comment, she does not say directly that she disagrees with the category of the round semiformal style but, as discussed in Chapter 2, how Yardeni perceives style categorisation is different to Cross. While acknowledging that the handwriting fits Cross' category, in her own work she does not recognise the round semiformal as an independent script style.²³⁸ Furthermore, her palaeographic reasoning seems to be that the Herodian round semiformal is idiosyncratic of a specific scribe, not a style. To explain, Tigchelaar's research suggests that there are in total 107 manuscripts

_

²³⁵ Tigchelaar, "Scribal Practices," 4.

²³⁶ Cross, "The Development," 32–37.

²³⁷ Yardeni, "A Note," 282.

²³⁸ In *The Book of Hebrew Scripts* in the section entitled "Script Styles and Script Charts," 163–91, Yardeni discusses the script styles from the Early Jewish or Pre-Jewish to the Post-Herodian and then beyond. While discussing examples of the book-hand and the cursive scripts across the Hasmonean and the Herodian period she does not mention semiformal scripts. See also, Tigchelaar, "Seventy Years," 258–78.

categorised as round semiformal;²³⁹ Yardeni lists up to 90 of them being the one scribe.

The Herodian round semiformal is characterised by curvilinear, wavy strokes. Typologically, the graphic features are associated with the late first century BCE. ²⁴⁰ At its best, the Herodian round semiformal is an elegant and beautiful script; however, there are manuscripts which are characterised by curvilinear, wavy strokes and developed graphic components and yet lack the beauty and elegance associated with consistency and uniformity. There are substandard versions of this script. Yardeni recognised this, but it did not dissuade her from identifying these manuscripts as belonging to one writer. Rather, she suggested that the prolific scribe penned some of his manuscripts elegantly, and some with far less care and consideration. ²⁴¹

Yardeni's decision to identify manuscripts that exhibit such differing degrees of quality and standardisation as belonging to one scribe raises the problem of how exactly to distinguish a scribe. This issue pertains to two ambiguous palaeographic matters. It is not clear how much variability is possible within the handwriting of one scribe, or how much similarity is possible between scribes, both whose hands were embedded in a particular script style. Furthermore, how does one distinguish between the amount of variability possible within the handwriting of one scribe, as compared with the similarity possible between scribes writing in the same type and style? For example, there are obvious graphical differences between the manuscripts Yardeni said were copied by one scribe. Can they be explained away by such general explanations of implements, time, elegance and carefulness? Or rather, are the similarities pertaining to the lamed and the curvilinear lines explainable by way of scribal education, and the imitating and copying of particular writing styles? These were the questions that we applied to a digital palaeographic method.

²³⁹ Tigchelaar, "Scribal Practices as Attested in the Dead Sea Scrolls," 2.

²⁴⁰ Cf. section 3.6.1 "Palaeographic Charts," for further details.

²⁴¹ Yardeni, "A Note," 282.

3.4 Method

3.4.1 Preprocessing / Binarisation

The DSS pose numerous challenges for artificial neural networks. They are fragmentary, the materials and inks are degraded, and to the digital photos have been added colour calibrators, labels, and scale bars. Computational methods need to compensate for such noise in digital images. The most typical and effective method for dealing with noise is image-binarisation technique. 242 Binarisation separates the foreground from the background, or the text regions from the non-text regions. Pixels where there once was ink are assigned a value of 1, and all other pixels are assigned a value of 0, hence binary. The human brain seems to naturally do this, but it was indeed learnt. The computer must also learn to do this. Through a process of deep learning, 243 the neural network learns to identify what is text and what is background.

In document analysis, there are methods for working with grayscale or colour images. Nonetheless, binarisation remains a powerful tool for document analysis. When images are not binarised, the network can make spurious correlations based on extraneous information, such as the texture of background material, the splinter lines, rice paper, number tags, scale bars or colour calibrators. There are researchers who want this information, but for our aims of writer identification it would be risky not to binarise. We wanted to be sure we were getting particular outcomes (scribal identification) based on the right information (handwriting). Consequently, for our project, a neural network for binarisation was designed.²⁴⁴

²⁴² M. Almeida, R.D. Lins, R. Bernardino, D. Jesus, and B. Lima 2018. "A new Binarization Algorithm for Historical Documents," *Journal of Imaging*, 4/2 (2018), 27, doi: 10.3390/jimaging4020027.

²⁴³ Algorithms involved in deep learning progressively extract higher-level information from a multi-layered system.

²⁴⁴ Maruf A. Dhali, Jan Willem de Wit, Lambert Schomaker, "BiNet: Degraded-manuscript binarization in diverse document textures and layouts using deep encoder-decoder networks," arXiv preprint arXiv:1911.07930

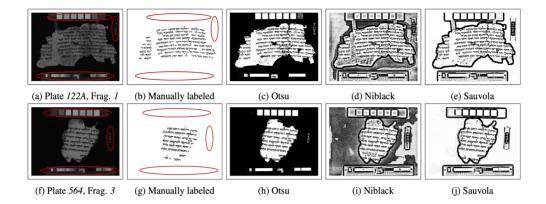


Figure 1: This figure shows the difficulty of using traditional binarization technique for the DSS images; example images of 4Q375 (IAA plate number 122a, fragment 1) and 11Q18 (IAA plate number 564, Frag. 3). On the left is the original IR image received from the IAA (captured in 924 nm wavelength of light). The second column is manually labeled by experts. The remaining images are the binarisation results of techniques proposed by Otsu (15), Niblack (16), and Sauvola (17) for both the fragment images. All three of these methods fail to provide output images that focus only on the original handwriting.



י אבר מנוף לר מת בלרוף מכר מבלרי מול אן מי

Figure 2: This figure shows the results from our binarisation technique. Example images of 4Q215 (IAA plate number 368.

3.4.2 Feature Extraction Algorithms

Digital palaeographers need feature extraction algorithms to translate aspects of handwriting into feature vectors. Feature vectors numerically represent an object's characteristics; the object, in this case, is handwriting.

Pertaining to the study, we applied two feature extraction methods. One is textural-based, ²⁴⁵ namely, the hinge feature extraction approach; the other is allograph-based, ²⁴⁶ namely, the fragmented connected-component contours method (FCO3), or the fraglet approach. There are numerous benefits for using this combination of the feature extraction methods, hinge and fraglet. ²⁴⁷ Firstly, the artificial intelligence and pattern recognition-based techniques can make calculations from multiple perspectives; secondly, the measurements are explainable beyond, "pixels go in, scribes come out." The explanation is that the two approaches measure aspects of the habitual writing process—genetic factors and memetic factors. ²⁴⁸

- Genetic factors relate to the genetic makeup of the scribe, such as the structure of the hand, pen grip, and fine motor skills.
- Memetic factors relate to cultural influences, training, and style. The evolution and spreading of character shapes is a memetic process.

In a digital palaeographic approach for scribal identification, a method is needed to deal with genetic and memetic factors. To tap into both aspects of handwriting, we combined a curvature-based general texture appearance

²⁴⁵ Textural-based methods are interested in spatial frequency and orientation contents, which represent handwriting texture. Texture-based methods extract such features as writing speed, direction, duration, height, width, slant angle. Texture features of orientation and curvature provide an intimate characterization of an individual's handwriting. For further reading on textural based methods see, Yong Zhu, Tieniu Tan, Yunhong Wang, "Biometric personal identification based on handwriting," in *Proceedings 15th International Conference on Pattern Recognition, 3–7 Sept, 2000*, 2 (Los Alamitos, CA: IEEE Computer Society, 2000), 797–800.

²⁴⁶ Allograph methods are interested in shape patterns. Shapes in a given handwriting sample is characteristic for the writer and is computed using a common shape codebook obtained by grapheme clustering. The writing is characterised by a stochastic pattern generator of ink-trace fragments. Marius Bulacu and Lambert Schomaker, "Text-independent writer identification and verification using textural and allographic features," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, (2007), 701–717.

²⁴⁷ "Hinge and Fraglets are state-of-the-art features, based on statistical pattern recognition, which show impressive performance in test conditions." A.A Brink, R. M. J. Niels, R. A. Van Batenburg, C. E. Van den Heuvel, and L. Schomaker, "Towards Robust Writer Verification by Correcting Unnatural Slant," in *Pattern Recognition Letters*, 32/3 (2011), 449–457 at 450.

²⁴⁸ Schomaker and Bulacu, "Text independent writer identification," 701–717.

approach (hinge) with an allographic approach (FCO3). Below is a further explanation of the hinge feature and the FCO3 approach.

3.4.3 The Hinge Feature

The Hinge kernel calculates the joint probability distribution of the angle combination of two hinged edge fragments. The calculation quantifies the joint probability of the orientations into a two-dimensional histogram p (α , β), where the angles α and β (α < β) are the angles for the horizontal plane, of the two arms of a hinged kernel convolving over the edges of a handwritten image (See figure 4). For actual calculations, the hinge can be slid along the contour of each connected ink component.

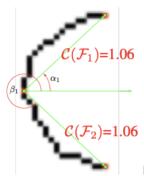


Figure 3: Hinge kernel; the angles and leg-lengths for two

different character shapes²⁴⁹

The hinge feature belongs to a category of algorithms called edge-based directional features. Edge-based directional features developed from the understanding that curvature and distribution of directions in handwriting traces could capture elements unique to a writer's hand. Marius Bulacu, Lambert Schomaker and Louis Vuurpijl explain:

²⁴⁹ Dhali, de Wit, Schomaker, "BiNet: Degraded-manuscript binarization," arXiv preprint arXiv:1911.07930

'As regards the theoretical foundation of our approach, the process of handwriting consists of a concatenation of ballistic strokes, which are bounded by points of high curvature in the pen-point trajectory. Curved shapes are realized by differential timing of the movements of the wrist and the finger subsystem. In the spatial domain, a natural coding, therefore, is expressed by angular information along the handwritten curve.' 250

Through measuring curvature, edge-based directional features characterise the changes undertaken by the writer at the time of writing. Handwriting is a moving process dictated by the rules of physics. When writing, one unconsciously slows down and speeds up when shaping their letterforms. As with a car, a bend is an indication of where a slowing down took place, and the sharper the bend, the greater the deceleration. Therefore, through measuring curvature, it is possible, obliquely, to exploit the gap between static space and dynamic time; namely, the physical properties of the writing hand that bind them together.²⁵¹

-

²⁵⁰ Marius Bulacu, Lambert Schomaker, and Louis Vuurpijl, 'Writer identification using edge-based directional features, *Proceedings of the Seventh International Conference on Document Analysis and Recognition, August 3 to 6, 2003, Edinburgh, Scotland* (Los Alamitos, CA: IEEE Computer Society, 2003), 937–941.

²⁵¹ The idea was expressed to me in personal communication with Lambert Schomaker; however, the idea of recovering dynamic information from static handwritten images is not a new one. See also, Stephan Jäger, *Recovering dynamic information from static, handwritten word images*, dissertation at the University of Freiburg im Breisgau (Koblenz: Fölbach, 1998); P.M Lallican, C. Viard-Gaudin, and S. Knerr, "From off-line to on-line Handwriting Recognition," in *Proceedings of the Seventh International Workshop on Frontiers in Handwriting Recognition, September 11–13 2000, Amsterdam*, eds. L. Schomaker and L. G. Vuurpijl (Nijmegen: International Unipen Foundation, 2000), 303–312.

3.4.4 Fragmented Connected-Component Contours (FCO3)

Schomaker, Franke, Bulacu proposed using the contours of fragmented connected components for writer identification.²⁵² A connected component is a region of foreground pixels that are touching each other. For the palaeographer working on the *DSS* collection, these may be allographs, or parts of allographs, or attached allographs. A fragmentation of the connected components creates fragmented connected-components (FCO3s) or fraglets, which encapsulate the shape details of the writer.²⁵³

In our experiment, each fragmented contour contains 200 points with 400 different feature values (x,y coordinates: position of each pixel). The contours are then normalized. Using the extracted fraglets, we then form a Kohonen self-organizing feature map that use neural networks with neighbourhood functions to preserve the topological properties of the fraglets. The resulting SOFM contains 70x70 cells, with each cell containing 400 features.²⁵⁴

3.5 Experiments

The method described above, which applies two complementary feature extraction algorithms to binarised images of the scrolls, enabled us to test fifty-seven of the manuscripts identified by Yardeni to be penned by the one scribe.²⁵⁵

⁻

²⁵² Lambert Schomaker, Katrin Franke and Marius Bulacu, "Using codebooks of fragmented connected-component contours in forensic and historic writer identification," *Pattern Recognition Letters*, 28/6 (2007), 719–727.

²⁵³ L. Wolf, N. Dershowitz, L. Potikha, T. German, R. Shweka, and Y. Choueka, "Automatic Palaeographic Exploration of Genizah Manuscripts" in *Kodikologie und Paläographie im digitalen Zeitalter 2 / Codicology and Palaeography in the Digital Age 2*, eds. F. Fischer, C. Fritze, and G. Vogeler, IDE Schriftenreihe, 3 (Norderstedt: Books on Demand, 2010), 157–179 and 171. ²⁵⁴ For further details on Kohenen maps and how they are used by the project in Groningen see, Mladen Popović, Maruf Dhali, Lambert Schomaker, "Artificial Intelligence based writer identification generates new evidence for the unknown scribes of the Dead Sea Scrolls exemplified by the Great Isaiah Scroll (1QIsa ^a)," *PLOS ONE* (2021), 1–28 at 3–5, 8, 10, 12. ²⁵⁵ The fifty-seven manuscripts tested are 203, 2024, 306, 4013, 4027, 4038, 4038a, 4057.

²⁵⁵ The fifty-seven manuscripts tested are, 2Q3, 2Q24, 3Q6, 4Q13, 4Q27, 4Q38, 4Q38a, 4Q57, 4Q58, 4Q73, 4Q98, 4Q161, 4Q166, 4Q167, 4Q171, 4Q184, 4Q203, 4Q215, 4Q215a, 4Q227, 4Q252,

Of the tested fifty-seven manuscripts, thirty-eight are from Yardeni's first list, and nineteen are from her second list.²⁵⁶ The choice of manuscripts to test was based on the quality of the manuscript and how many characters it contained. If the manuscript contained less than circa twenty well-preserved characters, it was too small for testing.

We conducted eight experiments in total.²⁵⁷ Experiment 1 tested thirteen scrolls;²⁵⁸ experiment 2 and 3 tested forty-five scrolls, and experiment 4 tested fifty-seven scrolls.²⁵⁹In experiments 3, 5, 6, 7 a small amount of manual cleaning was performed, without affecting the data. Only experiment 4 applied automatic touch-ups.²⁶⁰ The first five experiments used only the hinge feature. Experiments 6 and 7 applied the two algorithms of hinge+fraglet (see above, Sections 3.4.3 and 3.4.4). Experiment 6 the hinge feature vectors had a dimensionality of 254 and experiment 7 had a dimensionality of 1225.²⁶¹ For experiment 8 the data was augmented by adding additional copies of the scrolls in question.²⁶²

Each experiment required analysing the distances between the data points in the distance files. The data points are the measurements generated from applying the algorithms to each manuscript. While each data point

_

⁴Q267, 4Q271, 4Q272, 4Q274, 4Q276, 4Q277, 4Q284a, 4Q301, 4Q303, 4Q325, 4Q375, 4Q390, 4Q397, 4Q409, 4Q410, 4Q431, 4Q432, 4Q436, 4Q437, 4Q439, 4Q442, 4Q471a, 4Q473, 4Q474, 4Q475, 4Q476, 4Q492, 4Q493, 4Q494, 4Q501, 4Q511, 4Q525, 4Q531, 6Q18, 11Q18, Mas Josh ²⁵⁶ Cf., n. 214 for the details pertaining to the two lists.

²⁵⁷ These experiments were conducted between 26-10-2018 up until 23-04-2020.

²⁵⁸ 4Q27, 4Q73, 4Q161, 4Q166, 4Q171, 2Q252, 4Q267, 4Q375, 4Q390, 4Q397, 4Q436, 4Q494, 11Q18.

²⁵⁹ Cf., n. 255 for the list of fifty-seven manuscripts.

²⁶⁰ Automatic touch-ups are done by algorithms whose aim is to 'touch-up' white spots that may have been left by the binarisation technique. The idea of automatic touch-ups was to fill in automatically these blanks. However, it was possible that the automatic touch-ups also added information. Therefore, we decided best not to apply them.

²⁶¹ The dimensionality of the hinge feature vectors relates to the directions being measured. For example, when measuring in 2D spaces, it is possible only to measure in two dimensions. In 3D spaces a third dimension is added. The hinge feature measures in 254- or 1225-dimensional space. ²⁶² The data was augmented by applying elastic 'rubber-sheet' transformation to the data with a displacement value of 1.0 and smoothing radius of 8.0.

connects to a specific manuscript, the data points are not the manuscripts, but the feature vectors (measurements) connected to each manuscript. The data points are the measurements that the algorithms calculated in feature space to numerically characterise aspects of the writing hand. A digital palaeographic process is interested in assessing the distances between the data points and what the distances mean.

When looking at the distances between the data points of the eight experiments, I noticed that with the first seven experiments there was a small amount of change here and there, but mostly the data remained consistent throughout. Regarding experiment 8—and the augmented data—the distances between the data points differed in ways that were greater than the trajectory had been for the previous seven tests, which had been largely steady. For this reason, I decided to work with the results from experiment 7, rather than choosing to work with the augmented data from experiment 8.

Working with experiment 7, I observed the distances between the data points, and established nearest neighbours using both Principal Component Analysis (PCA),²⁶³ and the distance files.²⁶⁴ The PCA technique is a convenient tool for understanding and visualising the considerable amount of data contained in the distance files.²⁶⁵ It can draw one's attention to potential clusters in the data points and potential outliers. Yet, PCA reduces the dimensionality from a 5365-dimensional space to a 3-dimensional space. I have provided here in Fig. 4 an image from our PCA plot. However, it is important to keep in mind if taking information from this plot, that it is a 2D image of the 3D, PCA plot. This means that the perspective offered in Fig. 4 is just one perspective among many of the distances between the queried manuscripts.

-

²⁶³ Cf., Fig 4. For the PCA plot of Experiment 7.

²⁶⁴ More on distance files in the following paragraph.

²⁶⁵ Access link for distance files: https://unishare.nl/index.php/s/iTpnAfaWSEsaoty

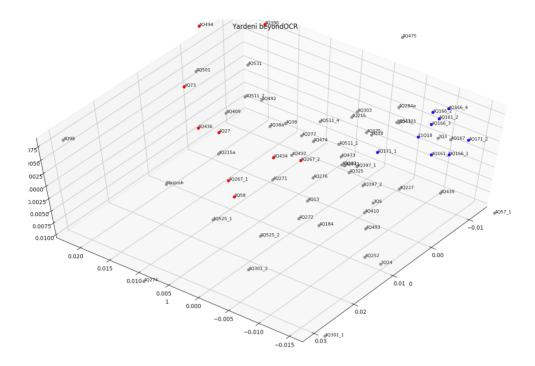


Figure 4: Principal Component Analysis (PCA) graph, Experiment 7. Each dot represents a manuscript. The blue dots on the right represent manuscripts that were consistently the closest to each other in this experiment and the previous six. The red dots, upper left, represent manuscripts that were consistently outliers. The Q number of the associated manuscripts are printed next to each dot.

Due to the numerous perspectives that the PCA plot offered, I turned to the distance files for more precision. The distance files contain the numerical data on which the PCA plots are based. I saw in the distance files that the Chi-square distance between, for example, 4Q397 and 4Q171 equaled 0.245, or between 4Q436 and 4Q409 it equaled 0.390. However, these numbers are evidently abstract. The challenge was to determine, without relying on the subjective

analysis of palaeographic opinion, how close a distance would need to be for a within-writer set, and at which distance two data points became a between-writer set. What was needed from the query documents (handwriting samples) was a hit-list, and information on how far to go to say the same writer. I needed probabilistic information: the FRR / FAR curves.

The second step was to create curves for false reject rate (FRR) and false accept rate (FAR). When doing so another challenge immediately arose, which is the lack of ground truths regarding identified scribes of Qumran manuscripts of which we can be certain. When applying FRR / FAR curves for interpreting data, the usual procedure is to establish ground truths from known facts, but for the DSS collection there are no certain writers. The scribes did not sign the manuscripts they copied, and thus remain anonymous. In lieu of that, when working with experiment 7, I took as 'ground truths' twelve data points from the previous six experiments. These data points could function as 'ground truths' because they remained consistent and steady through the experiments, as either clusters or outliers. The within-writer data points were the manuscripts of 4Q161, 4Q166, 4Q171 and 11Q18 (see the blue dot points in the PCA plot above, Fig. 4). The between-writer data points were the manuscripts of 4Q27, 4Q58, 4Q73, 4Q267, 4Q390, 4Q434, 4Q436 and 4Q494 (see the red dot points in the PCA, Fig 4). On this information, we developed FRR / FAR curves that established three reasonable distance ranges with their associated false-reject rate on which to then decide whether the remaining forty-five data points (manuscripts) were within the within-writer set or the between-writer set.²⁶⁶

Prior to explaining the FRR / FAR curves, I would like to highlight that this is where this method for writer-identification diverges from the method employed for by Popović, Dhali and Schomaker for writer-identification on the Great Isaiah Scroll (1QIsa^a).²⁶⁷ The same team conducted both pieces of research,

-

²⁶⁶ See below, "Table 1: Handwriting samples from Yardeni's identified scribe, with a 55% chance or above to be the same scribe."

²⁶⁷ Popović, Dhali, and Schomaker, "Artificial intelligence based writer identification,"1–28.

but the question and the method of analysis differ. For the experiments on 1Qlsa^a, the data points all came from one source, one manuscript, and therefore from the results from the feature-space exploration the question is whether we see the same or different signal sources. Within the context of fifty-four columns of one scroll, Popović, Dhali and Schomaker saw two different signals that coincided with the two codicological halves of this manuscript. In addition to the feature-space exploration, Popović, Dhali and Schomaker used several statistical tests that underscored the statistical significance of the clear separation of data points into two clusters. Those statistical tests were enabled by a sufficiently large number of columns with handwriting that made robust testing possible (e.g., the character *aleph* occurs more than 5,000 times in the Great Isaiah Scroll).

However, with the manuscripts that Yardeni attributed to one scribe the data points in question are not from one scroll, but consist of the remains of many different scrolls. The set up in this case is different from the one of the Great Isaiah Scroll, which means it is not possible to ask within one manuscript whether there is one or more signal sources. Additionally, for the experiment on the manuscripts Yardeni said were penned by one scribe the number of characters, not only on each manuscript but in the whole experiment, is considerably lower. Therefore, the same statistical tests cannot be applied. Instead of using statistical tests similar to the research for the article on 1QIsa³, for the research presented herein, we employed here different techniques, specifically the FRR / FAR curves.

3.5.1 Probability-based decision-making: Curves for False Reject and False Accept

In Figure 5, the green curve represents the False Reject Rate or FRR curve (d_ok.curve). This FRR curve represents the case when the test manuscript can be identified as the same writer as the original manuscript (the one we are testing with). It consists of an error to reject the decision 'same scribe'. At the distance of 0 (in the x-axis), an image will be assumed to be from the same signal

source (scribe); at 0, moving up the y-axis, there is a 100 percent chance that the decision of same writer is the correct one. By going to a higher distance on the x-axis, the test manuscript has a lower chance of being labeled as the same scribe. The purple curve for the False-Accept Rate (FAR or d_err.curve) represents the condition where a pair of images is falsely decided to be produced by the same scribe.

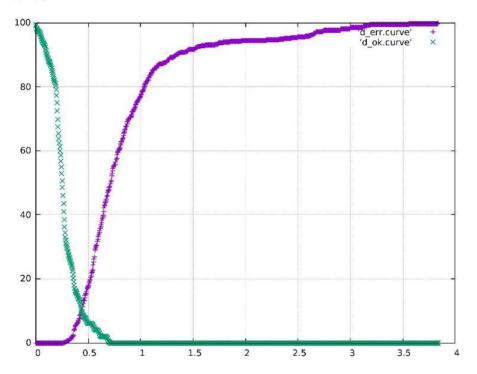


Figure 5: Combined false-reject (green) and false-accept (purple) probability curves, represented as percentages on the Y axis. The values on the X axis represent the computed Chi-square distance for a pairwise image comparison. As the distance increases, the risk for a false acceptance ('same scribe') decision increases (purple curve).

The FRR and FAR curves are not complementary and are two different curves. This is due to the variability within the writer and between writers. The point of equal error rate (EER) is the crossing point for both curves and represents a

commonly used threshold where FAR and FRR meet. In this case, ~0.47. However, the EER ~0.47 Chi-square distance would be an extremely lenient position to decide same-scribe, as at this point there would a 10% chance at best of it being the same scribe (see Fig. 5, and where the EER is in line with the y-axis). One could argue that at 10% it is still possible, but it is very unlikely. For this study, I used a stricter criterion, i.e., requiring a calculated distance to be below ~0.3 (on the horizontal curve). One can assess from Fig. 5, from the purple curve, flat line on the horizontal axis, that in the range of ~0-0.3 the risk of a false accept is very low. Accordingly, from the corresponding point on the green curve (of which 0-0.3 on the x-axis corresponds with 55% and above on the y-axis) the risk of erroneously deciding for 'different scribes' becomes higher. Therefore, the probability that the decision for "same scribe" is the correct one becomes higher.

From the FRR curve (green), I defined three reasonable ranges of distances. The first range is 90-100% (see Y-axis), which corresponds with the Chi-square distance of ~0-0.1 on the X-axis. Deciding that any two manuscripts that fall this close to each other are the one scribe has a 90-100% chance of being correct. The second range is 70-90%, which corresponds with the Chi-square distance of ~0.1-0.2 on the X-axis. The third range is 55-70% chance, which corresponds with the ~0.2-0.3 Chi-square on the X-axis. These realistic FRR / FAR curves demonstrate (a) that there is a *reduced variability* within a writer, as evidenced by the fast drop of the FRR when distance increases, in comparison to the slower rise of the FAR curve and (b) a *clear distinction* between writers, as evidenced by the gap between the two curves and the low value of the EER at the crossing point.

3.5.2 Results from the FRR curve

Based on the definition of the three reasonable ranges of distances with their associated false-reject rate, sixteen of the handwriting samples fell within the three set ranges. Table 1 includes all the manuscripts (handwriting samples) that fell within the set three ranges, and shows their distribution.

Table 1: Handwriting Samples from Yardeni's identified scribe, with 55% chance or above to be the same scribe.

Manuscripts	90-100%	70-90%	55-70%
Distance range	0-0.2	0.2 – 0.25	0.25 – 0.3
4Q161-1 ²⁶⁸		4Q166-3, 4Q215,	4Q166-4, 4Q171-1,
		4Q166-1, 4Q166-2, 11Q18	4Q161-2
4Q161-2		11Q18	4Q161-1
4Q166-1	4Q166-	4Q161-1	4Q171-1; 11Q18; 4Q303;
	3,2,4		4Q215
4Q166-2	4Q166-	4Q161-1, 4Q171-1	4Q375; 4Q215; 4Q303;
	4,3,1		11Q18
4Q166-3	4Q166- 1,2,4	4Q161-1, 4Q171-1	4Q215; 4Q303; 4Q375; 11Q18
	1,2,4		11010
4Q166-4	4Q166- 2,3,1	4Q161-1	4Q375; 4Q215; 4Q171-1; 4Q303
4Q215		4Q161-1	4Q38; 4Q166-2,3,4; 4Q375; 11Q18

 $^{^{268}}$ For some of the tested manuscripts there was more than one copy of them. In these cases, I call the manuscripts, for example 4Q161-1, 4Q161-2.

11Q18		4Q161-1,2	4Q166-1,3; 4Q215;
			4Q166-2,4
4Q171-1		4Q375; 4Q474; 4Q171-2;	4Q474-1; 4Q166-3;
		4Q166-2; 4Q397-2	4Q397-1; 4Q511; 4Q161-1
			4Q166-1,4; 4Q227, 4Q439
4Q171-2		4Q171-1,	4Q397-2
4Q397-1	4Q397-2		4Q171-1, 4Q474- 4Q38, 4Q375
4Q397-2	4Q397-1	4Q474-1; 4Q171-1	4Q267-2; 4Q474; 4Q171-2
4Q474	4Q474-1	4Q171-1	4Q375; 4Q397-2; 4Q267-2
			4Q397-1
4Q474-1	4Q474	4Q397-2, 4Q267-2, 4Q171-1	4Q397-1, 4Q38
4Q439			4Q227, 4Q171-1
4Q375		4Q171-1	4Q166-2, 4Q474, 2Q227, 4Q166-4; 4Q215;
4Q227			4Q375, 4Q171-1, 4Q439
4Q38			4Q215, 4Q397-1, 4Q474, 4Q27
4Q303	4Q303-1		4Q166-3,2,1,4
2Q24			4Q184
4Q284a			6Q18

3.6 Interpreting the Results

First, the forty-one queried manuscripts not shown in Table 1 fell above the Chisquare distance of \sim 0.3 (the criterion for accepting samples as possibly the same writer). This means that the margin of error is too large to simply assume one scribe for multiple of these manuscripts.

Second, in this table there are sixteen manuscripts. There is a cluster of twelve manuscripts that fall within the 55–90% chance range that one scribe penned them: 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439, 4Q474, 11Q18, 4Q375, 4Q227, 4Q38, 4Q303. Two couplets of manuscripts fall within the 55-70% range that one scribe penned them: 2Q24 with 4Q184, and 4Q284a with 6Q18. These results presented in Table 1 are useful in that they elucidate the distance between the data points, and what the distances might mean. Yet, probabilities are not yes or no answers to the question of the same or different scribe. For a yes or no answer and for how the results from Table 1 reflect the reality of a scribe, the final choice was handed back to me (the human palaeographer) working with the system.

To reach the final decision on whether the twelve manuscripts that fell within the 55-100% chance range of being the one scribe are the one scribe, I engaged a method for writer identification outlined by arts academic and forensic document analyst Tom Davis. ²⁶⁹ Davis said that the key difference between the methods of traditional palaeographers and of forensic scientists is that forensic scientists make analyses of individual documents first, and only after making analyses of the individual documents can they draw comparisons between them. ²⁷⁰

For these twelve manuscripts, in an effort to do analyses before comparisons, I first made a palaeographic chart for 4Q161.²⁷¹ For this chart, I

²⁶⁹ Davis, "The Practice of Handwriting Identification," 251–76.

²⁷⁰ Davis, "The Practice of Handwriting Identification," 258–59.

²⁷¹ The purpose was to choose one of the four manuscripts in the initial four that were used as ground-truths (4Q161, 4Q166, 4Q171 and 11Q18). I could have chosen either of these four.

chose six graphemes—aleph, bet, he, ayin, shin and taw. The choice of these six graphemes is justified because they are among the more complex graphemes in ancient Hebrew manuscripts,²⁷² but I also implicit judgement about the significance of these six graphemes came into play.²⁷³ First, I segmented three examples from 4QQ161 of each of the six graphemes and wrote descriptions of them. Second, I followed this same process for 4Q161 as for the remaining twelve manuscripts. Third, I compared the images and palaeographic analyses, observing the similarities and differences. What is presented here is the process at the third step; the comparison phase. There are six charts for the six graphemes of aleph, bet, he, ayin, shin and taw. These charts include all twelve manuscripts.

-

²⁷² Yardeni implied that it is enough to recognise a scribe with one grapheme, a *lamed*. I do not agree that one grapheme is enough, but consistent and significant similarities and differences reveal themselves in an in-depth analysis of six graphemes.

²⁷³ In his article, Davis explores the role of implicit judgment in palaeographic and forensic document analysis. He says that implicit judgment is an important aspect of the palaeographic art, but that it needs to be accompanied with explicit reasonings. My aim here was to draw on enough implicit judgment about what is significant, to spare the reader from endless palaeographic assessments of every letter from every document; but also accompanying this judgment with enough explicit reasonings that the reader understands the final conclusions. Davis, "The Practice of Handwriting Identification," 252–54.

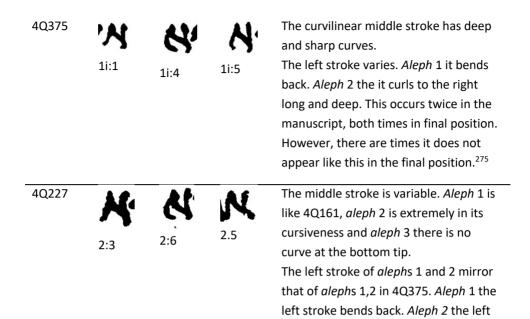
3.6.1 Palaeographic Charts 274

Chart 1: Aleph

Q	1	2	3	
4Q161	W	K	W	Wavy middle stroke, curving first right and then at bottom tip curving left.
	8–10:22	8–10:22	8–10:8	The right arm descends from a place higher than the middle stroke. For alephs 1, 2 the right arm curves at the top. The left stroke of aleph intersects the middle stroke at its upper curve. At the bottom tip it curves in to the right with varying degrees of emphasis.
4Q166	2:10	2:14	2:4	The descriptions of 4Q161 apply here also.
4Q171	2:5	2:10	2:3	The descriptions of 4Q161 apply here also.
4Q38	2:5	2:10	2:3	Aleph 1 curves in the same places as 4Q161, but the angles of the curves differ. Aleph 2 comprises of rectilinear strokes. Aleph 3 is a mix of rectilinear and curvilinear strokes.

²⁷⁴ For the fragment and line numbers for the segmented letters, I used the numbering system in the DJD series. For 4Q161 see, Allegro, DJD 5: 11–15; for 4Q166 see, Allegro, DJD 5: 31–32; for 4Q171 see, Allegro, DJD 5: 42–50; for 4Q38 see Duncan DJD 14, 93–108; for 11Q18 see Tigchelaar, DJD 23: 305–55. for 4Q397 see Yardeni, DJD 10: 21–28; for 4Q303 see Lim, DJD 20: 151–53; for 4Q215 see, Stone, Chazon DJD 36: 172–84; for 4Q439 see, Weinfield, Seely, DJD 29: 335–41; for 4Q474 see, Elgvin, DJD 36: 456–63; for 4Q375 see, Strugnell, DJD 19: 111–19; for 4Q227 see, Vanderkam, Milik, DJD 13: 171–75.

11Q18	13:1	12:6	13:3	The descriptions of 4Q161 apply here also.
4Q397	5:2	5:3	6–13:1	The descriptions of 4Q161 apply here also. The small exception is that for aleph 2 the right arm descends from below the tip height of the middle stroke.
4Q303	1:3	1:11	1:11	The descriptions of 4Q161 apply for the middle and left strokes. The right arm differs. Rather than descending from right to left, it descends somewhat straighter, giving the <i>aleph</i> an upwards stance. The triangle shaped flag at the top tip may evidence the beginnings of the <i>keraiai</i> . <i>Aleph</i> 2 and 3 the right stroke curves slightly right.
4Q215	1:1	1:2	1:9	The descriptions of 4Q161 apply here also.
4Q439	1i+2:3	1i+2:4	1i+2:4	The descriptions of 4Q161 apply here also. There is an usual bulge at the top right corner of <i>aleph</i> 2. This is likely due to inking.
4Q474	1:4	1:5	1:5	The descriptions of 4Q161 apply here also.



Analysis and Conclusions regarding Aleph

The three strokes of *aleph* are drawn separately, and in movements downward from the top to the bottom. Cross envisioned the ductus of *aleph* differently, with the middle stroke drawn upward, and then the left stroke down in a continuous motion.²⁷⁶ He even suggests that in 4QNum^b (the specimen that Cross used for the Herodian round semiformal) that the "s-shaped axis develops in anticipation of the overlapping movement to the left leg."²⁷⁷ Yardeni does not agree with Cross. She sees the ductus as consisting of three separate downward

stroke curls around long and deep (also

in final position).

²⁷⁵ This type of left stroke is rare in the early Herodian periods, although a version of it can be seen in the Wadi Murrabaʿat Genesis scroll from the 1st Century CE.

²⁷⁶ Cross, "The Development,"33.

²⁷⁷ Cross, "The Development,"33.

movements.²⁷⁸ My descriptions of *aleph* in the charts concur with Yardeni's perspective of the ductus.²⁷⁹

In terms of dating, as this *aleph* does not evidence the evolved *keraia*, one can date it more easily to the earlier as opposed to the later Herodian period. Predominantly, the intersection point of the left and middle stroke is below the top tip of the middle diagonal, and therefore this is not the so-called developed Herodian inverted v-shape *aleph*.

For aleph, 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439, 4Q474 and 11Q18 show precisely the same features. 4Q38, 4Q227, 4Q303 and 4Q375 differ. 4Q38 shows the most difference across all of the features. In 4Q303, it is only the right stroke that differs, but it differs consistently and the shape of this stroke changes the stance of the letter. The unusual and variable left stroke of aleph in 4Q375 and 4Q227 mean these two manuscripts stand out as different from 4Q161 et al.

Chart 2: Bet

Q.	1	2	3	Descriptions
4Q161	8–10:16	8–10:20	8–10:2	Roof of <i>bet</i> is drawn with a defined serif, and an ascending horizontal stroke. The third stroke is a slanted vertical shaft. The scribe reversing the calamus on descent causes the protrusion at the shoulder. The base stroke gently slants downwards towards the left.

²⁷⁸ Yardeni, *The Book of Hebrew Script*, 286.

²⁷⁹ I do not agree with Cross that the scribes were "anticipating" the left leg in the s-shaped axis. The scribes penned these strokes in two separate movements.

4Q166		440	144	The descriptions of 4Q161 apply
-FQ100	13	ニ		here also.
	2:2	2:7	2:16	nere also.
4Q171	4 1+3-	14	15	The descriptions of 4Q161 apply
			f1+3_4iii:3	here also.
	_4iii:2	1+3_4iii:8	11+5_4111.5	
4Q38	120	B.See	164	The bets of 4Q38 show
	2:7			variability. Bet 1 the horizontal
	2.,	2:10	2:11	stroke is almost lost between
				the serif and the shoulder.
				The baseline stroke in bet 2
				rises at the right end. Bet 3 is
				squat, due to a short vertical
				shaft.
11Q18	1 -	88 - 1	. 0 - 4	The descriptions of 4Q161 apply
11Q16	3	13		here also.
	13:6	13:4	12:1	Here also.
		13.4		
4Q397	4	120	LA.	The <i>bet</i> s of 4Q397
	6-			predominantly mirrors 4Q161.
	_13:12	5:3	6_13:3	The serifs on bet 2, 3 are
		0.0		particularly high.
4Q303	: 14	ta:	101	The descriptions of 4Q161 apply
	1:5		1:8	here also.
		1:7		
4Q215	144	مدا		The descriptions of 4Q161 apply
. 4213	1:2		15	here also.
		1:8	1:9	
4Q439	<u>la</u>	-	4.4	The descriptions of 4Q161 apply
. 4.03		3	>	here also.
	1i+2:2	111212	1i+2:8	- 3
		1i+2:2		

4Q474	1:2			The descriptions of 4Q161 apply here to the top half of 4Q474. It is difficult to see precisely what is happening with the base stroke.
4Q227	2:2	2:3	2:5	The base stroke slants steeply.
4Q375	1i:4	1ii:4	1 1:3	Bet 1, 2 the base stroke slants steeply.

Analysis and Conclusions regarding Bet

The protrusion in the lower right corner (seen more clearly in some of the images above than in others) associates this handwriting with the Herodian period. Cross argued that a characteristic shift took place in early Herodian scripts, with the base stroke being drawn from left to right (instead of right to left) and that becomes systematic in late Herodian scripts. His argument is that the protrusion is evidence for this change in direction. However, while the direction is difficult to know for certain, it is possible that the protrusion from the intersection point with the vertical shaft becomes more conspicuous in later scripts, suggesting at least the lifting of the calamus to draw the base stroke, as opposed to curving around from the vertical shaft. The prominent shoulder in the right corner offers another possible indication that these *bets* are early

²⁸⁰ Cross 1961. 33.

²⁸¹ Yardeni in her descriptions of the scribe writes that the long, horizontal base stroke is "apparently" drawn from left to right. Yardeni, "A Note," 287. It would seem that in saying "apparently," she is acknowledging that it can be difficult to tell. Tigchelaar writes of 11Q18 that the base stroke slants downwards to the left. Tigchelaar, DJD 23: 309.

Herodian. Cross suggested that such a 'tick' (shoulder) is lost in the *bet*s of later periods.²⁸² I suggest that this tick is caused by the scribe reversing the calamus on descent.²⁸³

The *bet*s of 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439, 4Q303, 4Q474 and 11Q18 predominantly mirror each other. Again, 4Q38 shows the most difference. While 4Q161 et al., slant gently, 4Q375 and 4Q227 the base stroke slants steeply.

Chart 3: He

Q.	1	2	3	Descriptions
4Q161	8_10:17	8_10:14	8_10:24	The right leg descends from above the roof. It is a wavy stroke, curving at both the top and bottom tips. The left leg is shorter and sometimes curves at the bottom. The roof has three strokes. The first and second strokes are drawn on top of one another. A third stroke is added on the left. This stroke may be hidden, but can protrude either above or below the traverse. ²⁸⁴
4Q166	2:12	2:11	2:14	The descriptions of 4Q161 apply here also.

²⁸⁴ Yardeni, "A Note." These drawings from Yardeni indicate where the third stroke is.



²⁸² Cross, "The Development," 33.

²⁸³ Tigchelaar writes of the *bet* in 11Q18, "that the scribe, after having drawn the head-stroke from left to right, turned back to the left in order to draw the downstroke." Tigchelaar, DJD 23: 309.

4Q171	1+3- _4iii:1	1+3_4iii:6	1+3_10iv:5	The descriptions of 4Q161 apply here also.
4Q38	2:6	2:9	2:13	When in final position, the roofs of <i>he</i> in this manuscript are extremely long.
				The third small stroke of the roof juts out pointedly at the lower right corner. See <i>he</i> 2, 3.
11Q18	13:2	13:4	f12:7	The descriptions of 4Q161 apply here also.
4Q397	5:5	6_13:5	1 6_13:3	The descriptions of 4Q161 apply here also.
4Q215	1:4	1:1	1:5	The descriptions of 4Q161 apply here also.
4Q303	1:6	1:10	1:11	The descriptions of 4Q161 apply here also.
4Q439	1i+2:4	1i+2:4	1i+2:5	See description for 4Q161, except <i>he</i> 3 that appears exceptionally long.
4Q474	1:4	1:4	1:5	The descriptions of 4Q161 apply here also.

4Q227	が	171	州	The descriptions of 4Q161 apply here also.
	2:3	2:4	2:6	
4Q375	41	art	at!	See description for 4Q161. The third
	· A	") }	-33	stoke on the left of the roof is
	1i:2	1i:4	1i:9	prominent in <i>he</i> 2.

Analysis and Conclusions regarding He

He is one of the most complex letters in the Hebrew alphabet—particularly the roof—and the ductus is not always obvious. In the Herodian period, Cross envisioned a looped formation of the letter he. He said "the cross-stroke is drawn to the left, drops slightly before doubling back or looping slightly into the left leg and the movement into the left leg is frequently triangular." Yardeni envisioned two or three separate strokes in three separate movement for the roof of he (cf. n. 284). My descriptions of he in the charts concur with Yardeni's perspective of the ductus. The roof of he, with a double stroke one on top of the other, and a third small stroke at the right tip does not follow the pattern of other letterforms. Yardeni suggests that this form of he is inherited from the fourth century BCE official Aramaic script, but that it is also found in the Herodian-period ossuaries. 287

The *he*s in all of these manuscripts are predominantly alike in terms of the formation of the strokes, their length and intersection points. However, 4Q38 differs in that the scribe has a consistently produced final form in which the roof stroke is far longer.

²⁸⁵ Cross, "The Development," 34.

²⁸⁶ Yardeni, "A Note," 286.

²⁸⁷ Yardeni, "A Note," 287.

Chart 4: Ayin

Q.	1	2	3	Descriptions
4Q161	8_10:17	8_10:12	9 8_10:23	The right diagonal stroke oscillates between being a bent stroke that bends left at the top and then flattens, or being of a gently curved rounded shape. The left stroke oscillates between being rounded or straight. The intersection point of the left stroke with the right stroke is consistently around the middle of the point of the right stroke.
4Q166	2:6	2:11	2:7	The descriptions of 4Q161 apply here also.
4Q171	1+3- _4iii:2	1+3_4iii:3	1+3- _4iii:5	The descriptions of 4Q161 apply here also. The description of the bent right stroke is more applicable for 4Q171 than the gently curved rounded arm.
4Q38	2:3	W 2:6	2:7	Left arm is straight. Particularly sharp bend at the top of right stroke.
11Q18	13:2	13:6	12:2	The descriptions of 4Q161 apply here also.

4Q397	5:5	6- _13:12	6_13:4	The descriptions of 4Q161 apply here also. The description of the bent right stroke is more applicable for 4Q397 than the gently curved rounded arm.
4Q215	1:1	1:6	1:6	The descriptions of 4Q161 apply here.
4Q303	1:2	У 1:8	1:10	4Q303 the stroke bends left at the top, but it never flattens, which consistently gives the letter an upright appearance.
4Q439	1i+2:3	1i+2:3	1i+2:4	The descriptions of 4Q161 apply here also.
4Q474	1:7			The intersection point of the left and right strokes is higher than in 4Q161 et al. However, there is only one example to work from.
4Q375	1i:2	1 i:7	19 4	The intersection points of the left and right strokes are higher than in 4Q161 et al. Also the shape is different.
4Q227	2:3	2:3	2:4	The intersection point of the left and right strokes are higher than in 4Q161 and the other manuscripts, see <i>ayin</i> 2, 3. This intersection point occurs on a sharp bend in the right arm. This sharp bend also distinguishes this manuscript

from 4Q161.

Analysis and Conclusions regarding Avin

Ayin is not generally thought of as complex letter, as it consists of only two intersecting diagonal strokes. While complex letters are mostly more indicative, I have found that ayin can have indicative values, regarding such aspects as inclination or intersection points. Cross described the arms on the ayin of the round semiformal as thickened. 288 Yardeni's description of ayin curving the top right and left strokes is a better description, as the strokes of ayin in these manuscripts at their top tips are clearly more curved than thickened. Yardeni added that ayin in these manuscripts lack the ornamental features (eg. keraia) that develop in the later Herodian period. 289 Given its size and inclination, it could not be very much earlier than the Herodian period, but it does not belong to the later extensions of the Herodian period either.

For *ayin*, 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439 and 11Q18 show precisely the same features, as outlined in the chart. There are aspects in which 4Q38, 4Q227, 4Q303, 4Q375 and 4Q474 differ from the main group. 4Q38 and 4Q303 show the most difference. 4Q38 is deeply reclined and 4Q303 stands up straight. The left stroke on 4Q375 and 4Q227 intersects with the right stroke high up, and their shape is different. The one example of *ayin* in 4Q474 looks most like 4Q227.

²⁸⁸ Cross, "The Development," 36.

²⁸⁹ Yardeni. "A Note." 289.

Chart 5: Shin

Q.	1	2	3	Descriptions
4Q161	8_10:22	% 8_10:23	8_10:11	The left stroke curves at the top, descends gently right, the bottom tip makes a curve left. The left stroke of <i>shin</i> protrudes down from the intersection point with the
				right stroke.
				The right stroke curves left near its top, descending to meet the left stroke.
				Predominantly, the middle stroke of <i>shin</i> in these manuscripts gently curves at its tip and descends left.
4Q166	W	K	4	The descriptions of 4Q161 apply here also.
	2:6	2:8	2:14	
4Q171	4.	YI	141	The descriptions of 4Q161 apply here also.
	1+3_4iii:4	1+3- _4iii:5	1+3_4iii:8	
4Q38	KY	2:12	2:3	The <i>shins</i> of 4Q38 show variability. For example, compare the protrusion of
	2:7			the left stroke between <i>shin</i> 1, particularly with <i>shin</i> 3
				The bend in the right arm of <i>shin</i> 2 is unusually sharp.

11Q18	14	4	Y.	The descriptions of 4Q161 apply here also.
	13:1	13:2	12:6	
4Q397	4	4	W	The descriptions of 4Q161 apply here also.
	5:3	6_13:3	f6_13:13	
4Q215	4	Es.	ادم	The descriptions of 4Q161 apply here also.
	1:1	1:4	1:6	
4Q303	1:1	1:2	1:10	The left vertical of the <i>shins</i> of 4Q303 is almost straight, particularly at the bottom tip. <i>Shin</i> 3 is very upright. <i>Shin</i> 1 leaves a gap between the left and right vertical.
4Q439	1i+2:2	1i+2:3	1i+2:6	Shin 1 matches the descriptions of 4Q161. Shin 2 also does, although the intersection point of the middle stroke is low. Shin 3 the protrusion is almost lacking.
4Q474	1:7	1:8	1:11	The descriptions of 4Q161 apply here also.
4Q375	11:7	1i:9	1 i:9	Descriptions from 4Q161 in some ways match these <i>shins</i> , although there is more variability here. E.g., the right arm of <i>shin</i> 3 is long, straight and
				does not curve in. There is a strange thickening caused by inking.
				The left stroke curves in far less at the top tip.

4Q227







2:2 2

Descriptions from 4Q161 match the *shins* of 4Q227, although the protrusions on bottom left stroke is shorter, and in *shin* Col. 1, 2 it bends back sharply (similar to *shin* 2 in 4Q375).

Analysis and Conclusions regarding Shin

The wavy, curvilinear strokes of these *shins* are one of the most indicative aspects of the Herodian round semiformal script type and style. Cross said that the tendency for the "break through below the lower right arm is seen especially in the semiformal hands." He saw that the tendency arose in the semi cursive traditions, but that it reversed in the late Herodian period. He argued that the middle stroke with a curved or thickened top is typological significant of the late Hasmonean, early Herodian period. ²⁹⁰ Yardeni perceived the middle stroke as running parallel to right stroke. ²⁹¹ Again, I find Yardeni's explanation more plausible. I am not convinced from Cross that the middle stroke is even thickened, let alone typologically indicative of the middle of the first century BCE.

There is some variability in the *shins* in these manuscripts, but overall the *shins* of 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439, 4Q474 and 11Q18 mirror each other in the variability. The *shins* of 4Q38 are particularly variable, but none of them match the *shins* of 4Q161 et al. The *shins* of 4Q303 and 4Q375 are less curvilinear and more rectilinear than the 4Q161 et al. manuscripts.

²⁹¹ Yardeni, "A Note," 286. These drawings from Yardeni are helpful to see what she means by



²⁹⁰ Cross, "The Development," 37.

Chart 6: Taw

Q.	1	2	3	Descriptions
4Q161	5 8_10:7	5 8_10:8	\$ 8_10:21	The horizontal roof and right vertical are made in one movement. The shoulder is sharper in <i>taw</i> 1,2 than it is in <i>taw</i> 3, in which the shoulder is a gentle curve.
				The left vertical stroke descends from just above the roof, curving around the roof and down to the right.
				The base or 'foot' of <i>taw</i> is a separate stroke, drawn from left to right.
4Q166	प्राप्त	Th'	17	The descriptions of 4Q161 apply here also.
	2:1	2:7	2:9	The sharp shoulders in 4Q166 mirror taw 1, 2 in 4Q161.
4Q171	N	ら	V	The descriptions of 4Q161 apply here also.
	1+3_4iii:3	1+3- _4iii:6	1+3_4iii:2	The curved shoulders in 4Q171 evident <i>taw</i> 3 in 4Q171.
4Q38	J	2:8	2:11	Very square shoulders. Taw 1 and 3 conspicuous curves at the bottom of the right stroke.
11Q18	\$\hbar{1}_{13:1}	77	カ	The descriptions of 4Q161 apply here also.
		12:3	13:6	

4Q397	5 :2	5:3	6_13:6	The descriptions of 4Q161 apply here also.
4Q215	17 1:1	1:9	1:5	The descriptions of 4Q161 apply here also.
4Q303	137· 1:2	1:3	为 _{1:5}	The descriptions of 4Q161 apply here also. On taw 3 that the foot is clearly a separate stroke is evident.
4Q439	1i+2:2	1i+2:3	1i+2:2	The descriptions of 4Q161 apply here also.
4Q474	M _{1:13}	1:14		The descriptions of 4Q161 apply here also.
4Q227	り 2:3	2:4	2:5	The foot in 4Q227 appears consistently longer, and in taw 1, 2 the foot is almost disconnected from the left vertical.
4Q375	57 _{1i:6}	1ii:7	5 1	The descriptions of 4Q161 apply here also.

Analysis and Conclusions regarding Taw

Cross, Yardeni and I all have different opinions regarding the ductus of *taw*. Cross suggested that the *taw* was made in a continuous stroke. He said, "The left leg is

now drawn upward and looped slightly into the right leg (1QM, 4QNum^b)."²⁹² Yardeni suggested that the *taw* was made in two movements. The first movement includes the roof and descends down; the second movement includes the left stroke and the foot and descends down.²⁹³ My suggestion is that the scribe lifted the calamus for a second time to draw the foot.²⁹⁴

Yardeni leaves a wide berth in terms of dating, saying that similar *taws* occur in the Hasmonean and Herodian book-hand. Cross says that in the late Herodian period *taw* becomes increasingly squat and broad. Squat would not be an appropriate description for these *taws*, unless compared with the large *taws* of the archaic period.

There is variability in the *taws*, but it is a variability that exists *within* the manuscripts just as much as *between* them. 4Q38 and 4Q227 stand out as somewhat different from the rest. The shoulders are sharper in 4Q38, and the right stroke as a conspicuous curve in at the bottom tip, not present on 4Q161 et al. The 'foot' is clearly and consistently longer in 4Q227, and in two examples of the *taw* it almost sits disconnected from the left stroke.

3.6.2 Drawing Comparisons from the Charts

A common pattern emerged between 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439, and 11Q18. These manuscripts always comprised of the same features. 4Q474 was somewhat less consistent regarding *ayin* and *bet*. However, should these differences be counted as significant, given there was only one example of *ayin* and the examples of *bet* were fragmentary? I decided that the differences were not significant.

²⁹⁴ See also, Tigchelaar, DJD 23:309.

AAA

²⁹² Cross, "The Development," 37.

 $^{^{\}rm 293}$ She drew the $\it taw$ for the scribe she identified with two movements.

4Q38, whichever letterform I looked at, differed from 4Q161 et al. This made it easy to conclude this manuscript was penned by a different scribe.

4Q303, 4Q375 and 4Q227 depending on the graph demonstrated both small and more significant differences in the graphic components. For example, only small differences are seen with *bet*, *he* and *taw*, but more significant differences are seen with *aleph*, *ayin* and *shin*. This made it more difficult to decide whether it is the same scribe, or a different one. However, also looking on the level of general appearance these manuscripts show greater differences. For example, in 4Q303 the lines are generally more rectilinear, in 4Q375 is an emphasis on deepening the curvilinear lines, and 4Q227 shares more in common with 4Q375 regarding many of the letterforms than with 4Q161 et al. Due to this, I contend that 4Q38, 4Q227, 4Q303 and 4Q375 were not penned by the same scribe who penned 4Q161, 4Q166, 4Q171, 4Q215, 4Q397, 4Q439 and 11Q18. A difference here and there can easily fall into the amount of variability possible in the handwriting of a scribe, whereas regular and consistent differences are more significant.

In regards to the two couplets (2Q24 and 4Q184 / 4Q284a and 6Q18) from Table 1 that fell within range of the 55–70% chance of being the same scribe, I did not make such detailed analyses. It was clear to me when looking closely at the graphs in these manuscripts that too many differences existed between them to suggest the same scribe. Having established that a *lamed* is not enough to indicate that they were copied by the same scribe, there was no need to do such an in-depth analysis to know that different scribes penned these manuscripts.²⁹⁵

²⁹⁵ One might wish to raise the question as to why the computer coupled them together, but that is not precisely the right question to raise. These manuscripts on the basis of probability (FRR curve) fell within the 55–70% range of being one scribe. The computer did not say they were one scribe. The probability-based decision-making is left to the human palaeographer.

3.7 Reflecting on Traditional Palaeographic Models in Light of Digital Tools

This section reflects on traditional palaeographic models in light of the digital process engaged here for the identification of scribal hands. The first model is one in which palaeographers identify a hand from a specific and set list of criteria. The second model is one in which palaeographers identify a hand from an idiograph.

3.7.1 Lists of Criteria for the Identification of Scribal Hands

When following this model, one will identify and describe a scribal hand based on a set of features that palaeographers deem as significant and thus set out in a list. ²⁹⁶ Different palaeographers create different lists. ²⁹⁷ The lists operate to both standardise and quantify identifications and descriptions of hands, with the theory being that in recording said features scribal fingerprints will emerge. The lists are helpful in encouraging one to think about which allographic components are specific to an individual hand. Furthermore, they enable a quantification

²⁹⁶ Mark Aussems, *Christine de Pizan and the Scribal fingerprint; a quantitative approach to manuscript studies*, MA Thesis (2006). Stokes, "Computer-Aided Palaeography," 313–14.
²⁹⁷ For lack of space, I will not provide here all of the lists and the characteristics therein. However, the first recorded list from Jean Mallon in *Paleographie romaine* listed seven measurable features. "1. Form, 'the morphology of the letters.' 2. Pen angle in relation to the baseline 3. Ductus, which is the sequence and direction of a letter's different traces. 4. Modulus, the proportions of the letters.

5. Weight, 'the difference in thickness between hair lines and shadow lines. 6. Writing Support. 7.

Internal characteristics."

The most recent list, which was the list Aussems used to examine the "Queens Manuscript" of Christine Pizan is a list from: Jan W. J. Burgers, *De palaeografie van de documentaire bronnen in Holland and Zeeland in the dertiende eeuw* (Louvain: Peeters, 1995). The list is as follows. 1. Slant. 2. Writing angle. 3. Weight. 4. Modulus. 5. Format. 6. Width of the margins. 7. Ruling and irregularities of the base line. 8. Flourishes and other decoration. 9. "Text structure," punctuation, and use of majuscules and capitals. 10. Abbreviations. 11. Cursiveness between letters. 12. Cursiveness within letters. 13. Characteristic letter forms.

In Chapter 2, Section 2.4, I also provided a list from Yardeni that she worked with when identifying scribes in the Aramaic documentary texts.

process to happen as many of the features can be valued, counted and compared.

Yet, the lists raise seemingly endless questions and challenges. On the general level, Aussems asks, "when does a method of analysis (list) contain enough parameters to provide a scribal fingerprint?²⁹⁸

On the level of the particular—such as pen and writing angle—also questions arise. Stokes asks: what does writing angle actually mean, how does one accurately measure pen angle, and what strokes should one measure when measuring angles?²⁹⁹ Aussems asks: "How big is the difference between a writing angle of 40 and 45 degrees?"³⁰⁰

Clearly the literal answer is five degrees, but what Aussems was driving at is that it is difficult to ascertain whether five degrees is significant. Palaeographers know that angles are significant, but knowing they are significant is different from knowing in value terms what is significant about them. If 5° of difference is deemed as not significant, at what point does a difference become significant? Could one suppose that if the strokes are consistently within the range of 0–10° then this is an acceptable parameter for a scribal fingerprint, but at 11° it becomes a different scribe?

A palaeographer would not reason as such, given there are always outliers, and some scribes are more consistent than others are. The issue is that the lists suggest to measure writing angles but they do not contain guidance as to the parameters in which one should expect a scribal hand to fall. The lack of parameters in guiding and standardising what is significant applies to all of the features on all the lists. To a point, the lists standardise which features are measured, but each individual palaeographer will still differ in how they value

²⁹⁸ Aussems, *Christine de Pizan*, 52.

²⁹⁹ Stokes, "Computer Aided Palaeography," 315.

³⁰⁰ Aussems, *Christine de Pizan*, 51.

each measurement, and at what point they think that a scribal fingerprint emerges.

On the one hand, the lists of criteria denote what are units of handwriting, and palaeographers working with the lists denote what are significant units of handwriting. Digital models, on the other hand, have the ability to alter one's perspective regarding what is a unit of handwriting. For example, working with the hinge feature palaeographers are not forced to selectively decide which angles they deem as significant, as the algorithm measures speedily thousands of angles. Furthermore, a unit of handwriting is no longer a descender angled at 5°, but a complex set of angles measured from central pixels to contour pixels. This is not to insist that digital models override traditional models, but rather to say that digital models expand what a unit of handwriting is.

3.7.2 Idiographs

In regards to Yardeni's identification, it appears that she was working with a model common in forensic handwriting analysis, which is identifying idiographs that the writer produced unconsciously. ³⁰¹ Davis explains that forensic examiners make detailed comparisons of all of the graphs, but for the court appearance the examiners prepare a chart that selectively displays what is idiographic. ³⁰² Choosing what to include is a matter of knowing which handwriting characteristics are likely to be idiographic. In her brief article, Yardeni argued the scribe she identified is easily recognisable by the *lamed* with the curved lower part, leading me to suggest she concluded that she knew what was idiographic.

_

³⁰¹ Davis, "The Practice of Handwriting Identification," 255.

³⁰² Davis, "The Practice of Handwriting Identification," 259. He does stress that all the charts of all the graphs are on-hand if needed.

How did employing a digital method encourage me to reflect upon a model that focuses almost exclusively on the identification of an idiograph? I trust that such a model works for forensic examiners who build up a picture of subtle, idiographic components that they have observed writers to produce unconsciously. However, this idiograph model does not easily translate to ancient manuscripts if the so-called idiographic letter could readily be copied and imitated. Scribes and scripts were taught in ties of intimate relationships such as families and religious communities, manuscripts were copied from one to another, and gradations in styles were perpetuated. Working in collaboration with digital tools enabled me to reflect on aspects of similarity and difference; to realise that one can assume too quickly that a similarity means a same scribe, rather than a same style; and to reflect more deeply on the role of imitation in the scribal culture of the ancient world.

3.8 Conclusion

This chapter outlined an iterative process between digital and traditional palaeography for testing fifty-seven manuscripts Yardeni suggested the one scribe copied. The digital part of the process suggested that a different scribe penned most of the manuscripts. Only twelve manuscripts clustered into a group, or fell within the probability range of being the same scribe. After applying a traditional palaeographic analysis to these twelve manuscripts, I

-

³⁰³ Parkes tells the story of a fourteenth century English scribe imitating the writing of from the twelfth century. Parkes, *Their Hands*, 142. "The scribe also traced fine replicas of twelfth century ascenders and managed to achieve appropriate spacing and proportions of letter shapes." He adds also that, "During the last quarter of the fifteenth century and into the sixteenth century a number of scribes copied texts in handwriting with obsolete details, and a pronounced archaic aspect." Parkes, *Their Hands*, 143.

Stokes also recognised the ability of medieval scribes to imitate from each other, saying that particularly the more distinctive features were more easily imitated. Stokes, "Computer Aided Palaeography," 315.

Cf., also, Dhali, Popović, Schomaker, "Artificial Intelligence Generates New Evidence." Here, these scholars demonstrate that the second scribe of 1Qlsa^a emulated the first scribe's handwriting.

judged eight manuscripts to be similar enough to be penned by one scribe. These manuscripts are 4Q161 (plsa^a) 4Q166 (pHos^b), 4Q171 (pPsa^a), 4Q215 (TNaph), 4Q397 (MMT^d), 4Q439 (Lament by a Leader), 4Q474 (Text Concerning Rachael and Joseph) and 11Q18 (NJ ar).³⁰⁴ For lack of the scribe's real name, we have called this scribe GQS001.³⁰⁵

Yardeni suggested one similar letter, the *lamed*, across fifty-four to ninety manuscripts to be an idiograph, but she did not evaluate the palaeographic differences, nor assess the scribe within—and then distinguish him from—his script type and style, i.e., the Herodian round semiformal.

Although an idiograph may have indicative value, a palaeographic approach that encourages identifying only one idiograph is risky. A letterform that may have value in understanding a type and style instead becomes indicative of a scribe. Furthermore, if one did want to identify a scribe on the basis of an idiograph, they would need to explain why the scribe is consistent with one feature, when all others are subject to change. Collaborating with a digital palaeographic method that takes into account both the genetic and memetic factors of handwriting, as well as considering the ability of scribes to copy and imitate each other, can complement and balance palaeographic approaches that look mainly, or exclusively, for idiographs.

³⁰⁴ I acknowledge the possibility that this scribe may have penned a small number of other manuscripts, which further research may indicate. I was not able to test all ninety manuscripts, and the statistical probability error range was tight.

³⁰⁵ GQS001: the Groningen Qumran Scribe 001. Regarding the previously identified scribes from the Qumran collection, there exists no system for naming them. The scribe of 1QS is the most well-known scribe in the field. His name refers to the largest of the manuscripts he copied. For details of this scribe, see Moore, Cross and Trever, *Scrolls from Qumran Cave* I, 4; Tigchelaar, "In Search of the Scribe of 1QS," 439. Yardeni also did not name the scribe she identified. Commonly, scribes are named after the manuscripts they copied. For example, the scribe of 1QpHab and 11Q20. See, for example, van der Ploeg, *Qumrân: Sa piété, sa théologie et son milieu* 107. That works when the scribe only copied two or three manuscripts. As there is no systematised way for tracking identified scribes, the "Hands that Wrote the Bible" project in Groningen set up a straightforward system that allows for continuous tracking. GQS, Groningen Qumran Scribe. The 001 leaves open the possibility of further identifications with the technology developed in Groningen.

Before this study, palaeographers were not able to provide any independent evidence, beyond expert opinion, whether one scribe wrote the fifty-seven tested manuscripts. Our iterative approach between digital and traditional palaeography generated new data to suggest that different scribes wrote most of these manuscripts. Yet, one scribe that copied eight manuscripts did emerge from the data; namely GQS001. The identification of this scribe is not entirely original. Allegro and Strugnell already noted that one scribe penned the three *pesharim* of 4Q161, 4Q166 and 4Q171. Tigchelaar noted when considering the Herodian round semiformal manuscripts that one scribe copied 4Q397 and 11Q18. Tardeni included these eight manuscripts in her first list with forty-eight other manuscripts. Nonetheless, these eight manuscripts as belonging to one scribe is a new configuration. Thus, this study has brought forth a newly identified scribe for the field of Qumran studies.

_

³⁰⁶ Allegro, DJD 5: 50; Strugnell, "Notes en marge du Volume V,"163–176 at 199–201.

³⁰⁷ Tigchelaar, "Scribal Practices as Attested in the Dead Sea Scrolls."

4. Chapter Four:

Spelling and Scribal Practices of Dead Sea Scribes

4.1 Introduction

The previous two chapters explored methods for identifying scribes, so as to confirm the identification of a number of Dead Sea scribes. It is, therefore, now possible to offer in-depth analyses on a range of textual and literary aspects accorded to the manuscripts copied by some of these scribes. This chapter focuses on spelling and scribal practices; Chapter Five will explore literary content and codicological features. This chapter compares the spelling and scribal practice of three of the identified scribes, whose handwriting was discussed in Chapters Two or Three. The three scribes are GQS001, the scribe of 1QS and the scribe of 1QpHab and 11Q20. These three scribes are the most prolific of all of the identified scribes. GQS001, and the scribe of 1QS, both copied eight manuscripts each. While the scribe of 1QpHab and 11Q20 only copied two manuscripts, the considerable length of both these two manuscripts makes this scribe among the top three most prolific, if one is thinking in terms of the amount of text available from his writings.

Each of these scribes differ from one another in their spelling and scribal practices. Specifically, spelling practices relate to such things as the way the scribe employs and proliferates the *matres lectionis* (*plene* spelling), or morphologically lengthens words by adding vowel sounds (lengthened spelling). Scribal practices relate to the *paragraphos* markings inserted by the scribes, or how they make corrections, or write the name of God. One of the gifts of the DSS is that through them it is possible to see how scribes wrote and copied scrolls by observing the spelling practices (orthographic and morphological) and the scribal markings on the scrolls. This chapter records in charts the elements of the spelling and scribal practices three scribes (GQS001, the scribe of 1QS and the scribe of 1QpHab and 11Q20). It makes analyses of the similarities and differences within the scribal practice of one scribe, and then following between the three scribes.

The significant element of the orthography (*plene* spelling) of these scribes is related to the proliferation of *matres lectionis*— *aleph, yod, waw, he*— both in the middle and at the end of words, to represent known vowel sounds. The significant element of the morphology (lengthened spelling) is the lengthening of words with a *he* to express an additional /a/ sound at the end of the word. Since their discovery, this *plene* / lengthened spelling has served as one of the striking elements of the DSS. First, because it differs from the Hebrew Bible, and second, because it differs within itself. As becomes clear throughout this chapter, the use of vowel markers is not standardised, which makes it indeed interesting as it opens up a discussion of the wide range of causes for the use of the *matres lectionis*.

Previous analyses of the orthographic, morphological, and scribal markings have focused either on the consistency or inconsistency of scribal activity across the whole Qumran corpus. One perspective perceives the existence of sectarian scribal practice for the sectarian scrolls that is consistent enough to argue it is intentional, operating alongside another scribal practice for the large majority of the biblical and affiliated scrolls.³⁰⁹ Another perspective, in

³⁰⁸ It was Martin who that stated that on the first reading of the scrolls the orthography and morphology "struck" Hebrew scholars. Martin, *The Scribal Character*, 3–12. For contextualisation of the use of the *matres lectionis* in Hebrew writing over time, see, Werner Weinberg, *The History of Hebrew Spelling* (Cincinnati: Hebrew Union College Press, 1985), 1–10.

³⁰⁹ Emanuel Tov, "The Orthography and Language of the Hebrew Scrolls Found at Qumran and the Origin of these Scrolls," *Textus* 13 (1986): 31–57. idem, "Further Evidence for the Existence of a Scribal School," in *The Dead Sea Scrolls, Fifty Years After their Discovery*, ed. Lawrence Schiffman, Emanuel Tov, and James VanderKam (Jerusalem: Israel Exploration Society, 1997), 199–217; Tov, *Scribal* Practices; idem, "Scribal Practices and Approaches Revisited" HeBAI 3.4 (2014): 355–67; idem, "Some Reflections on Consistency in the Activity of Scribes and Translators," in *Textual Criticism of the Hebrew Bible, Qumran, Septuagint. Collected Essays Volume 3*, ed. Emanuel Tov, *VTSup* 167 (2015); idem, "The Tefillin from the Judean Desert and the Textual Criticism of the Hebrew Bible," in *Is There a Text in This Cave? Studies in the Textuality of the Dead Sea Scrolls in Honour of George J. Brooke*, STDJ 119 (Leiden: Brill, 2017), 277-292. Martin Abegg "Scribal Practice and the Pony in the Manure Pile," in *Reading the Bible in Ancient Traditions and Modern Editions: Studies in Memory of Peter W. Flint*, EJL 47 (2017), 65–88; idem, "Qumran Scribal Practice: Won Moor Thyme," in *Scribal Practice, Text and Canon in the Dead Sea Scrolls*, STDJ 130 (2019), 175-204; William Schniedewind, "Qumran Hebrew as an Antilanguage," *JBL* 118 (1999), 235–52 at 248.

noting the many inconsistencies, does not see these neat dividing lines.³¹⁰ To some extent, it depends on whether one emphasises the similarities or the differences

The advantage of my research is that it looks on the level of individual scribes. When analysing the *plene* and lengthened spelling practices of these three scribes, both consistencies and inconsistencies arise. This inconsistency occurs within the same manuscript and between the different manuscripts. The *matres lectionis* are most prevalent and consistent in the sectarian scrolls, although they are far from confined to the sectarian scrolls. The data gathered and recorded in this chapter on the consistency and inconsistency of these scribes' spelling and scribal practices contribute to the heavily debated question of whether sectarian scribes worked according to a sectarian scribal practice.

Emanuel Tov's Qumran Scribal Practice (QSP) is the most well-known model to argue that there are sectarian purposes behind the use of the *matres lectionis* and the scribal markings.³¹¹ Tov says that the *matres lectionis* and the scribal markings reflect a practice intentionally employed by the Qumran sectarians, most specifically for sectarian manuscripts. The QSP model has on one side of the coin the MT non-*plene* / non-lengthened spelling, and on the other side of the coin is the *plene* / lengthened spelling of the Qumran group. A question explored in this chapter is whether the practices of individual scribes reflect the binary system of the QSP model.

William Schniedewind has combined notions of the polemical character of the sect with "Qumran Hebrew" (QH), and the use of plene / lengthened

-

³¹⁰ See, for example, Eibert Tigchelaar, "Assessing Emanuel Tov's Qumran Scribal Practice," in *The Dead Sea Scrolls, Transmission of Tradition and Production of Text*, eds. Sarianna Metso, Hindy Najman and Eileen Schuller, STDJ 92 (2010), 173–207; Molly Zahn, "Beyond Qumran Scribal Practice: The Case of the Temple Scroll," *RevQ* 29 (2017), 185–203. Eric Reymond, *Qumran Hebrew: An Overview of the Orthography, Phonology and Morphology* (Atlanta: SBL, 2014). Jacobus A. Naudé, "The Transitions of Biblical Hebrew in the Perspective of Language Change and Diffusion," in *Biblical Hebrew: Studies in Chronology and Typology*, ed. Ian Young, JSOTSup 369 (London: T & T Clark International, 2003), 189–214 at 207; White Crawford, *Scribes and Scrolls*, 262–63.

³¹¹ Cf., n. 309, for all of the references to Emanuel Tov's Qumran scribal practice.

spelling practices. He suggested, "the small, isolated religious community on the north shore of the Dead Sea used language ideologically as a means of differentiating and further insulating themselves." In regards to the *plene* / lengthened spelling, he suggested the purpose behind it was for creating an antilanguage. Those who employ anti-languages aim to use language to distinguish and separate themselves from other groups who do not employ that language. Gary Rendsburg has supported Schniedewind's idea of an anti-language as the best explanation for the nature of QH. Rendsburg argued that compelling evidence for supporting the idea of QH as an antilanguage is its tendency towards "classicizing" or a suspected "pseudo-classicizing," and also the use of internal idioms the group created for sect members. Furthermore, he suggested that this tendency towards classicizing reflects the Qumran groups conservatism, which extends beyond their ideology and to their use of the Hebrew language as well. 144

Tigchelaar points out though a disparity of Rendsberg with Schniedewind. Tigchelaar recognises that, "for Schniedewind, these scribes were part of a counter-society and adhered to a linguistic ideology, Rendsburg turns them into a conservative group who preferred to use older forms since these would be more respectable." When thinking about the *plene* / lengthened forms (and other aspects of QH), Tigchelaar argues that, "it is unclear in most cases why these phenomena would in fact be pseudo-classicizing, let alone

-

³¹² Schniedewind, "Antilanguage," 235.

³¹³ Gary A. Rendsburg, "The Nature of Qumran Hebrew as Revealed through Pesher Habakkuk," in *Hebrew of the Late Second Temple Period; Proceedings from the Sixth International Symposium on the Hebrew of the Dead Sea Scrolls and Ben Sira*, eds. Eibert Tigchelaar, Pierre van Hecke, STDJ 114 (Leiden: Brill, 2015), 132-159; idem, "Qumran Hebrew (With a Trial Cut [1QS])," in *The Dead Sea Scrolls at 60: Scholarly Contributions of New York University Faculty and Alumni*, ed. Lawrence H. Schiffman and Shani Tzoref, STDJ 89 (Leiden: Brill, 2010), 217–46, at 238–240.

³¹⁴ Rendsburg, "Qumran Hebrew (With a Trial Cut [1QS])," 232.

³¹⁵ Eibert Tigchelaar, "Sociolinguistics and the Misleading Use of the Concept of Anti-language for Qumran Hebrew, in *The Dead Sea Scrolls and the Study of Humanities. Method, Theory, Meaning: Proceedings of the Eighth Meeting of the Internation Organization for Qumran Studies (Munich, 4–7 August, 2013)*, eds. Pieter B. Hartog, Alison Schofield, Samuel I. Thomas, STDJ 125 (Leiden: Brill, 2018), 195–206, at 200.

motivated by a wish to use an archaic form, or even reveal aspects of an antilanguage."³¹⁶

Regarding notions and ideas of a polemical sect at Qumran, Popović takes a different perspective.³¹⁷ He sees that the concept of a textual community, whose social activities revolve around the reading and writing of texts, provides insight into the lived reality of a group in which people were drawn together by texts.³¹⁸ A textual community may be a sect, but it does not have to be, leaving the particular issue of a textual community's character open for further exploration and analysis. Furthermore, a textual community may be reflected in the material aspects of the scrolls. Popović suggests how the scribal markings, on for example 4Q175, offer a window into the reading culture of a/the textual community behind the Qumran scrolls.³¹⁹

The above brief reflections (which will be elaborated upon throughout this chapter) on how Tov, Schniedewind and Popović use spelling practices and scribal marks to reflect on possible social realities demonstrates how spelling and scribal practices have broader implications for understanding the real-life circumstances that surrounded the Qumran scrolls. Reflecting on these real-life circumstances is substantially more complicated than collecting the material evidence. While the material evidence is tangible, these broader reflections are abstract in nature, and can only exist among the plethora of possibilities that sit behind the real-life circumstances of the scrolls. Section 4.3 of this chapter collates the material data on the spelling and scribal practices of GQS001, the scribe of 1QS and the scribe of 1QpHab and 11Q20, and compares the data. Section 4.5 reflects on potential influences of the scribes' practices. Section 4.6

³¹⁶ Tigchelaar, "Sociolinguistics," 203.

³¹⁷ Mladen Popović, "Qumran as Scroll Storehouse," 551-94; idem, "Reading, Writing, and Memorizing Together: Reading Culture in Ancient Judaism and the Dead Sea Scrolls in a Mediterranean Context," *DSD* 24 (2017): 447-70.

³¹⁸ Popović, "Qumran as Scroll Storehouse," 554.

³¹⁹ Popović, "Reading, Writing," 447-470. I will take this up further in the chapter when discussing scribal markings.

explores the notion of a Qumran scribal practice as a cause for use of *plene* / lengthened spelling and scribal markings.

My purpose for reflecting on the influences and causes of these three scribes' spelling and scribal practices is to explore the possible social realities behind the scrolls. What might the material aspects of the scrolls copied by these scribes suggest about the activity of writing and copying scrolls, and what was important to the scribes? Do the spelling practices of individual scribes reflect the intentional use of an anti-language? Do they reflect aspects of sectarianism? Do they reflect aspects associated with reading and textual communities? Did these scribes copy precisely from a *Vorlage*? The *Vorlage* is clearly a factor in the copying of scrolls, but is it the guiding principle? What influence did pronunciation and spoken registers have on spelling practices? What other processes lay behind the writing and copying of scrolls?

A final implication of studying the scribal and spelling practices relates to where the scribes copied the manuscripts. Tov has stated, although with caveats, that manuscripts that contain the scribal marks and employ the *matres lectionis* were likely penned at Qumran. ³²⁰ Other scholars have dismissed this perspective. ³²¹ However, if the particular features of QSP can be combined with other evidence that links the manuscripts to the site of Qumran, then the question remains open as to whether scrolls written in QSP can be associated with the site at Qumran.

As said above, for the exploration of spelling and scribal practices, the scribes in the spotlight are GQS001, the scribe of 1QS, and the scribe of 1QpHab

scribes wrote scrolls at Qumran—even down to the particulars of which scribes—should be kept on

³²⁰ The idea that QSP equals manuscript copied at Qumran was one of the earlier theories, see Tov, "Orthography and Language," 31. Later he nuanced such an idea, see, Tov, *Scribal Practices*, 264. Potentially, the claim of at Qumran is the hardest to support of all of the claims about QSP. Even if there are patterns in the data that suggest QSP is more common in texts classified as sectarian, in trying to link those patterns to the site of Qumran, scholars will inevitably ask, how do you know. Especially as ideas of the sect are geographically widening. However, the question of whether

the table. Cf., Chapter Six where I discuss GQS001 as situated at Qumran.

321 See Zahn, "Beyond Qumran Scribal Practice, 204; White Crawford, Scribes and Scrolls, 263.

and 11Q20. There are four different but interconnected aspects to the analyses of these scribes. The first aspect works on the level of each individual scribe and his spelling and scribal practice within and between the manuscripts he copied. The second aspect is how the spelling practices of the manuscripts each scribe copied relates to other copies of the same composition. The third aspect is comparative between the three scribes. The fourth aspect is how their spelling and scribal practices relate to QSP. In summary, this chapter aims first to understand the spelling and scribal practices of individual scribes and then to correlate the work of these scribes with QSP and other theories in the field that situate certain scribal and spelling practices in relationship to the Qumran group. Indeed, the different conceptions of this Qumran group will be considered throughout.

4.2 Features and Forms of the Qumran Scribal Practice

For documenting the spelling and scribal practices of GQS001, the scribe of 1QS, and the scribe of 1QpHab and 11Q20, predominantly, I adopt the set of features that correlate with Tov's QSP.³²² While his eighteen features are not the only examples of *plene* / lengthened spelling in the Qumran scrolls, Tov assessed that it is these eighteen features and forms that are distinctive of QSP. In Table 2 (below), column 1 records the number of the feature/s in Tov's list; column 2, the feature itself; column 3 the QSP form; column 4, the MT form; column 5 explains the difference between the QSP and the MT form, and when applicable the difference the additional letter makes to the pronunciation of the word.

³²² Tov, "Further Evidence," 199–217; idem, Scribal Practices and Approaches, 265–67

Table 2. Features of QSP

1	2	3	4	5
	Features	QSP Forms	MT Forms	Difference
1, 2	Independent Pronoun. M / F sing.	היאה / הואה	היא / הוא	Lengthened with a he to express a final /a/.
3, 4	Independent	אתנה / אתמה	אתם /	Lengthened with a
	Pronoun.	הנה / המה	אתן	he to express a final
	M / F plur.		הן / הם	/a/.
5, 6	2p/3p suff. on n/vb	-מה	-۵	Lengthened with a
	2p/3p suff. on prep	-המה	-הם	he to express a final /a/.
7	Qal imperf. (no	תקטולו / יקטולו	יקטלו /	A waw in the
	suffix)		תקטלו	middle, to express
	yiqţolu / tiqţolu			an /o/.
8	<i>Qal</i> imperf. (with	יקוטלנו	יקוטלנו	A waw in the
	suffix). y ^e quṭlenu			middle to express an /u/.
9	2p in all	קטלתמה	קטלתם	Lengthened with a
	conjugations			he to express a final
	qeṭaltemah			/a/.
10		/ מאודה / מואדה	מאד	Waw is added to
		מוד	זאת	represent /o/.
		זואת / זאות / זות		Elision of <i>aleph</i> on occasions.

12,		מושה / בוה	משה	A waw in the
13			כה	middle to represent /o/.
14		כול / לוא	כל	A waw in the
15			לא	middle to represent
			κ,	/o/
16		ביא	כי	An <i>aleph</i> is added.
17	2ms verbal form	-תה	n-	Plene. He is added
				to represent final
				/a/.
18	2ms suff. Nouns /	-כה	ղ-	Plene. He is added
	preps			to represent final
				/a/.

This list is far from exhaustive regarding the features and forms in the Qumran scrolls that differ from the MT. There are other interesting spelling phenomena—for example, the prevalence of the weakening of gutterals, and the addition of yod as a mater, or consonantal yod as in ירושלים—that make Qumran orthography and morphology so striking. Why Tov chose to zero in on a particular set of features and forms as indicative is not entirely self-evident; although, he must have seen some pattern with the above eighteen features.

Additionally, Tov included several scribal markings occurring on the Qumran manuscripts as an indicator for QSP. Scribes employed these features for such things as correction procedures, marking paragraphs and for the divine name. These scribal features and markings are *paragraphos* signs, cancellation dots, crossing out letters and words with a line, parenthesis signs, dots or paleo-

Hebrew characters for divine names, single paleo-Hebrew letters, the X sign, guide dots, scribal co-operation.³²³

4.3 Practices of GQS001, the Scribe of 1QS and the Scribe of 1QpHab and 11Q20

In the charts below—for GQS001 (Chart 7), the scribe of 1QS (Chart 8), and the scribe of 1QpHab and 11Q20 (Chart 9)—I divided the eighteen spelling features into six categories based on phonetic similarities. At the top of the charts are the orthographic categories. Orthographic categories were when the *mater* was added but, ostensibly, the pronunciation was not changed. The first orthographic category is waw to represent /o/ or /u/. In this category, I include the words that Tov said were features of QSP (לוא, בול) etc.), but I include many other examples where it is added to words in which the MT would not (commonly) add it. The second orthographic category is where the he is added as an expression of the final /a/ of the 2ms suffix. The third orthographic category is the addition of the aleph in ביא. This is most likely an orthographic feature, although it may also have been morphological.

In the charts, the morphological categories are below the orthographic. The morphological categories are for when the *he mater* creates a different pronunciation from that reflected in MT. The first morphological category is where the *he* is added to express an additional /a/ sound at the end of the four independent pronouns. The second is for when the *he* added to express an additional /a/ for the lengthened suffixes for the 2/3 mp on nouns, prepositions, and the indirect object on verbs.³²⁴

The use of scribal markings by the scribes are listed in the charts. Scribal markings include how the scribes wrote the Tetragrammaton, their use of *paragraphos* signs, guide dots and correction procedures. In the Qumran scrolls there are scribes who write the Tetragrammaton with the palaeo-Hebrew script,

³²⁴ For a discussion as to the evidence that the *he mater* in these cases did reflect a different pronunciation, see: Reymond, *Qumran Hebrew*, 162–63.

³²³ Tov, "Further Evidence," 202.

but also scribes who use dots instead of letters to signify the name of God.³²⁵ In terms of the *paragraphos* signs, there are many of these, including cryptic A script, palaeo-Hebrew script, and X-signs.

The final category in my chart is "Additional." This category is reserved for spelling phenomena in the manuscripts penned by these scribes that differ from MT but that Tov did not include as QSP.

Following each scribe's chart, I offer analyses of their work in consideration of the questions posed for this chapter. Where are there consistencies and inconsistencies? How do the consistencies and inconsistencies relate to sectarian/non-sectarian content, the QSP model, and the *Vorlage*?

Only after discussing the scribes individually, I compare the three scribes to each other, to consider the other questions posed for this chapter. Do these scribes follow the same practice as each other? What processes lay behind the copying scrolls?

Chart 7:			

4.3.1 Analysis of GQS001 326

³²⁵ I further discuss throughout the chapter potential reasons for why these different procedures for writing the tetragrammaton. See also, for example: Jonathan Siegel, "The Employment of Palaeo-Hebrew Characters for the Divine Names at Qumran in Light of the Tannaitic Sources," *HUCA* 42 (1971): 159–72; Jonathan Ben-Dov, "The Elohistic Psalter and the Writing of the Divine Names," in *The Dead Sea Scrolls and Contemporary Culture: Proceedings of the International Conference held at the Israel Museum, Jerusalem (July 6–8, 2008)*, eds. Adolfo D. Roitman, Lawrence H. Shiffman, Shani Tzoref, STDJ 93 (2011), 79–104.

³²⁶ While GQS001 penned eight manuscripts, his eighth manuscript is 11Q18 (Aramaic). Therefore, 11Q18 is not included in this chart comparing the orthography and morphology of the Hebrew manuscripts.

	4Q161	4Q166	4Q171	4Q397
	<i>Pesher</i> Isaiah ^a	Pesher Hosea ^a	<i>Pesher</i> Psalms ^a	MMT
Orthography				
Waw to represent	גבול x2	לוא x 3	לוא x 7	מושה
/o/ and /u/ in common words.	ולוא	x 2 בול	2 x 9 בול	שלוא לוא
	כוהנים ,	אנוכי	אעבור	x 2 מכול
	ושוטף / אוזניו בוהני / ³²⁷	הפקודה	התהולל / יוברו	שבול
		יושיעום ³²⁸	ועזור / ,	/ האוכל שנואה /
			אתבוננה / זומם עושה / והורק	נותנים ³³⁰
			קודשו / יובדו	550
			³²⁹ ונותן / צופה	
ביא / כי	כיא ³³¹	ביא x 2 ³³²	צ ביא x 12	בי x 3 ³³³
-כה / -ך	-	-	³³⁴ וירוממכה	אליכה
קטלתה / קטלת				³³⁵ לבבכה

³²⁷ One footnote is used per box, not per word, to reference where in the manuscript the word is found. * operates as a space between each reference.

ובכול 5–6 ii, 12 * 8–10 iii, 20 * 8–10 iii, 20 * 8–10 iii, 20 * 1, 4 * 2–4, 3 * 8–10, 22 * 8–10, 24 * 2–4.

³²⁸ 1 i, 9 *1 ii, 11 * 1 ii, 14 . בול 1 ii, 14 * 1 ii, 15. The remainder 1 ii, 2 * 1, 10 * 2, 14.

 $^{^{329}}$ Starting from אעבור 3–10 iv, 13 * 1–2i, 17 * 1–2 ii, 1 * 1–2 ii,

³³⁰ 14–21, 15 * 14–21, 11 * 6–13, 6 * 3, 4 * 6–13, 4 * 6–13, 11 * 4, 2 * 14–21, 7 * 14–21, 9.

³³¹ 1 i, 4.

³³² 1 i, 12 * 1 i, 15.

³³³ 6–13, 4 * 14–21, 5 * 14–21, 9.

³³⁴ 3–10 iv, 10.

³³⁵ 14–21, 10 * 14–21, 14.

Morphology

Yiqţolu / tiqţolu y ^e quţlenu	יסומבנו		וידרוכו ³³⁷	-
y quiterra	ישפוט ³³⁶ ישפוט			
Independent	היאה	³³⁹ והמה	x 3 ³⁴¹ מה	היאה
Pronouns	³³⁸ המה	³⁴⁰ הם		³⁴² את]מה
				אתם ³⁴³
2 / 3 mp suffix	פיהם	אליהם	עליהם	להיו]תמה
nouns / prepositions /	שובם	עליהם ,מתעיהם	עדריהם	להתיכמה
verbs	344	להם ,מצרותיהם, מהם	בלבם קשתם	עמהם
		³⁴⁵ אתנם גום	וקשתותיהם	347
		Among others	מידם עליהם	
			³⁴⁶ ולהם	
Scribal Marks	Palaeo יהוה	Guide dots	7x יהוה Palaeo	Corrections
	3.10		Interlinear insertions.	dots

³³⁶ 8–10 iii, 18 * 8–10 iii, 23.

³³⁷ 3–10iv, 12.

³³⁸ 1 i, 2 * 8–10 iii, 5.

³³⁹ 1 ii, 13.

³⁴⁰ 1 ii, 18.

³⁴¹ 1–2 ii, 4 * 1–2 ii, 5 * 3–4 iii, 12.

³⁴² 6–13, 4 * 6–13, 14.

³⁴³ 14–21, 18.

³⁴⁴ 8_10 iii, 23 * 5_6 ii, 2.

 $^{^{345}\,1\,}ii,\,4\,^*\,1\,ii,\,5\,^*\,1\,ii\,,5\,^*\,1\,ii,\,13\,^*\,1\,ii,\,14\,^*\,1\,ii,\,6\,^*\,1\,ii,\,18\,^*\,1\,ii,\,4\,.$

 $^{^{346}}$ 1–2 ii 18 * 1+3–4 iii, 6 * 1_2 ii, 15 * 1_2 ii, 16 * 1_2 ii, 19 * 1_2 ii 18 * 1_2 ii 19 * 1+3_4 iii 3.

³⁴⁷ 5, 2 * 5, 4 * 6_13, 8.

³⁴⁸ 8_10 iii, 13.

Additional	2 x ירושלים ³⁴⁹	אתנם ³⁵¹ ? אתנם	relision רשים = elision ירושלים = 353
	עיתה. ³⁴⁹ בתיאים x3 ³⁵⁰	גואים x2 ³⁵²	of aleph ³⁵³
	4Q215	4Q474	4Q439
	Test. Naphtali	Rachel Joseph	Leader Lament
Orthography			
Waw to represent	לוא	מאודה	x 3 בול
/o/ and /u/ in common words.	כול / וכול	מבול	/ עומדים
	מאודה	³⁵⁶ אוזניהם	שופטי / פותיים ³⁵⁷
	תואמר		
	יעקוב		
	35 נולדה / בורה	5	
כיא / כי	יבי ³⁵⁸	ביא ³⁵⁹	
כה		³⁶⁰ לכה	
קטלתה / קטלת			

³⁴⁹ 5–6 ii, 9 * + 5–6 ii, 13 * 5–6, 5.

³⁵⁰8–10, 3 * 8–10, 7 * 8–1, 8.

³⁵¹ 1 ii, 17

³⁵² 2, 13 * 2, 16.

³⁵³ 1+3–4 iii:5

³⁵⁴ 6–13, 3.

³⁵⁵ 1-3, 9 * 1-3, 4 * 1-3, 7 * 1-3, 5 * 1-3, 7 * 1-3, 4 * 1-3, 7.

³⁵⁶ 4, 5 * 1, 6 * 1, 10.

 $^{^{357}}$ בול 1 i, 2 * 1 i, 5 * 1 i, 6. The remaining three words 1+2, 4 * 1+2, 5 * 1+2, 7.

³⁵⁸ 1–3, 4.

³⁵⁹ 1:4.

³⁶⁰ 1:7.

Morphology

Independent	³⁶¹ היאה		
Pronouns			
2 / 3 mp suffix		אוזניהם	אחריהם ³⁶³
nouns / prepositions / verbs		קומ[ת]ם	
		³⁶² משאלתמה	
Scribal Marks	Guide dots	יהוה	
		Non Palaeo ³⁶⁴	
Additional	ראישונה/ עישיו ³⁶⁵		

For the analysis of Chart 7, I will first discuss where the scribe is consistent and inconsistent, and how his practice relates to the QSP model. Second, for understanding more deeply the spelling practice of this scribe and how he may relate to his *Vorlage*, I discuss how 4Q397 relates to other copies of the *Miqṣat Ma'ase ha-Torah* (MMT). 4Q397 is the only Hebrew manuscript copied by GQS001, which belongs to a composition in which other copies were found in the Qumran corpus.³⁶⁶ Therefore, it is the only manuscript in which it is possible to make such comparisons.

GQS001 is unwavering in using the waw to represent /o/ and /u/ in the QSP forms. We can see this in the commonly occurring words, such as (z)/(z)

³⁶¹ 1–3:5.

³⁶² 1, 10 * 1, 13 * 1, 14.

³⁶³ 1 i, 4.

³⁶⁴ 1 i, 4.

³⁶⁵ 1–3, 3 * 1–3, 5 * 1–3, 7.

³⁶⁶ There is also 11Q18, but this text is in Aramaic.

etc.) and the *yiqṭolu* forms. Regarding many other additional words (e.g., יעקוב), the scribe adds the *waw*. The one exception among many is 4Q215.

GQS001 always employs the mater for final a for 2ms suffix כה.

GQS001 employs *plene* ביא in the three *pesharim* (sectarian) and 4Q474 (non-sectarian). He employs shortened בי in 4Q215 (non-sectarian) and 4Q397 (sectarian), begging the question of whether he employed other shortened forms in these manuscripts. Regarding 4Q215, every other example he employs *plene* spelling both regarding the so-called QSP forms, and also regarding other words, such as יעקוב / ראישונה/ עישיו. ³⁶⁷ 4Q397 is more complicated due to the non-lengthened uand אתם and אתם Yet, these short forms are rare, and in all the other abundantly occurring examples, the scribe employs *plene* or lengthened spellings.

Regarding the independent pronouns, the scribe predominantly employs the morphological lengthened forms. However, in 4Q161 the scribe spells / המה in the two different ways; also, in 4Q397 he spells אתם / אתם / וה the two different ways. One might assume that the reason for the occurrence of both המה / in 4Q161 (Pesher Hosea) was related to content and Vorlage, as הם appears in the biblical quote from Hosea, whereas המה appears the interpretation section. Surprisingly though, this particular quote from MT Hosea uses lengthened המה. What looked like a cut and dry case of a scribe switching spelling practices because of copying from Vorlage was complicated because the copy of the text one might assume was his Vorlage (proto-MT) evidences lengthened forms where the DSS scribe uses the shortened form. MT Hosea, like pesher Hosea switches between the set only way to explain this is simply to say, the scribes of both texts switched between these forms.

Regarding the suffix 2 / 3 mp, this is the only feature where GQS001's preference is not to use the *mater*. There are only three times where he writes -

³⁶⁷ These words occur commonly in MT, but only in very rare occasions in *plene*.

מה; ³⁶⁸ among many other examples of just final *mem* (I recorded ten examples of the shortened form in the chart above).

Interesting orthographic and morphological phenomena exist in the category I mark as additional. For example, scribe GQS001 in 4Q161 spells *Kittim* as כתיאים instead of בתיים. The question is whether the phenomenon with the additional *aleph* for words that end with the etymological $-iy\bar{i}$ is orthographic or morphological. In other words, does the *aleph* in these gentilic nouns suggest a different pronunciation from when it is not included? Reymond outlines the differing opinion between himself and Elisha Qimron. He says that Qimron sees that the *aleph* in these cases does not represent a glottal stop but rather a "glide." A glide is an aspect of the process of the weakening of gutterals. In other words, whether the spelling is with the double *yod* or with the *aleph*, it is basically pronounced the same. However, Reymond hears that with the addition of the *aleph* a distinction between two sounds is implied. He says that "the similarity in sound between $-iy\bar{i}$ (see בתיים) and -i- led to some speakers emphasising the distinct syllables through the intervocalic glottal stop $(-i\bar{i}-)$.

Another word in my additional category is רשים. In this case, the variation is not an additional *aleph*, but an elision of it.³⁷³ The elision of the *aleph* does not happen anywhere else in the scribe's manuscripts.

Also, in the additional category are two words that employ yod as an orthographic marker of /i/ or /ī/. It is not clear why Tov did not include the use of the yod mater as part of QSP, but he included the waw mater. In 4Q215 (non-sectarian), there are two words that employ yod in which the MT version of this word does not, see: ראישונה/ עישיו. In each case, one might assume that the yod

⁽their desire). משאלתמה (to become of them), להתיכמה (let them be united), משאלתמה (their desire).

³⁶⁹ These words are predominantly the gentilic nouns, see for example לויאים (Levites). But, also on occassions other words, see for example נבריאים (innocent ones) נבריאים (foreigners).

³⁷⁰ Elisha Qimron, *The Hebrew of the Dead Sea Scrolls*, HSS 29 (1986).

³⁷¹ Qimron, The Hebrew of the Dead Sea Scrolls, 26.

³⁷² Reymond, *Qumran Hebrew*, 128.

 $^{^{373}}$ In the DSS, the spelling of ראש varies. Sometimes a waw added before or after the aleph, or aleph is dropped and just with a waw.

is part of a digraph, in that two letters represent one sound. However, Reymond perceives that ראישונה is not so much a digraph, "but rather aleph being preserved as historical spelling and accompanied by a *yod mater*."³⁷⁴ The point is that again we might be seeing the scribe being guided by pronunciation.

Doe final word in my additional category is אתנם. The translation in the DSS Study Edition is "their gift," which would mean this is the shortened form, but this is debatable. "First, it is followed by המה meaning the use of the pronominal mem suffix for 3mp is not necessitated. Second, in the book of Hosea, the form is אתנה. Third, the word for gift (or wage) is אתנה. What, thus is happening with אתנה? Reymond says that confusion between mem and nun is common in the scrolls, with mostly a final nun being replaced by a final mem. He offers two thoughts as to why. Either there is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects. The interest is an overcorrection from Aramaic influences, "To that it could be a confusion between the two phonemes mem and nun in some dialects."

Finally, what of the scribal markings of this scribe? GQS001, in 4Q161 and 4Q171 employs the palaeo-Hebrew script for the name of God, whereas in 4Q474 he uses the square script. One may ask why the scribe uses the two forms. Scholars such as Tov have argued that palaeo-Hebrew is more common in sectarian texts than biblical or parabiblical texts. Two of these scribes reflect Tov's argument as 4Q161 and 4Q171 are categorised as sectarian texts and 4Q474 is a parabiblical text. Also, with the scribe of 1QpHab and 11Q20. He uses the palaeo-Hebrew script in his sectarian text (1QpHab), while his non-sectarian Temple Scroll employs the square script. The danger here though is that one

³⁷⁴ Reymond, *Qumran Hebrew*, 52.

³⁷⁵ García Martínez and Tigchelaar, *The Dead Sea Scrolls: Study Edition* Vol. 1, 331.

³⁷⁶ Reymond, *Qumran Hebrew*, 66–67.

³⁷⁷ In Aramaic, final *nun* is used for the plural suffix, so exceedingly common. Hence, why Hebrew scribes may overcorrect by applying a final *mem*.

³⁷⁸ Reymond, *Qumran Hebrew*, 67.

uncritically uses modern categories to explain what is going on, but these were not likely the labels of the ancient scribes.³⁷⁹

In 4Q397, the scribe uses correction dots. It is quite remarkable that in only one scroll is any correction procedure evident. There are parts of these scrolls missing—so we do not have all of the evidence—yet, this lack of correction procedures demonstrates the carefulness and professionalness this scribe brought to the penning of his manuscripts.

The other scribal markings on two manuscripts penned by this scribe are guide dots, in 4Q166 and 4Q215.

The above data has shown that the scribe has a preference for employing the *matres lectionis* and the so-called QSP features. However, he does employ the shortened form, predominantly on the 2 / 3 mp pronominal suffix on nouns, prepositions, and the indirect object for verbs. Additionally, there are four times where the non-*plene* form occurs for a feature in which *plene* is the norm. These are two different phenomena. Regarding the 2 / 3 mp suffix, the scribe diverges from the features considered QSP. In contrast, the other examples are of the scribe diverging from his own regular pattern. My research operates on both these levels, exploring where the scribe is consistent concerning QSP and if he is consistent concerning his internal dynamics. The question comes down to what is more significant and compelling, the correlations or the divergences?

Regarding the QSP model, given that there is only one of the QSP features he does not employ, this in and of itself is not enough to say the scribe is at odds with the OSP model.

Concerning his internal dynamics, the few places where the scribe diverges appear to be accidental. Armin Lange gives a reason for why accidents could happen. He says that because in the same palaeographic epoch there is the

173

 $^{^{379}}$ The use of categories of sectarian and nonsectarian, I continue to explore and unpack in Chapters 5 and 6.

existence of *plene* / lengthened (baroque) and defective (conservative) spelling practices, it is likely scribes copied texts with both. ³⁸⁰ Therefore, when switching between manuscripts, scribes could *accidently* find themselves using both in one manuscript. ³⁸¹ The point is that scribe GQS001 must have interacted with manuscripts that use *plene* / lengthened and defective, leaving open the possibility of accidentally using defective even if his preference was for *plene* / lengthened forms. The few places this scribe accidentally switches in his orthographic or morphological practices are not enough to suggest that the scribe, therefore, had no internal dynamics regarding his spelling practice.

Furthermore, GQS001 is more consistent than the other two scribes analysed in this chapter. While the other two scribes show a tendency to switch between the different choices of spelling practice based on *Vorlage*, there is evidence to show that GQS001 uses a lengthened spelling practice, where his *Vorlage* may have been defective. I demonstrate this here, when comparing 4Q397 (copied by GQS001) with three other copies of the MMT manuscripts.

4.3.1.1 A Comparison of 4Q397 with 4Q394, 4Q396 and 4Q398

This section compares 4Q397 with other copies of MMT (4Q394, 4Q396 and 4Q398). It demonstrates that on the one hand, in every example of an overlapping text between 4Q394 and 4Q396, the spelling matches, even when that spelling is idiosyncratic. On the other hand, where 4Q397 overlaps with other copies of MMT, it differs regarding the spelling features. First, see overlaps 1 and 2 (below), as here 4Q394 and 4Q396 match precisely. Second, see overlap 3, 4, and 5 (below), where 4Q397 differs every time from 4Q394, 4Q396, and 4Q398.

³⁸⁰ Armin Lange, "The Question of the So-Called Qumran Orthography, the Severus Scroll, and the Masoretic Text," *HeBAI* 3 (2014): 424–75 at 47.

³⁸¹ Lange, "The Question," 48.

```
Overlap 1:
```

```
(frag. 8iv: 7) בי לחת המוצקות המקבל <u>מהמה כהמ</u> לחה אחת
```

4Q396 — בי לחת המוצקות המקבל מ**המה** כ**הם** לחה אחת (frag. 1ii: 9)

Overlap 2:

4Q394 – וטהרה ולא (frag.8iv:2)

4Q396 – טהרה **ולא** (frag.1-2ii:4)

In both 4Q394 and 4Q396, the customary spelling of the negative particle is lengthened. Only once in each manuscript does the shortened form appear, and it happens in the same place across both texts.

Overlap 3:

```
4Q396 — ל[ו]הָּחُ[ים להיו]תם עצם (frag.1-2i:6)
```

4Q397 — לוקחים <u>להיו]ת**מה** ע</u>צם (frag.5:2)

Overlap 4:

4Q394 — לה]תיב**ם** [ו]לעשותםׁ (frag. 8iii:14)

4Q397 — להתיכ**מה** ולעשׁ[ותמה (frag.5:4)

Overlap 5:

4Q397 — בכ]ל לבב**כה** (frag.14-21:14)

4Q398 — בכל לבב**ר** (frag.14-17i:7).

From the five overlapping texts presented above, is it possible to claim that the scribe of 4Q397 inserted his own spelling practice into the text? Indeed, the evidence here may suggest such a scenario. Another scenario may be that there were many copies of MMT circulating at the end of the first century BCE and the scribe of 4Q397 copied from a different *Vorlage* than 4Q394, 4Q396, and 4Q398.

Given the possibility of both these scenarios, how can we know whether 4Q397 changed the text, or if the spelling tradition of his *Vorlage* differed from those used by the scribes of 4Q394, 4Q396, and 4Q398?

The analysis of Molly Zahn of the spelling practice of the scribe of 1QpHab and 11Q20 may offer insight. Her data shows that the spelling practice of 1QpHab and 11Q20, though copied by one scribe, does not match. To understand why, Zahn looked at other copies of the Temple Scroll and saw that 11Q20 and 11Q19 do correlate. Therefore, she suggested that the scribe of 11Q20 used the same spelling as his *Vorlage*. In the case of 4Q397, the opposite is true. The overlaps do not match. Does this mean that the opposite is also true, that the scribe did not copy from his *Vorlage*? It may be easier to show evidence of the influence of *Vorlage* when the overlaps between two texts of the exact composition match. However, that 4Q397 is the least defective version of this composition, and it is copied by a scribe who regularly uses *plene* / lengthened spelling, just may suggest that GQS001 in the case of 4Q397 diverged from the spelling practice of his *Vorlage*.

_

³⁸² Zahn, "Beyond Qumran," 185–203.

4.3.2 Analysis of the Scribe of 1QS

Chart 8: 383

Chart o.	1QS	1QSa	1QSb	4Q53
Orthography				
Waw to	(many) בול	לוא ³⁸⁵	לוא x4 ³⁸⁸	לוא x 6
represent /o/ and /u/ in	לוא (many)	over 15) כול	over 15) בול	זאות בכול
common words.	x 3 מושה	times)	times)	מ]אוד אדוני
	זואת 2 nזות	/ הפקודים קודש	קודשו / תעמוד / ויפקוד / קודשיכה / הכוהנים /	ויאומר x 2 ³⁹⁰
	רוש x 2	משפחותם		ויאמר x 2 ³⁹¹
	2 x וכוחו / מוד	/ הכוהנים	קדושים / שומעי / נחושה /	
	בש^ו^מעו/ וא^ו^רך	וברובות / פותי	יעובדוכה ³⁸⁹	
		/ יכתוב / עבודתו שופטים		
	מ^ו^לאת			
	ברואש / כובוד	שוטרים ³⁸⁶		
	בוקר / חודש ³⁸⁴	/ הכוהנים / מנוגע כושל		
		/ קודש / אנושי שולחן ³⁸⁷		

³⁸³ Given the sheer length of 1QS and some of the other manuscripts, space does not allow me to record all examples of his use of the *plene* and non-*plene* forms, but have reflected the scribe's common spelling practice as best I can.

 $^{^{384}}$ מושה 2, 12 * 8, 15 * 8, 22; זואת 2, 13 * 9, 20 מוד 10, 16 ובוחו 3, 2 * 11, 19. From 2, 13 * 4, 3 * 6, 17 * 4, 11 * 6, 14 * 10, 3 * 10, 10.

³⁸⁵ 1, 9.

 $^{^{386}}$ From הוקי 1, 5 * 1, 9 * 1, 9 * 1, 13 * 1, 15 * 1, 16 * 1, 19 * 1, 19 * 1, 21 * 1, 22 * 1, 24.

³⁸⁷ From הכוהנים 2, 3 * 2, 4 * 2, 7 * 2, 9 * 2, 13 * 2, 17.

 $^{^{388}}$ 1, 6 + 3, 18 + 4, 24 + 5, 18.

³⁸⁹ 1, 2 * 1, 3 * 3, 2 * 3, 2 * 3, 22 * 4 * 4, 28 * 5, 26 * 5, 28.

³⁹⁰ 1 i, 2 * 2 5 i, 3 * 5ii 7i, 6 * 5ii 7i, 12 * 7ii 11, 8 * 7ii 11, 14.

³⁹¹ 2–5i. 4 * 5ii–7. 25.

ביא / כי	ביא x 34	ביא x 2 ³⁹³	ביא x 3 ³⁹⁴	³⁹⁵ בי ^א
	כי x 1 ³⁹²			
-כה / -ך	לכה	-	Among others	לכה
קטלתה / קטלת	(and many,		בידכה / לכה	בכה
קטלת	many other occurrences).		/ ויחו]ננכה	x2 עבדכה
	עווניך ³⁹⁶		יפ]לטכה	אליכה ³⁹⁸
	•		ישעשעכה / יחונכה	
			והייתה / שׄנאתה x 2 ³⁹⁷	

Morphology

Yiqṭolu / tiqṭolu y ^e quṭlenu	יכופרו יעבורו x 3	יעמודה ⁴⁰⁰	-	
	ישקודו / יערובו ³⁹⁹			
Independent pronoun	x 14 הואה x 5	⁴⁰¹ המה	-	הואה היאה ⁴⁰²

³⁹² 5, 14.

³⁹³ 2, 8 * 2, 10.

³⁹⁴ 3, 20 * 4, 26 * 5, 7.

³⁹⁵ 1 ii 2.

³⁹⁶ 2, 8

³⁹⁷ 1, 4 * 1, 5 * 1, 5 * 1, 7 * 1, 7 * 2, 23.

³⁹⁸ 1:2 * 2–5 i, 4 * 2–5 i, 21 * 5ii–7i * 3 5ii–7i:17

³⁹⁹ 3, 6 * 2, 19 * 2, 20 * 2, 21 * 6, 4 * 6, 7.

⁴⁰⁰ 1, 22.

⁴⁰¹ 1: 3

⁴⁰² 5ii-7i, 9 *

2 / 3 mp suffix nouns / prepositions / verbs	כוחם , דעתם	משפטיהמה	⁴⁰⁵ ולהורותם	
	בם / הונם	ולהבינם/ בריתם		
	עתיהם / בקציהם	לשבטיהם		
	מועדיהם	וקדשום/ צבאותם		
	⁴⁰³ מהמה	שופטיהם / ושופריהם במחניהם / וכמסעיהם		
		⁴⁰⁴ פניהם		
Scribal Marks	Four dots for יהוה	Paragraphos cryptic ayin	Paragraphos cryptic ayin	Four dots for יהוה
	הואהא ⁴⁰⁶ (name of God).	Correction Dots		Correction Dots
	Paragraphos cryptic ayin			
	Correction Dots			
Additional	א הנשי x 2	⁴⁰⁸ הנשים	רוש x 2	מירושלם ⁴⁰⁹
	<i>He</i> replaces <i>aleph</i>	Elision of aleph		
	וחבא / וחנם ⁴⁰⁷			
	Het replaces aleph.			

⁴⁰³ 8, 21.

⁴⁰⁴ 1, 1 * 1, 5 * 1, 15 * 1, 29 * 1, 29 * 2, 15 * 2, 15 * 2, 16 * 1, 26 * 5, 24 * 5, 29.

⁴⁰⁵ 3:20.

⁴⁰⁶ 8:13.

⁴⁰⁷ 4, 6 * 7, 12.

⁴⁰⁸ 1, 27.

⁴⁰⁹ 7ii–11, 8.

	4Q175	4Q422	4Q443	4Q457b
Orthography				
Waw to represent /o/ and /u/ in common words.	א בול x 6	ולוא	לוא	כול
	א לוא x 3	בכול	כול	ויאומרו ⁴¹³
	אנוכי / מושה	בכול	נעמודה ⁴¹²	
	יעקוב ⁴¹⁰	⁴¹¹ אוכלם		
	היומים			
כיא / כי	⁴¹⁴ כי		-	-
-כה / -ך	כמוכה / אליכה		אליכה / ישעכה	
קטלתה / קטלת	אמרתכה ⁴¹⁵ תורתכה		בכה	
			פיך ⁴¹⁷ פיך	
	תמיך ואורך			
	חסידך , ואורך			
	משפתיך / ובריתך			
	מזבחך , באפך ⁴¹⁶			
Morphology				
Independent pronouns	-	⁴¹⁸ אותם	-	-

⁴¹⁰ 1, 1 * 1, 7 * 1, 12.

⁴¹¹ 2–6iii1 * 2–6iii 8 * 2–6iii 10.

⁴¹² 1, 6.

⁴¹³ 2, 8 * 2, 7.

⁴¹⁴ 1, 17.

⁴¹⁵ 1.17 * 1:18

⁴¹⁶ 1, 14 * 1, 14 * 1, 17 + 1, 18.

⁴¹⁷ 1, 12 * 2, 8 * 4, 2 * 2, 5.

⁴¹⁸ 2–6iii, 2.

2 / 3 mp suffix nouns / prepositions / verbs	להמ / להם ולבניהם אחיהםה , לאהםה	מימיהמה מקניהםה בבתיהםה פ[]הםה	-	בצעם בהם עליהמה
	אליהםה	ובהמתם		421
	שניהמה ⁴¹⁹ שניהמה לבבם ⁴²⁰ לבבם	ארצם אולכם גבולם		
Scribal Marks	Four dots for יהוה Paragraphos		Four dots for יהוה Correction	-
	cryptic <i>ayin</i>		Dots	
Additional	ירושלם ⁴²² הנבי / הנבי elision of <i>aleph</i> עתהא /למעאן /Addition of <i>aleph</i>			-

This scribe does not employ in a consistent fashion either QSP or MT spelling. He does with a couple of features, but most features and forms show a great amount of variability.

He is consistent regarding using the *waw* to represent /o/ and /u/. This is demonstrated both with the QSP forms, and with the many other words in which the scribe employs the *waw mater* where MT does not. The two exceptions in 4Q53 are that twice the scribe writes ויאומר, but then twice he writes ויאומר. I did not check every example in 1QS, however, there are plenty of examples of use of

⁴¹⁹ 1, 3 + 1, 4 * 1, 4* 1, 5 * 1, 5 * 1, 6.

⁴²⁰ 1, 3.

⁴²¹ 1, 7 * 2, 1 * 2, 6.

⁴²² 1, 30.

the waw mater provided, including the interlinear additions in 1QS—מ^ו^לאת / מ^ו^רך /בש^ו^מעו ווא^ו^רך /בש^ו^מעו . In these cases, the scribe is correcting towards the waw mater. The yiqtolu verbal forms also employ the waw.

The other QSP feature in which the scribe is consistent is his use of the lengthened independent pronouns. They are not commonly occurring; however, when they do, they are always in the long-form.

Regarding the inclusion of he for the final / \bar{a} / for the 2ms suffix. In 1QSb and 4Q53, the scribe always employs plene form a-, and although much less frequently occurring, he employs the plene form also in 1QSb for קתלתה. In 1QS and 4Q443 he uses more commonly the plene form, except again for the exceptions of פיך and יפיך and יפיך and יפיך and יפיך the suffix form for 2ms on nouns and prepositions occurs twelve times, with four times it being plene and eight times it being non-plene.

The scribe is inconsistent across many of his manuscripts regarding the lengthened he on the 2 / 3 mp suffix on nouns/prepositions/verbs. For example, in 1QS, 1QSa, and 4Q457b, although leaning towards the shortened forms, each manuscript includes one example of the lengthened suffix form המה-.

4Q175 and 4Q422 are particularly interesting regarding this morphological feature. In 4Q175 there are seven relevant examples, with three being shortened and four being lengthened. With 4Q422 there are eight relevant examples, four lengthened and four that are defective. Thus, both 4Q175 and 4Q422 exhibit a mixed-use of this feature that goes against the general tendency of the scribe in his other manuscripts. The particularly interesting aspect is that both 4Q175 and 4Q422 lengthen the 3mp suffix with the idiosyncratic practice of הםה-. The scribe is not consistent and uses both the medial and final *mem* when writing this suffix, making the final *mem* look like a mistake. However, one has to wonder if by virtue of happening six times across two manuscripts, and that it being the most common form, if it was the choice of the scribe in these two manuscripts to do it this way.

Regarding $\ \Box$, most commonly the scribe employs the lengthened form with the *aleph*. Except for the one example in 4Q175, spelled $\ \Box$. There is also the occurrence of $\ \Box$ in 4Q53. This interlinear correction suggests that although being aware of both ways of spelling this word, the scribe preferred to employ the *aleph*.

Regarding the category marked additional, the scribe's spelling regarding *aleph* is confusing. There are times he drops the *aleph*, there are times when he adds it, and then there are times when he replaces it with a *he* or a *het*. The best way to understand this is as a weakening of gutturals, ⁴²³ or the related quiescence of the *aleph*. ⁴²⁴ Reymond says that that where an *aleph* appears at the end of a syllable, its significance is etymological and not a glottal stop. One, therefore, should also include in the interpretation of the data from this scribe the influence of pronunciation, or a dialect in which the strength of the gutturals and the glottal stop was waning.

The details above show that the scribe switched between his spelling practice, but no more so than with the manuscript of 4Q175. 4Q175 is made up of a series of five quotes; three from Deuteronomy, although, the first two Deut. quotes follow Exod 20:21 in its pre-Samaritan form = Deut 5:28–29 + 18:18–19. Furthermore, the marginal signs indicate four quotes and Deut 5:28–29 + 18:18–19 were one. Then one quote each from Numbers and one from the Apocryphon of Joshua. Only a small number of intervening words exist between the quotes. Given that this manuscript is a series of quotes from other sources, one may wonder if the reason for the mixed spelling practice is due to the scribe copying faithfully from the *Vorlage*. I was curious whether it was possible to establish a pattern between the quotes and the spelling practice. To an extent, yes, although it is not always so.

⁻

⁴²³ Tigchelaar, "In Search," 181-82.

⁴²⁴ Reymond, Qumran Hebrew, 77–87.

⁴²⁵ Zahn, "Beyond Qumran," 192.

- The first quote from Deut 5: 28–29 the scribe always uses the short suffix form of הם-, although once with a final *mem* and once with a medial *mem*. He uses the lengthened suffix form of הם-.
- The second quote from Deut 18: 18–19, the scribe always uses lengthened הם-, and always with a final *mem*, not in final position. One time he employed the short suffix form of ק- alongside two lengthened בה.
- The fourth quote from Deut 33: 8–11, the first three occurrences of the 2ms suffix form is γ-, following with the use ασ-, then again twice γ-, then again once ασ-, then twice again γ-. This switching back and forth in the one quote is difficult to understand, leading to the question, was he sometimes copying (the shortened) and other times accidentally used his more usual spelling (the lengthened)?
- In the final quote from Josh 6:26 he employs once the lengthened form -

How then can we understand the spelling practice of 4Q175? Why did the scribe keep switching between the suffix forms? Certainly, switching happens between the different quotes, but sometimes also within them. It seems that he most likely copied faithfully from his *Vorlage*, but then found himself accidentally reverting the spelling that most reflects his pronunciation and usual practice.

Tigchelaar gives several clues from the manuscript that he believes support the position that the unusual orthography and morphology suggest the scribe was copying from different biblical manuscripts. For example, there is a change that happens between the first two quotes from Deuteronomy. In the first quote, the 3mp suffix הם- is short, and in the second quote it is long, המה-. Tigchelaar says, "One may hypothesise that either the scribe of 4Q175 or an earlier scribe of the text used by the scribe of 4Q175, copied from two sections of Deuteronomy written in a different orthography."

⁴²⁶ Tigchelaar, "In Search," 349.

says that the quote from Deut. 33: 8–11 evidences faithful copying of the scribe from the *Vorlage*, which may have been 4Q35 (Deut^h). Deut 33: 8–11 is the only quote that uses the shortened γ -, and although Tigchelaar acknowledges that in this quote twice the scribe uses lengthened γ -, this does not deter him from arguing the scribe was copying from a *Vorlage* with shortened forms. The shortened use of γ in this quote also supports his suggestion of direct copying.

For Tigchelaar, *Vorlage* even explains the unusual and idiosyncratic mixing of the positions of the medial and final *mems*. He said, "Apparently, this scribe mechanically copied the medial and final *mems* of the *Vorlage*, which itself may have been a text where *he* was added secondarily."⁴²⁸ This is of course a possibility. However, one would then need to apply this logic to 4Q422, in which the same phenomena of and is found. As 4Q422 reworks Genesis and Exodus, I looked to see if where the scribe wrote and overlaps directly with a biblical verse. This is not the case, nor does the text overlap directly with any other Qumran text. Therefore, applying the explanation of *Vorlage* in this case is somewhat more complicated. Although, it is still notable that the two manuscripts the and-occurs in (in the other relevant examples it does not) are more connected to the rewriting of other texts.

Indeed, 4Q175 is a most unusual manuscript regarding its orthography and morphology. It is possible that features were introduced into the documents by the scribe accidentally switching between different spelling practices, though *Vorlage* held to a large extent sway over the choices of the scribe.

Turning now to the scribal markings of the scribe of 1QS, this scribe is famous for using four dots to represent the Tetragrammaton, which occurs in three out of seven of the above manuscripts. These four dots also occur in

185

⁴²⁷ Julie Duncan suggests the possibility that the Deut 33: 8–11 quote in 4Q175 was copied directly from 4Q35 (Deut^h). Julie A. Duncan, "New Readings for the Blessing of Moses from Qumran," *JBL* 114 (1995): 273–90. Tigchelaar supports her suggestion. Tigchelaar, "In Search," 348.

⁴²⁸ Tigchelaar, "In Search," 349.

interlinear corrections in the Isaiah scroll and play a part in why scholars think it was this scribe who wrote the interlinear corrections in the Isaiah scroll.⁴²⁹

In four out of seven of his texts, this scribe applies correction dots. Also seen in four out of seven of this scribe's texts (not always the same four as those that apply correction dots) is the *paragraphos* cryptic A script *ayin*. Scholars also call the *paragraphos* cryptic *ayin* a hook-shaped sign. Additionally, in 1QS is an occurrence of the *paragraphos* palaeo-waw (Col. V, 1). Tov says that these *paragraphos* signs in either cryptic A script or palaeo-Hebrew were penned either by original scribes, later scribes, or readers. Given that the rarely occurring cryptic A *ayin* appears in four out of seven of this scribe's manuscripts, I think it must be correct that it was added by the scribe himself when writing the manuscript. It is difficult to make the same assumption with the palaeo-waw, as it appears only once in one manuscript.

Tov states that the reason for the *paragraphos* marking that utilizes another script style is far from always clear. Although, Popović says for 4Q175 that the reason for the hook-shaped signs is for marking off the four excerpted passages. He notes that commonly scribal markings appear for distinguishing between excerpts and that the reaches of such a practice extend beyond Qumran. He says, "The hook-shaped signs marking off the four passages in 4Q175 (Testimonia) are similar in form to those used in Greek excerpted texts, which may point to common technicalities of excerpting."

⁴²⁹ Discussed at length in Chapter 2.

⁴³⁰ For a table of all of the cryptic A / palaeo-Hebrew *paragraphos* signs plus discussion on the use of each see, Emanuel Tov, "Letters of the Cryptic A and Paleo-Hebrew Letters Used as Scribal Marks in some Qumran Scrolls," *DSD* 2 (1995): 330–39.

⁴³¹ Popović, "Reading, Writing," 463.

⁴³² Tov, "Letters of,"332.

⁴³³ Tov, "Letters of," 331.

⁴³⁴ Popović, "Reading, Writing," 463. See also, Lutz Doering, "Excerpted Texts in Second Temple Judaism: A Survey of the Evidence," in *Selecta colligere, II: Beiträge zur Technik des Sammelns und Kompilierens Griechicher Texts von Antike bis zur Humanismus*, ed. Rosa M. Piccione and Matthias Perkams, Hellenica 18 (Allesandria: Edizioni dell'Orso, 2005), 1–38.

scribes copying a series of excerpted texts, I will take up again below when discussing the function of manuscripts.

4.3.2.1 A Comparison of 1QS with other Serekh manuscripts

For clues as to the influence on the spelling practice of the scribe of 1QS, it is helpful to look at other copies of the *Serekh* manuscripts; while keeping in mind that *Serekh*, to degrees, is a modern concept and construct used to label particular manuscripts. Alexander and Vermes, and also Zahn, comment on the spelling practice of the *Serekh* manuscripts. Alexander and Vermes say that there is a diversity in the spelling practice across all of the *Serekh* manuscripts, which they categorise in three groups, super-full, full, and defective. Even though 1QS has some defective forms, its use of the lengthened independent pronouns (as opposed to just the orthographic features) allows its inclusion in the superfull category. However, not all *Serekh* manuscripts are super-full. Some are simply full, and others are defective. Alexander and Vermes notice a trend that the earlier manuscripts are fuller than the later manuscripts.⁴³⁶ Against Tov's QSP model, they argue that the wide-ranging spelling practices in such core sectarian manuscripts make it difficult to sustain the idea that the sect's scribes adhered to a specific orthographic and morphological practice.⁴³⁷

⁴³⁵ Jutta Jokiranta recognised, on the one hand, "There is no single manuscript, labelled as "S," that is identical to another S manuscript, neither as regards to textual form nor inclusion and preservation of the same textual sections." Jutta Jokiranta, "What is the *Serekh ha-Yahad* (S)? Thinking about Ancient Manuscripts as Information Processing," in *Sibyls, Scriptures, and Scrolls: John Collins at Seventy*, eds Joel Baden, Hindy Najman, Eibert Tigchelaar, JSJSup 175 (Leiden: Brill, 2017), 611–36 at 619. On the other hand, she recognises pertaining to S, that it is "still often worthwhile to try and reconstruct at least the broad textures of textual history, both on the basis of existing manuscript evidence and on the basis of source-/literary-critical method." Jokiranta, "What is the *Serekh ha-Yahad* (S)?," 622.

⁴³⁶ Phillip Alexander and Geza Vermes, DJD 29: 34.

⁴³⁷ Alexander and Vermes, DJD 29: 34.

As there are different literary traditions that the *Serekh* manuscripts follow, Zahn explored if it is possible to draw a correlation between the spelling practices and textual content. If one thinks that *Vorlage* is the greatest influence on scribes, they would expect a correlation between the literary traditions and the spelling practice. Zahn did not find that. For example, 4QSb (4Q256) and 4QSd (4Q258) are similar content-wise, but while 4QSb is lengthened, 4QSd is defective. 4QSe (4Q259) is like 4QSd in that it uses lengthened forms, but does not always overlap with it in terms of content and literary tradition. This means that for the *Serekh* manuscripts, no neat relationships can be drawn to explain the differing spelling practices through tracing potential lines of literary traditions and *Vorlage*. This leaves open the possibility that individual scribes of core sectarian texts operating to individual predilections when it comes to their orthographic and morphological practice.

_

⁴³⁸ Zahn, "Beyond Qumran," 196–97.

⁴³⁹ Zahn, "Beyond Qumran," 197.

4.3.3 Analysis of the Scribe of 1QpHab and 11Q20

Chart 9: 440

	1QpHab	11Q20	
Orthography			
Waw to	x 25 / בול x 28	x 6/ בול x 6 לוא	
represent /o/ and /u/.	בל x 1 ⁴⁴¹	אנוכי / x 1 אנוכי / x 1 אואת	
	בוגדים / איום / רחוק / יושבים	עולה (many times)	
	ויעזוב / ויעגוד / בהוקים	עומת / יותרת / מלואים / יותרת	
	עורלת / עורלת ⁴⁴²	עבודה / בכורה / ברובע / כוהנים	
		שבועות / שוחר ⁴⁴³	
כיא / כי	גיא x 18	ביא x 1	
	x 3 כי	2 x 3	
כה	א קטלתה x 1	בה x 7	
קטלתה / קטלת	2 x 8 -בה		
Morphology			
<i>yiqṭolu</i> and	ישופטנו יקבוצו ⁴⁴⁴	ישרופו / ישפוכו	
tiqṭolu / y ^e qutlenu	ישפטנו ⁴⁴⁵		
, 4			

 $^{^{440}}$ Largely, I borrowed this data from that which Zahn collected on the spelling practice of this scribe. Zahn, "Beyond Qumran," 190, 193–94. However, I collected the additional non QSP specific data.

⁴⁴¹ v. 5

⁴⁴² ii, 1 * iii, 2 * iii, 7 * iv, 8 * viii, 10 *, viii, 10 * viii, 10 * vii, 14 * vi, 13.

 $^{^{443}}$ From עומת - i, 14 * i, 16 * i, 12 * i, 16 * iii, 25, * iv, 1 * iv, 10 * 5v, 1 * 5, 14 * 15, 5.

⁴⁴⁴ xii, 5.

⁴⁴⁵ x, 5.

		תספורו / יעבורו ⁴⁴⁶	
Independent Pronouns	x 1 המה / x 8 הואה	אה x 1	
	x 9 / היא x 8	א x 1	
Suffix 2 nd / 3 rd plural nouns / prepositions / verbs	44 examples total of the defective forms. E.g.	21 in total lengthened. E.g. נפשותמה / להמה ונסכמה / ומנחתמה	
Scribal Marks	Correction dots X sign Paleo-Hebrew יהוה	Correction dots X sign Square Script יהוה	
Additional	ירושלם x 2 מאסו instead of מאשו כתיים instead of בתיאים	ובירות instead of ובירות	
	פרשו instead of פרשו להוגיע instead of להגיע		

This scribe is consistent regarding the waw to represent /o/ and /u/ in the common, occurring QSP words (besides the one occurrence among many of \Box), and the other words that use the /o/ and /u/ phoneme. The scribe also uses the waw in the yiqtolu and $y^equtlenu$ verbs. There is one occasion where the waw was not added ישפטנו. In this case, we can presume the scribe forgot, as there is an example of the same word in the manuscript where the waw is included. Additionally, regarding the final \bar{a} mater for the 2ms suffix: the scribe consistently employs the lengthened form \Box - and also \Box -.

⁴⁴⁶ i, 26 * ii, 9 * iv, 2 * iv, 11.

Regarding ביא / ביא, both texts use both; however, in 1QpHab ביא is dominant, in 11Q20 ביא is dominant.

Regarding the independent pronouns of היא / הוא in 1QpHab the scribe employs the shortened forms eighteen out of nineteen times, but then reversing his trend in this manuscript, he consistently employs the lengthened independent pronoun for the 3mp המה. It is difficult to say the preference of the scribe in 11Q20, as only two independent pronouns occur, with one being lengthened and the other not.

Regarding the 2 / 3mp suffixes, 1QpHab is always non-plene, while 11Q20 is more likely plene, but not always.

The additional category demonstrates several interesting aspects regarding the influence of phonetics on spelling phenomena, starting with מאסו instead of מאסו. A mix-up between sin and samekh is expected if pronunciation influences the scribe. Regarding פרשו, here yod was dropped from 3ms on plural nouns. Reymond says this is evidence of a linguistic movement from $/\bar{a}w/$ to $/\bar{o}/$. Regarding ובירות / הרץ / לוגיע Reymond says the elision of the glottal fricative he is to do with its inherent weakness, but that this can be likened to also the elision of aleph, which demonstrates the phenomenon of the weakening of the gutterals. Regarding בתיאים, I discussed the phonetics of this spelling when discussing 4Q161, as the same spelling was found there also.

Regarding the scribal features, these two manuscripts both use correction dots, although these are commonly employed in the Qumran scrolls. Less common in the Qumran scrolls is the X-sign, which is found in both 1QpHab and 11Q20. This sign is only found as what is seemingly a line filler in 1QpHab and 11Q20, 5/6Hev44-45, and possibly in 4Q252.⁴⁴⁷ The X-sign is also found in

Pieter, B. Hartog, "The Final Priests of Jerusalem and the Mouth of the Priest," DSD 24 (2017): 59-

191

⁴⁴⁷ For an interesting debate about the use of the X-sign in the 1QpHab see: Stephen Llewelyn, Stephanie Ng, Gareth Wearne and Alexandra Wrathall, "A Case for two Vorlagen behind the Habakkuk commentary (1QpHab)," in *Keter Shem Tov: Essays on the Dead Sea Scrolls in Memory of Alan Crown*, eds. Shani Tzoref, Ian Young PHCS 20 (Piscataway, NJ; Gorgias Press, 2013), 123-150;

1QIsa^a, 4Q177, and 4Q417, but Tov suggests that the X-sign mark areas of special interest in these last manuscripts. If the X-sign phenomenon is different in 1QIsa^a, 4Q177, and 4Q417 than in 1QpHab and 11Q20, then it becomes possible to say that the X-sign as a line filler was an idiosyncrasy of this scribe. The scribe of 1QpHab and 11Q20 differs between manuscripts regarding the use of the script for the Tetragrammaton. The *pesher* manuscript uses the palaeo-Hebrew.

To conclude, can any preferences of the scribe be distinguished, either on the level of QSP or on the level of him having a certain spelling system? Regarding QSP, both 1QpHab and 11Q20 employ QSP forms, but there are three features in which there is a divergence from the QSP forms. 1QpHab employs shortened הוא / הוא and then also the defective use of the 2 / 3mp suffix on nouns, verbs, and prepositions. In 11Q20 the scribe writes non-plene בי While both manuscripts can be associated with QSP forms and features, there are still differences between the two manuscripts regarding where and how consistently they use these forms.

On the whole, 11Q20 leans more towards the QSP associated features than 1QpHab. This is peculiar because 11Q20 is not one of the so-called core sectarian manuscripts; an intermediary sectarian possibly. 1QpHab is regarded by modern scholars as a core sectarian text. In terms of the QSP model, one would expect a sectarian text to be more lengthened / plene than one that could maybe be classed intermediary. In this way, we cannot explain the differences in the spelling practices of these manuscripts down sectarian / non-sectarian dividing lines.

The above data also suggests that the scribe does not conform manuscripts to his own scribal practice. Instead, his spelling practice appears to depend on the text he was copying from. Finally, I will discuss Zahn's comparison

^{80.} See also, Tov, "Letters of," 330–39, for the use of the cryptic A script and the palaeo-Hebrew script as a *paragraphos* marker.

of 11Q20 with other Temple Scroll manuscripts as evidence of this dependency of the scribe on Vorlage.

4.3.3.1 A Comparison of 11Q20 with other Temple Scroll **Manuscripts**

Zahn looked closely at the relationship between 11Q20 and the other copies of the Temple Scroll. She found that 11Q19 and 11Q20 are the same in all the spelling and scribal features. Likewise, 4Q524 is similar, except regarding the suffix for the 2 / 3mp on nouns, verbs, and prepositions. Also, the scribe of 4Q524 uses the four dots for the Tetragrammaton instead of the square script in 11Q19 and 11Q20. Given that the spelling practice of 11Q20 aligns more closely with other copies of the Temple Scroll than with 1QpHab, Zahn suggests the influence of Vorlage to explain the differences between 1QpHab and 11Q20.448

Comparison of the Spelling and Scribal Practices of the Three 4.4 **Scribes**

This data demonstrates differences and similarities in the spelling practices of these three scribes (who all copied a mixture of manuscripts considered sectarian and manuscripts that are not considered as such). A close examination of the details is needed for assessing whether the differences or the similarities are more significant. If the similarities—or the correlations in the employment of matres lectionis and lengthened spellings—are more significant, this adds support to the idea of a Qumran scribal practice. Whereas, if they differ greatly, then this is not highly supportive of such ideas and notions. The following eight aspects are relevant:

448 Zahn, "Beyond Qumran," 185.

- a) All three scribes are very consistent in employing the *waw mater* for /o/ and /u/, not only for the words listed as QSP but in almost every other example when this phoneme occurs in the word.
- b) The *yiqṭolu / yequtlenu* verbs exhibit some variance, but the lengthened forms are the more common practice of these scribes.
- c) Both GQS001 and the scribe of 1QpHab and 11Q20 always employ the he mater for final \bar{a} for the 2ms. The scribe of 1QS differs, predominantly in 4Q175 but also in 1QS and 4Q443 he employs the shortened form.
- d) Mostly commonly the scribes use ביא, but in 4Q397 (sectarian) and 4Q215 (nonsectarian) GQS001 uses בי. Twice among numerous times of ביא, the scribe of 1QS uses בי. The scribe of 1QpHab uses both forms in both texts; however, in 1QpHab ביא is dominant, in 11Q20 בי is dominant.
- e) The scribe of 1QS (who is usually the most inconsistent) uses only lengthened independent pronouns. GQS001 mainly uses lengthened independent pronouns, with two exceptions. The scribe of 1QpHab and 11Q20 uses both, and the differences can be drawn down manuscript lines.
- f) In terms of the suffix 2 / 3 mp on nouns / prepositions / verbs, GQS001 uses the shortened forms in abundant examples, and the lengthened form three time. The scribe of 1QS uses mainly the shortened form also, although in four manuscripts examples of both forms occur. In 1QpHab the scribe employs the defective form, and in 11Q20 the lengthened.
- g) Regarding the forms outlined under additional, each scribe has a particular idiosyncrasy. GQS001 is ample with his use of the *yod mater* adding it in Esau, a place called Aiath, ראישונה and Jerusalem. (The scribe of 1QS uses both spellings for Jerusalem, but this is the only examples of its addition. The scribe of 1QpHab in this text spells Jerusalem without the *yod*). The scribe of 1QS has a particular problem with *aleph*. Mainly he drops it and replaces it with *he* or *het*. There are many examples (see above in the charts), but for couple of examples see, בהנשי, וחנם. At other times, the scribe adds *aleph*, see, למעאן. The scribe of 1QpHab and 11Q20 has less of a pattern, but in 1QpHab examples can

- be found of adding *he*, dropping *aleph* or confusing *shin* with *samekh*. Both GQS001 and the scribe of 1QpHab and 11Q20 write כתיאים. Certainly, the scribe of 1QS and the scribe of 1QpHab and 11Q20 show evidence of a dialect in which there is a weakening of the gutturals. GQS001 makes far less mistakes with his gutterals. His only mistake is 1 cm for באשים for בשים 1 cm for באשים 1 cm for בעריא 1 cm for בעריא 1 cm for בעריא 1 cm for 2 cm
- h) Regarding the Tetragrammaton, GQS001 and the scribe of 1QpHab and 11Q20 employ both the *palaeo* and square script. The scribe of 1QS uses four dots for the name. GQS001 rarely employs scribal markings, except on a couple of his texts there are guide dots, and 4Q397 correction dots. Both the scribe of 1QS and the scribe of 1QpHab and 11Q20 are prolific with the scribal markings, but they do not use the same ones. The scribe of 1QS applies the *paragraphos* cryptic *ayin*, the scribe of 1QpHab and 11Q20 uses the X-sign. Both these scribes regularly use correction dots.

This list of comparison makes it possible to reflect on notions of a group practice. Is there evidence of scribes following a group practice? Where are the similarities and differences? Furthermore, what is more significant, the similarities or the differences?

There are several similarities between the three scribes. First, they all copy what modern scholars understand to be sectarian and non-sectarian texts—but most commonly sectarian. Second, on the whole, the spelling practice of each scribe leans towards the QSP features, and it is possible to assign to each of them scribal markings associated with QSP. This correlation of scribes copying predominantly sectarian texts with an ample use of *mater* and lengthened spelling practices may be interpreted to support the model of QSP and the idea that sectarian scribes intentionally employed a group spelling practice, possibly for the purpose of distinguishing the group's texts (an anti-language perhaps?).

However, these similarities are far from the whole story. There are numerous differences, which go beyond just the occasional incongruity. Besides and the strong tendency to add a waw in the middle of several other

words, the practice of *plene* spelling is far from standardised. To start, $\Box \lor \Box$. Each scribe employs both forms, suggesting that this is a feature the scribes are unsure about, which is possibly related to the weakening of gutterals. While the use of *waw* in the middle of the words for o and u seems clear, whether to put the *aleph* at the end of u the scribes appear as far less clear about.

Other differences are that GQS001 is consistent regarding the final \bar{a} mater for the 2ms, whereas 1QS is consistent with final \bar{a} mater with the independent pronouns. This means that each of these scribes is consistent with another QSP feature besides the waw mater, but it is not the same feature as each other.

It is also interesting to note that GQS001 is flexible regarding the 3mp on singular nouns and verbs, whereas the scribe of 1QS is flexible regarding the 3mp on plural nouns and prepositions. For the scribe of 1QpHab and 11Q20, the use of these suffixes runs along manuscript lines, with the suffixes shortened in 1QpHab and lengthened in 11Q20.

Finally, there are the features and forms discussed in additional. As said, Tov did not include these as QSP. However, it is difficult to understand why he would think that a waw signals the particular practice but that the yod does not. Maybe also he considered the weakening of gutturals an entirely different phenomenon. However, it is interesting to note, as discussed above, that the scribes in my category of "additional" also show a range of differences.

A tenet in the model is that QSP features and forms correlate with the sectarian texts. Therefore, maybe the differences as described above are not significant if a sectarian / non-sectarian divide could explain them. However, the differences cannot be explained this way. For example, with GQS001, the non-sectarian text of 4Q215 (Testament of Naphtali) is more *plene* than 4Q397, which is regarded by scholars as sectarian.⁴⁴⁹ A similar phenomenon can be observed

196

_

⁴⁴⁹ In Chapter 5, when discussing the literary categories ascribed to each of the manuscripts copied by GQS001, I discuss reasons for and against classifying MMT as sectarian.

with the scribe of 1QS, who writes lengthened ירושלים in 4Q53 (4QSam^c) and shortened shortened ירושלם in 4Q175. Finally, 11Q20 (nonsectarian or intermediary sectarian) is more *plene* than 1QpHab (core sectarian text). Thus, sectarian / nonsectarian content does not help in explaining the differences.

However, if the spelling practice of each scribe is somewhere in the realm of QSP, are the differences significant enough to challenge a model that states that scribes in the sect were encouraged to use a particular group practice? Is pointing at the differences just niggling at the details? In the end, the three scribes discussed here do all use QSP features, so does it matter if they do so in variously different ways?

No doubt scholars will have different opinions about the answer to these questions. Certainly, scholars such as Tov and Schniedewind are aware of these inconsistencies, but they do not see them as significant.⁴⁵⁰ However, besides the *waw mater*, there is much mixing and matching both within and between the manuscripts copied by these scribes in regards to the features and forms associated with QSP and the *plene* / lengthened spelling / scribal markings. This evidence should caution against models that consists of a binary distinction, with one practice on one side and another practice on the other. Furthermore, if the purpose of the *plene* / lengthened spelling was an anti-language, one may expect that such an intention would insist on more standardisation. Instead, it appears that the situation was a fluid one, more fluid than binary models allow.

When looking at the spelling practices of the scrolls on the microlevel of individual scribes, the differences are just as significant as the similarities. It would be possible to interpret the data in such a way that brushes over the differences for the goal of creating a bipartite model of spelling practices in Second Temple Hebrew. However, a preferred interpretation includes the differences. These scribes employ QSP features, but they do it in ways that are different from each other, and the differences indeed cannot always be

⁴⁵⁰ Discussed at greater length in section 4.6.

explained by sectarian or nonsectarian content. Is it now possible to widen the lens for explaining *plene* / lengthened spelling and scribal markings in the scrolls, which goes beyond concepts of a sectarian and nonsectarian spelling practice?

To answer this question, I will explore what have been considered other possible influences on the spelling practices of scribes. These are authority, the function of a manuscript, pronunciation, the sect, and individual choice. Some of these concepts are compelling for explaining the influences, and others less so.

4.5 Influences on the Spelling and Scribal Practices of Scribe

4.5.1 Authority

One possible explanation for the use of either *plene* or defective spelling practice is the notion of authority; the strategy to confer authority on a copied text by employing a certain spelling practice. However, what spelling practice may have counted as authoritative is not immediately clear. On the one hand, Tigchelaar suggested the possibility that scribes used biblical spelling in texts that are not biblical to convey authority. On the other hand, Cross and Schniedewind argued that *plene* spelling was authoritative in the eyes of the sectarians. Zahn looked at both sides of the argument and reasoned that authority is not a deciding factor for spelling practice. Sor example, the Temple Scroll is a text that uses predominantly *plene* spelling forms and speaks as a direct revelation from God. This qualitative evidence shows that *plene* spellings can be used in places where authority is aimed to being conveyed. Yet, this is not always true. Ultimately, Zahn concluded that "the relationship between textual authority and scribal practice cannot be reduced to whether QSP features were seen as

⁴⁵¹ Tigchelaar "Assessing," 198, 204.

⁴⁵² Frank Moore Cross, "Some Notes on a Generation of Qumran Studies," in *The Madrid Qumran Congress: Proceedings of the International Congress on the Dead Sea Scrolls*, eds. Julio Trebolle Barrera and Luis Vegas Montaner, STDJ 11 (1992), 1–11 at 4–5; William M. Schniedewind, "Qumran Hebrew as an Antilanguage," *JBL* 118 (1999): 235–52

⁴⁵³ Zahn, "Beyond Qumran," 200.

authoritative, nor can it be connected directly to the 'biblical' or 'sectarian' nature of particular compositions."⁴⁵⁴ I did not find any evidence that would contradict this claim. Thus, the notion of authority does not help particularly to explain the differing use of spelling practices in the scrolls.

4.5.2 The Function of a Manuscript

Another potential meaning making area regarding spelling and scribal practices is the function of the manuscripts within the social context of the scribes. The function of a manuscript concerns for what and for whom a manuscript was produced. Is it possible that the intended audience, and the context in which said manuscript was planned to be circulated played a role in the material aspects—orthography, morphology and markings—that one can still observe on the manuscript today?

As a starting point for thinking about the social context in which these scribes were engaged, Popovic's concept of a textual community is helpful. ⁴⁵⁵ A textual community is characterised by its engagement with texts on various levels, such as intellectual and/or ideological pursuits, and in connection with ancestral traditions. Such communities emerged around the study and reading of texts. ⁴⁵⁶ Adding to how we can understand textual communities, Hempel recognised that the "impact of written traditions and the sense of the identity of those attached to the literature is effective beyond those who are able to access the material independently." ⁴⁵⁷ If indeed textual communities included those who were not literate, one must conceive of the writing, reading and study culture of textual communities as including oral dimensions, embedded in the communities through the sharing of texts via social activities such as group

⁴⁵⁴ Zahn, "Beyond Qumran," 200.

⁴⁵⁵ Popović, Qumran as Scroll Storehouse," 551–94; Popović, "Reading, Writing," 447–70

⁴⁵⁶ Popović, "Reading and Writing," 450.

⁴⁵⁷ Charlotte Hempel, "Reflections on Literacy, Textuality, and Community in the Qumran Scrolls," in *Is there a Text in this Cave? Studies in the Textuality of the Dead Sea Scrolls in Honour of George Brooke*, eds. Ariel Feldman, Charlotte Hempel, Cioatā Maria, STDJ 119 (Leiden: Brill, 2017), 69–83.

reading and performative events. Below I take each scribe and discuss clues that may suggest that their manuscripts were prepared for both smaller study contexts and larger group reading events.

Although not without some variability, 458 GQS001 writes all his manuscripts in an elegant hand and with very few mistakes. He proliferates the use of the *matres lectionis*, which help guide pronunciation, and he uses the palaeo-Hebrew Tetragrammaton to write the name of God (a clue that he was protecting a reader from accidently speaking the name of God). I suggest that the careful preparation of his manuscripts and the accumulation of further material elements may suggest that this scribe prepared his texts to be read aloud at group reading events. George Brooke said of the representation of the divine name and the use of the palaeo-Hebrew, and also marginal marks and systems of paragraphing, that through them one may discern the place of orality in the production and transmission of texts. 459 Moreover, Popović evidences a wide range of book rolls and letters from the ancient Mediterranean context that were read aloud and studied together in groups. 460 The material aspects of scribe GQS001's texts cannot prove he prepared his manuscripts keeping in mind that they would be read aloud by others; however, nothing in the materiality speaks against it, and on the contrary, encourages it.

The interlinear correction in his manuscript of 4Q171 was added by another scribe. The interlinear correction adds a small verse known from the Psalm being interpreted. That this correction was added by another writer evidences that this scroll was engaged in a type of study by least one other

⁴⁵⁸ For example, in 4Q161 the writing is bigger and the spacing between the lines wider than in 4Q215 where the writing is smaller and the spacing between the lines is tight. A similar comparison is made between 4Q166 and 4Q171.

⁴⁵⁹ George Brooke, "Scripture and Scriptural Tradition in Transmission: Light from the Dead Sea Scrolls," in *The Scrolls and Biblical Traditions: Proceedings from the Seventh IQOS in Helsinki*, STDJ 103 (Leiden: Brill, 2012), 1–17 at 6–7.

⁴⁶⁰ From Qumran he references 1QS and the Genesis Apocryphon. From further afield, the Letter to Aristeas and Attic Nights. Popović, "Reading, Writing," 453–69.

person. It is interesting that this second scribe reserved for himself the right to make this addition.

In engagement with Tigchelaar's work, Zahn suggested that the undisciplined handwriting of 4Q175 (penned by the scribe of 1QS), with frequent errors and inconsistent spelling practices, suggests it was probably only ever meant for private use. 461 Popović says that 4Q175 served as "personal scholarly notes," although he adds that the scribe composed these personal scholarly notes within the context of ancient Judaean reading groups. 462 The material features of 4Q175—such as scribal marks, the writing of excerpts, and notetaking with scribal marks—effectively highlight the function of the manuscript within a communal, study context. 463

Reymond's research on a set of spelling features of the scribe of 1QS supports the idea that the manuscripts penned by this scribe were for participation in a reading community. He orthographic and morphological features that Reymond highlighted for this scribe are different from QSP, and include the Aramaic הוהי, the he in the prefix of hiphil yiqtol verbs, and the interchange of the gutturals. Reymond says, that "In the case of 1QS, 1QSa, 1QSb, 4Q53, 4Q175 and 1QIsaa, the distribution of idiosyncrasies suggests a reading community that expressed ideas and read texts in a vernacular variety of Hebrew, but one that was not entirely homogeneous, with some scribes expressing texts in a more indistinct / Aramaized manner than others." I agree with Reymond that there are several aspects of the scribe of 1QS' orthography and morphology, which suggest his ongoing participation in a reading community.

-

⁴⁶¹ Zahn, "Beyond Qumran," 200.

⁴⁶² Popović, "Reading, Writing," 467.

⁴⁶³ Popović, "Reading, Writing," 447.

⁴⁶⁴ Eric D. Reymond, "The Scribe of 1QS, 1QSa, 1QSb, 4Q53 (4QSamc), 4Q175 and Three Features of Orthography and Phonology," *DSD* 25 (2018), 238-254.

⁴⁶⁵ Reymond, "The Scribe of 1QS," 253.

Both Toy and Zahn mentioned the possibility that the level of care afforded in the preparation of 11Q20 is comparable to a deluxe scroll. 466 Tov created the category of deluxe scrolls for Qumran manuscripts, saying they were prepared on a wide writing block, with wide margins, and with the utmost level of care, evidenced by the fine calligraphy and low scribal errors. 467 Fine calligraphy is a stretch for the handwriting of 11Q20—and corrections dots and spelling errors appear—meaning its categorisation as deluxe is dubious. That said, wide margins and enough care are evident in the preparation of this lengthy scroll. What of 1QpHab also copied by the same scribe? Like 11Q20, this scroll is long, prepared with wide margins, and the handwriting while not fine or elegant, is easily legible. The spacing between the lines is more cramped in 1QpHab than in 11Q20, the column widths are irregular, and not only do corrections and scribal errors appear, they are frequent. 1QpHab is clearly ruled out as being deluxe, and therefore Tov and Zahn never mentioned it as such. However, when discussing 11Q20 as a deluxe manuscript, Zahn suggested that this manuscript (and others carefully prepared) functioned in public/communal settings. 468 While I do not think that this scribe's manuscripts (11Q20 and 1QpHab) are deluxe, I agree that enough work and care went into them to suggest that they would be used by others, in communal settings and for group reading.

If the spelling practices and scribal markings of the manuscripts penned by these scribes are viewed in connection with the function of each manuscript, one gains a window onto the use of the manuscripts in their context. The elusive oral culture embedded in the Judaean way of life—in didactic, religious, performative and social settings—is on display. However, this oral culture on display is more vivid if we do not limit the use of the proliferation of vowel and scribal markings to a special group trying to separate itself from the wider world.

٠

⁴⁶⁶ Tov, Scribal Practices, 126; Zahn, "Beyond Qumran," 200-01.

⁴⁶⁷ Tov, Scribal Practices, 126.

⁴⁶⁸ Zahn, "Beyond Qumran,"201.

If we make the vowel marking about an antilanguage, we cannot so easily see how they are related to the function of the manuscripts in a reading culture.

4.5.3 Phonetics and Pronunciation

Indeed, the influence of pronunciation on the orthography and morphology of the Qumran scrolls is worthwhile to consider. That pronunciation is linked to orthography and morphology may sound like an obvious comment; however, this fact is overlooked as less significant than it surely was. First, Hebrew is largely spelt with consonants, but the proliferation of the *matres lectionis* as vowels to reflect pronunciation diachronically developed over hundreds of years. That is not to say that *plene* / lengthened spelling replaced defective forms, but rather to say the influence of the *mater* on the consonantal spelling was an ongoing process. ⁴⁶⁹ Second, the QSP model and concepts aligned with an antilanguage do not emphasise pronunciation as the reason for the differences in orthography and morphology in the DSS. Schniedewind argued that, "attempts to understand orthography simply as a transcription system is much more problematic than generally acknowledged." ⁴⁷⁰ QSP and anti-language models tie the spelling practice to social identity, and thus explain the orthography and morphology in terms of sociological aspects.

Reymond focused on all of the details pertaining to phonetics and phonology of the Hebrew language evident in the scrolls. In doing so he unburdens spelling from ideology, moving it instead into the realm of spoken registers. For example, the consistency of the development of /o/ and /u/ vowels, plus the pronunciation of various pronouns with an optional /a/ ending was part of the spoken vernacular of scribes.⁴⁷¹ He sees that the scribes were

_

⁴⁶⁹ Werner Weinberg *The History of Hebrew Plene Spelling* (Cincinnati: Hebrew Union College, 1985) 1–10, passim. Reymond, *Qumran Hebrew*, 13–21, passim.

⁴⁷⁰ Schniedewind, "Language and Group Identity in the Dead Sea Scrolls," 283.

⁴⁷¹ Eric Reymond, *Qumran Hebrew: An Overview of the Orthography, Phonology and Morphology* (Atlanta: SBL, 2014), 74.

conversant in both a literary language and a vernacular one, and the influence of vernacular Hebrew is one reason behind the different spelling practices one encounters in the DSS.⁴⁷² The *plene* and lengthened spelling reflected the pronunciation of the scribes, and helped readers with pronunciation when dealing with a largely consonantal language. Reymond observes that there was "a tendency to write and pronounce the writing/reading register of Hebrew in a manner that would better reflect its characteristic vowels and syllabic contours."⁴⁷³

The data I provide in this chapter offers further evidence of the use of spelling practices to emphasise syllabic contours. Indeed, the scribes' consistent use of waw is more easily understood as being applied for reducing confusion around when to read /o/ and /u/ instead of /a/; as opposed to being applied as a marker by a sect to distinguish themselves from those that they are antagonistic towards.

4.5.4 The Sect

Zahn suggested that it may be possible to associate the morphological variants with "the movements that gave rise to the *Yahad*." As the morphological variants of QSP are less common in the Hebrew Bible than the orthographic variants, this may be the reason to connect them to the sect. However, the scribes employ the orthographic features associated with QSP consistently. The morphological forms are used sporadically and unsystematically. Zahn suggests that this diversity in the morphological forms may support sectarian models that conceptualise the sectarians in diverse communities beyond Qumran, while

⁴⁷² Reymond, *Qumran Hebrew*, 18–21.

⁴⁷³ Reymond, *Qumran Hebrew*, 225.

⁴⁷⁴ Zahn, "Beyond Qumran," 202.

acknowledging that neither geography nor scribal training in different groups can neatly explain the heterogeneity. 475

4.3.5 Time

Potentially, changes over time could have influenced the spelling practice of scribes. At the beginning of the first century BCE, the scribe of 1QS was writing. At the end of this century, the other two scribes were writing. Can any patterns between the earlier and later scribes be discerned? GQS001 is the most consistently in regards to the *plene* / lengthened spelling of the three scribes, so one might wonder if this consistency of such a spelling practice is related to a later date. However, the scribe of 1QpHab and 11Q20 does not parallel GQS001 in this consistency. One might even argue that the scribe of 1QS and the scribe of 1QpHab and 11Q20 share more in common in terms of their inconsistent use of *plene* / lengthened spelling features and forms. Therefore, it is difficult using the work of these three scribe to state that any patterns existed regarding the development of spelling practices from the beginning to the end of the first century BCE.

4.5.6 *Vorlage*

Vorlage was an influence on spelling practice. As discussed in this chapter, the scribe of 1QpHab and 11Q20 is most likely to be the kind of scribe who copied faithfully from his Vorlage, with GQS001 in regards to 4Q397 providing a possible example of a deviation from Vorlage. The picture is mixed with the scribe of 1QS. 4Q175 shows evidence of the scribe copying from biblical texts with different spelling traditions and being guided to degrees by these different texts. Copying directly from a Vorlage is no doubt a part of the story of the scribal culture in the Second Temple period, although it is not the whole story.

⁴⁷⁵ Zahn, "Beyond Qumran," 202–03.

4.5.7 Synthesis

Tov drew a correlation between two variables, plene spelling and sectarian texts. A correlation insists that two variables move in relationship to each other. In this case, the action of producing sectarian content is connected to the action of producing plene / lengthened spelling. Indeed, Tov's data suggests correlations between sectarian manuscripts and plene / lengthened spelling. However, the data of these scribes add other variables—such as the function of a manuscript, the pronunciation of words, and the Vorlage—which also act upon the use and non-use of plene / lengthened spelling. There may be circumstances in which the Hebrew scribes were beholden to a set of rules that variable one, content, insists on variable two, spelling practice. However, when examining the work of these three scribes—their approach to orthography, morphology, and scribal markings, and how these aspects connect to content—each scribe carves out his own space in this corpus of manuscripts, with numerous variables influencing his choices. It seems that the variables are less concerned with sectarian ideologies, and more concerned with the material aspects of manuscripts and the phonetics of Hebrew, as it was read aloud from the manuscripts.

4.6 The Qumran Scribal Practice in Light of the Individual Scribes of the Qumran Manuscripts

Section 4.6 now turns to an in-depth analysis of the Qumran scribal practice. This is the most well-known model in the field, which made attempts to make sense of the striking orthography, morphology, and scribal markings of the Qumran scrolls. Schniedewind's theory of an anti-language also offered explanations for the *plene* / lengthened spelling, and is discussed here alongside QSP. Both these models explain the spelling in terms of a binary system with Qumran spelling on one side, and MT like spelling on the other. When assessing models and categories of ancient Hebrew spelling practice, whether we are dealing with a binary system needs exploring. Additionally, this section continues to reflect upon the broader implications of these spelling and scribal practices for

understanding the real-life circumstances behind the Qumran scrolls. For example, what might the spelling and scribal practices intimate about the people and communities who wrote, copied and collected these scrolls?

4.6.1 QSP in the history of Qumran Scholarship

A question regarding the scrolls is if they were copied at the site of Khirbet Qumran. The first excavation team of the Khirbet (1951-56) argued there was a scriptorium at Qumran where scribes wrote scrolls. In 1961, Dupont Sommer created winsome images of Qumran as an industrious secret sect of Essene scribes penning sacred scrolls. 476 In his first article on Qumran orthography and morphology. Toy said most scholars assumed that most of the scrolls found at Qumran were penned at Qumran; only a small number disagreed. 477 It was into this debate, with most scholars thinking the cache was penned at Qumran, but with a growing skepticism, that Tov contributed his theory of a Qumran scribal practice. 478 He took the position that some of the scrolls were written at Qumran, while others were brought from elsewhere. Tov expressed surprise that such a view had not yet been widely accepted in the field, 479 although he explains potentially why saying "Such a view has remained abstract since scholars did not go into detail regarding which scrolls were written in Qumran and which were imported."480 The beauty of Tov's theory regarding orthography and morphology was to take the abstract view and give it structure. If scholars could pinpoint a differing Hebrew spelling practice from that of the Hebrew in MT, then they could distinguish between scrolls written at Qumran from those carried there. Regarding QSP as the key to the origin of particular scrolls, Tov later nuanced this view slightly, saying that manuscripts with QSP features could have been penned elsewhere, but they were likely penned at Qumran. 481

⁴⁷⁶ André Dupont-Sommer, *The Essene Writings from Qumran* (B. Blackwell, 1961), 63.

⁴⁷⁷ Tov, "Orthography," 42.

⁴⁷⁸ Tov, "Orthography," 31–57.

⁴⁷⁹ Tov, "Orthography," 41.

⁴⁸⁰ Tov, "Orthography," 42.

⁴⁸¹ Tov, *Scribal Practices*, 262.

The point about origin, Zahn says, is difficult to sustain. However, one of the achievements of the QSP model was that it enabled scholars to look beyond Qumran as the place where the majority of scrolls were copied, without having to abandon in total that scrolls were copied there. The question is whether plene / lengthened spelling and scribal markings are enough to posit a Qumran origin. It would be unrealistic to think that plene / lengthened spelling was confined to the borders of Qumran. While this spelling may have been popular there, it could not have been exclusively there, meaning that features associated with QSP are not themselves necessarily evidence for a manuscript being copied there. However, Tov's point that a small minority of the manuscripts were penned at Qumran and that the scribes working at Qumran felt less bound to defective spellings is not impossible.

The model of QSP is not dependent though on determining the place of origin of a manuscript. While the suggestion is an aspect of the model, Tov's two more pressing points are that, a) there is a correlation between sectarian literary content and plene / lengthened spelling and, b) that the modus operandi of a group of sectarian scribes was the employment of a special practice of orthography, morphology, and scribal markings. Below, in conversation with other scholars, I will further explore whether plene / lengthened spelling was a sectarian practice. First, I briefly discuss material that Tov argues one should not overlook when discussing the QSP model; the tefillin.

4.6.2 The Tefillin

Tov explains that the *tefillin* fashioned according to rabbinic instruction were not written in QSP, whereas the *tefillin* not fashioned according to rabbinic instruction were written in QSP. ⁴⁸³ Rabbinic instruction for *tefillin* manuscripts

⁴⁸² Zahn, "Beyond Qumran," 204.

⁴⁸³ Emanuel Tov, "The Tefillin from the Judean Desert and the Textual Criticism of the Hebrew Bible," in *Is There a Text in This Cave? Studies in the Textuality of the Dead Sea Scrolls in Honour of George J. Brooke*, STDJ 119 (Leiden: Brill, 2017). 277-292.

permits only four scriptural passages; if a *tefillah* uses different passages from the four permitted passages, then it is not Rabbinic.

To understand how the *tefillin* support the QSP model, I formed Tov's data into a table (cf., Table 3, below). Column 1 records the *tefillin* found in sites in the Judaean Desert other than Qumran. ⁴⁸⁴ Column 2 records the *tefillin* found at Qumran. Column 3 records the manuscripts as either proto-MT, MT-like or independent. Tov says that proto-MT texts are largely known from Judaean Desert sites and are virtually identical to the Leningrad Codex, except maybe to 2% of their content. ⁴⁸⁵ The MT-like texts are primarily known from Qumran and differ in up to 10% of their content from the Leningrad Codex. ⁴⁸⁶ Independent texts do not agree with other known sources. ⁴⁸⁷ Column 4 says whether the *tefillah* is according to Rabbinic instruction. Finally, column 5 indicates the spelling practice.

Table 3: The Spelling Practices of the Tefillin

1	2	3	4	5
Judaean	Qumran	Content	Rabbinic	Spelling
Desert				
2	1	Proto MT	Yes	Defective
1	-	MT-like texts	Yes	Defective
3	4	Independent	Yes	Defective
	8	Independent	No	QSP

⁴⁸⁴ Obviously, Qumran is in the Judaean Desert, but for convenience Tov separated Qumran from the other Judaean sites.

⁴⁸⁵ See for example, MasPs^a, MasLev^b, 5/6HevPs.

⁴⁸⁶ See for example, 1QIsa^b, 4QJer^a and 4QJer?.

⁴⁸⁷ Tov, "The Tefillin," 281-82.

The significant aspect of this table is that it demonstrates that none of the Judean Desert *tefillin* uses QSP and that they always use passages permitted through Rabbinic instruction. Only *tefillin* that do not follow Rabbinic instructions are written in QSP.⁴⁸⁸ There is a glitch when looking at the four *tefillin* from Qumran that follow the patterns of the Judaean Desert texts. Tov says that these four *tefillin* were brought by new members joining the sect instead of having been penned within the walls of the sect. Being open to the possibility that there were a small number of scribes working at Qumran, the *tefillin* may be one of the pieces of evidence to support the idea that *plene* and lengthened spelling were employed by scribes working at the site of Qumran. However, while the scribes at Qumran may have been more partial to the use of the *plene* and lengthened spelling, it would not seem that they used it exclusively.⁴⁸⁹ Furthermore, the reason for that use is not evidently for sectarian purposes and boundary marking agendas.

For further discussion on the two types of *tefillin* slips, cf., Yonatan Adler, "The Distribution of Tefillin Finds among the Judean Desert Caves." in *The Caves of Qumran: Proceedings of the International Conference, Lugano 2014*, eds. Marcello Fidanzio. STDJ 118 (Leiden: Brill, 2016), 161-73, at 166–68. Adler categorises the *tefillin* slips that Tov says are of Rabbinic instruction as Type 1 slips and those of the non-Rabbinic instruction as Type 2 slips. Adler is in little doubt that these two types reflect two approaches to the observance of the *tefillin* ritual. While Type 1 *tefillin* are very intentional about a prescribed set of verses in proper order, Type 2 reflects a liberal approach.

⁴⁸⁹ Cf., also, Adler, "The Distribution of Tefillin," 173. Adler acknowledges that while the certain practices may be more common to the Qumran community, the diversity in the practices reflects an openness to variety. He says, "We are reminded that divergent types of *tefillin* cases and *tefillin* texts are not the only examples of diversity at Qumran; the texts found in the Qumran caves are remarkably varied in terms of textual character and scribal practices, including differing scribal conventions relating to orthography and morphology, choice of Aramaic script vs. Paleo-Hebrew script, varying methods of writing divine names, and more. While some of these practices might have been more closely associated with one group than another, the fact that all of these divergent practices were found side by side in the caves near Qumran may indicate that members of the Qumran community were rather open to such variety."

⁴⁸⁸ Tov, "The Tefillin," 285.

4.6.3 Were plene / lengthened spelling and scribal markings a sectarian practice?

Plene and lengthened spelling distinguishes a portion of the Qumran manuscripts from the spelling of the MT. Yet, the question remains as to whether the employment of *plene* and lengthened spelling was confined to a sectarian practice. Lange, Tov, Schniedewind, and Popović discuss this issue from different perspectives. Lange argued it was a widespread practice, while Tov concluded it was a sectarian practice. Schniedewind contends that plene / lengthened spelling was an aspect of an anti-language employed by sectarian scribes as a way of distinguishing themselves from the mainstream. 490 He proposed that writing is an instrument embedded inside groups and that "orthographies support group boundaries."491 Popović has not framed the linguistic nature of the Scrolls in terms of a marginal group over and against a mainstream group. Instead, he frames the Qumran collection as a diverse and heterogenic one. He suggested that our sociolinguistic models may better serve us if they reflect more deeply on the diversity of the collection, and not only prioritise sectarian texts to understand the people behind the scrolls.⁴⁹² In this section, I will briefly discuss each scholar's perspective, and consider these perspectives in light of the data provided in this chapter.

Lange's argument—that the use of *plene* / lengthened spelling is far broader than Qumran—comes from a close examination of biblical texts and the Severus scroll. He situated *plene* / lengthened orthography and morphology in the Second Temple period context, calling it a "baroque" spelling practice.⁴⁹³ He

⁴⁹⁰ Schniedewind, "Antilanguage," 235-52.

⁴⁹¹ Schniedewind, "Language and Group Identity," 281.

⁴⁹² Mladen Popović, "Multilingualism, Multiscripturalism and Knowledge Transfer in the Dead Sea Scrolls and Graeco-Roman Judaea," in *Sharing and Hiding Religious Knowledge in Early Judaism, Christianity and Islam,* eds. Mladen Popović, Lautaro Roig Lanzilotta, Clare Wilde, JCIT 10 (Berlin: de Gruyter, 2018), 46–71.

⁴⁹³ Lange "The Question of the So-Called Qumran Orthography," 424–75.

appropriated the term baroque from Cross, ⁴⁹⁴ but while in the tradition of Cross, Lange drew new conclusions. He suggested that baroque orthography was archaising, signalled formal and/or poetic speech, and was known in Palestine in the Hasmonean and Herodian eras widely." ⁴⁹⁵ This is different from Tov's suggestion that QSP is a "new" system that replaces the older one. ⁴⁹⁶

Lange provided numerous examples of the use of baroque spelling in biblical books. For example, בהנה ובהנה (2 Sam 12:8). He argues that baroque spellings appear in orthographically conservative texts due to idiomatic use and scribal habit, saying, "That the baroque spellings could cross-contaminate the conservative orthography of the MT out of idiomatic use and scribal habit points to a prominence of baroque orthography outside of the Essene movement in Second Temple Judaism." He adds that scribal errors led to baroque spelling, but that this could only happen if the scribes were familiar with baroque orthography. Furthermore, the use of the baroque approach may be linked with ease of reading. Essentially, Lange's analysis concludes that baroque orthography was idiomatic and habitual for many of the scribes and reflected something of their spoken register. Lange applies the term "bi-orthographism" suggesting that scribes of the Second Temple period could easily switch between the plene and defective spelling practices. 500

Tov responded directly to Lange's data saying it is unconvincing. He sees that the cross-contamination is minimal, noting that the MT does not contain characteristic QSP forms like מושה / ביא . He disputes both Cross and Lange's conclusion that "the baroque orthography known today mainly from the

⁴⁹⁴ Cross, "Some Notes on a Generation of Qumran Studies," 3–6.

⁴⁹⁵ Lange, "The Question of the So-Called Qumran Orthography," 475–76.

⁴⁹⁶ Tov, "Some Reflections on Consistency," 39.

⁴⁹⁷ Lange, "The Question of the So-Called Qumran Orthography," 443.

⁴⁹⁸ Lange, "The Question of the So-Called Qumran Orthography," 442.

⁴⁹⁹ Lange, "The Question of the So-Called Qumran Orthography," 452.

⁵⁰⁰ Lange, "The Question of the So-Called Qumran Orthography," 442.

Qumran Scrolls was more widespread in ancient Judaism."⁵⁰¹ Collecting and/or discussing all of the orthographic and morphological data from Hebrew non-biblical scrolls found in other Judaean caves and sites is not within the scope of this research chapter, so currently, I do not feel able to say precisely how widespread *plene* / lengthened spelling was. However, the argument that the baroque approach was connected with the ease of reading fits with arguments in this chapter about scribes preparing scrolls for group reading purposes. Additionally, without a sectarian agenda to *plene* / lengthened spelling, there is no reason to argue that the practice was not widespread.

Like Tov, Schniedewind sees that the spelling of QSP was a contained group practice. Even at one point, Schniedewind said "Tov's immediate conclusion that the scrolls written in QSP were copied at Qumran whereas those in standard orthography were brought from outside seems certain." Although, Schniedewind does change his perspective on this. Not about QSP being a group practice, but that it was confined to the site of Qumran. In a more recent article, Schniedewind suggested renaming QSP to Essene Hebrew because if one connects QSP to the Essenes—a group that spanned over two centuries in various places—then it is possible to explain the diversity in the spelling practice. Furthermore, Schniedewind argues against notions that plene / lengthened spelling simply reflects the vernacular, as he sees that writing is much more than a transcription system, adding that "social, political and religious factors" play a role in orthographic choices.

This issue of whether the *plene* / lengthened spelling is more tightly tied to pronunciation or to ideology is an interesting one. Schniedewind believes that regarding לוא, מושה, לוא "No scribe needed to add a *vav* (*waw*) to these words for the sake of pronunciation." This makes sense if considering only בול, מושה, לוא

⁵⁰¹ Tov, "Revisted," 360.

⁵⁰² Schniedewind, "Qumran Hebrew as an Antilanguage," 248.

⁵⁰³ Schniedewind, "Essene Hebrew," 281–82.

⁵⁰⁴ Schniedewind, "Essene Hebrew," 285.

as these words are commonly occurring, and indeed a scribe or a reader of a text would recognise these words with or without the waw. However, when it comes to the three scribes discussed in this chapter, their most consistent linguistic and spelling feature is using waw to represent /o/ and /u/, not just regarding אלוא, but in the majority of words that use these vowels sounds. In these other words in which the waw is added—next to an aleph or ayin or between two consonants—the pronunciation is much less obvious. In these cases, the waw would no doubt help to guide the readers through the text. Therefore, I would argue that the employment of waw in אלוא בול, מושה, לוא is part of a larger phenomenon, and that singling out these words as if they are isolated cases misses this point. If waw is consistently added to words penned by these scribes to represent /o/ and /u/ then it seems fairly obvious it was to guide the pronunciation of these sounds. I am not entirely convinced by arguments that say that the scribes added them as identity markers and for social, political and religious purposes.⁵⁰⁵

When connecting the spelling practice of the scribes with the world they inhabited, this chapter provided evidence that the scribe's orthography and morphology was influenced by their *Vorlage*, the pronunciation of words, and the intended function of a manuscript. Operating less on the material level and more on the conceptual level, Schniedewind says that spelling is "a learned system of social practice embedded in social groups... and a marker of group identity and an expression of their language ideology." ⁵⁰⁶ Conceptually it is an interesting thought. However, the evidence provided by Popović, through multilingualism, multiscriptualism, and knowledge transfer suggests that the people connected to the scrolls "were not isolated but participated in various ways in ancient Mediterranean intellectual networks." ⁵⁰⁷

-

⁵⁰⁵ Schniedewind, "Essene Hebrew," 283.

⁵⁰⁶ Schniedewind, "Essene Hebrew."

⁵⁰⁷ Popović, "Multilingualism, Multiscripturalism," 48. For broader discussions on what this participation in intellectual networks might mean, although not necessarily connected to linguistic and material evidence, see: Jonathan Ben-Dov and Seth L. Sanders, eds., *Ancient Jewish Sciences*

It may be possible to conceive of the group as both marking boundaries with orthography, while at the same time participating in broader networks. Conceivably, one could continue down this line of thought, making the case that the need for the orthographic boundary markers was because this sectarian group ultimately coexisted in larger networks; but I am not going to make that case. Reading communities and study groups were part of the fabric of ancient societies and the daily life of 'religious' and scholarly groups. Therefore, I connect the *plene* / lengthened spelling to such purposes. The variances, inconsistencies, and the freeness of the scribes in the data works against notions that these orthographies were about marking boundaries from other groups to strengthen and establish group identity. Schniedewind himself acknowledges the variances and inconsistencies, but explains them with the argument that the group was the diachronically broad and locationally wide Essenes, hence his idea to embed the nomenclature of Essene Hebrew into the field. 508

-

However, there has been and continue to be enough challenges to such a theory both from scholars inside and outside of the field to at least wield some caution in thinking it is solution to a problem, or a practical idea, to call a type of Hebrew—with its associated spelling practice—in the Qumran scrolls, Essene Hebrew. See for example, Albert Baumgarten, "Who Cares and Why Does it Matter? Qumran and the Essenes, Once Again!" *DSD* 11 (2004). Steve Mason, "The Historical Problem of the Essenes," in *Celebrating the Dead Sea Scrolls: A Canadian Collection*, eds. Peter Flint and Jean Duhaime, EJL 30 (Atlanta: SBL 2011), 201–51. Daniel R. Schwarz "Law and Truth: On Qumran-Sadducean and Rabbinic Views of Law," in *The Dead Sea Scrolls: Forty Years of Research*, eds. Devorah Dimant, Uriel Rappaport, STDJ 10 (Leiden, Brill, 1992), 229–40. Lawrence H.

and the History of Knowledge in Second Temple Literature (New York: New York University Press, 2014); Pieter B. Hartog, Pesher and Hypomnema: A Comparison of Two Commentary Collections from the Hellenistic-Roman Period, STDJ 121 (Leiden: Brill, 2017).

⁵⁰⁸ Schniedewind, "Essene Hebrew," 280–91. There are numerous eminent Qumran scholars who are comfortable in labeling the Yahad group the Essenes. White Crawford, *Scribes and Scrolls;* Alison Schofield, *From Qumran to the Yahad: A New Paradigm of Textual Development for the Community Rule,* STDJ 77 (Leiden: Brill, 2009); John J. Collins, Jonathan Klawans, "The Dead Sea Scrolls, the Essenes, and the Study of Religious Belief: Determinism and Freedom of Choice," in *Rediscovering the Dead Sea Scrolls: An Assessment of the Old and New Approaches and Methods,* ed. Maxine L. Grossman (Michigan: Eerdemans, 2010), 264–83; Kenneth Atkinson, Jodi Magness, "Josephus's Essenes and the Qumran Community," in *JBL* 129 (2010), 317-342. Simon J. Joseph, *Jesus, the Essenes, and Christian Origins: New Light on Ancient Texts and Communities* (Waco, TX: Baylor University Press, 2018). Joan E. Taylor, "The Classical Sources on the Essenes and the Scrolls Communities," in *The Oxford Handbook of the Dead Sea Scrolls,* eds. Timothy H. Lim, John J. Collins (Oxford: Oxford University Press, 2010),

4.6.4 QSP as a binary model

A final question arises when considering *plene* / lengthened spelling over and against the more defective spelling of the MT. Is what we are witnessing a binary system of Hebrew orthography and morphology? Does it truly make sense to create two opposing categories of defective MT spellings and *plene* / lengthened sectarian spellings? Tigchelaar and Martin Abegg have different perspectives on placing the Qumran scrolls' orthography and morphology in binary categories. Abegg believes he rediscovered QSP, starting from the place of the biblical manuscripts instead of the place of the sectarian scrolls. Tigchelaar sees a far more complex set of circumstances.

Tigchelaar argued against dividing the material into two dichotomised groups with different origins. ⁵⁰⁹ He raised several issues with the dichotomy, such as the phenomenon of exceptions (sectarian texts with defective spelling and the biblical texts with *plene* spelling). Also, he considers what to do with the underexamined group of nonbiblical, non-sectarian apocryphal texts. Tigchelaar says that the majority of these texts exhibit, at least to a degree, QSP features, but then there is also a group of up to thirty in this subset that are defective. ⁵¹⁰ Are we by-passing this data because it is not the majority and does not speak to the dichotomy that *plene* / lengthened equals sectarian and defective equals biblical? Tigchelaar suggests that the spelling practice of the scrolls is better explained with "a model of a spectrum." ⁵¹¹

For his test case, Tigchelaar gathered data from the Qumran biblical manuscripts, paralleling the occurrences of *plene* and defective spelling in

Schiffman, "Pharisaic and Sadducean Halakhah in Light of the Dead Sea Scrolls," in *DSD* 1 (1994), 285–99. Bartosz Adamczewski, "Are the Dead Sea Scrolls Pharasaic?" in *Sacred Texts and Disparate Interpretations: Qumran Manuscripts Seventy Years Later: Proceedings from the International Conference held at the John Paul II Catholic University of Lublin, 2017 ed. Henryk Drawnel, STDJ 113 (Leiden: Brill, 2020), 69–92.*

⁵⁰⁹ Tigchelaar, "Assessing," 202.

⁵¹⁰ Tigchelaar, "Assessing," 203-04.

⁵¹¹ Tigchelaar, 'Assessing," 203.

the biblical manuscripts with occurrences of other QSP forms. Tigchelaar was looking to see if a distinctive QSP system exists. Or in other words, if the use of אוֹל in the biblical manuscripts necessitated the use of other QSP forms? He created five categories to help us better understand spelling in the Qumran manuscripts. These categories create a more complex picture than a binary system:

- a) Texts that are generally MT-like with defective spelling in the categories that Tov uses and no lengthened spelling.
- b) Texts with mixed defective/full spelling and only very rarely lengthened forms
- c) Texts with predominately or exclusively full spelling and some degree of lengthened forms
- d) Texts with full spelling and comprehensive use of lengthened forms.
- e) Then as well one should also refer to the small group of manuscripts that have an "archaic" spelling that is more defective than that of MT. ⁵¹⁴

Ultimately, Tigchelaar and Tov's evidence have points in common. Certainly, biblical texts most commonly employ defective לא alongside other defective forms, while the texts with *plene* לוא are more likely to employ other lengthened forms. However, Tigchelaar argues that there is a spectrum on which the use of the lengthened forms exists that leave binary categories of QSP/MT wanting.

Tov responded to Tigchelaar by saying he should have taken as his point of departure the less commonly occurring features, such as הואה, 515 but I struggle to see how changing the starting point would change the outcome. For example, my data shows that the use of such features as the independent pronouns and pronominal suffixes commonly do not correlate with each other, but they do

⁵¹² Tigchelaar, "Assessing," 188–96.

⁵¹³ Tigchelaar, "Assessing," 182.

⁵¹⁴ Tigchelaar, "Assessing," 195–96.

⁵¹⁵ Tov, "Revisited," 357.

correlate with the use of לוא, which reflects Tigchelaar's categories of c instead of d.

Abegg's approach was to divide the large collection into biblical and non-biblical (non-biblical includes sectarian and parabiblical scrolls). Abegg ranked the biblical and nonbiblical scrolls from zero to ten by dividing the occurring QSP variables (features) by the potential occurring variables. He then ranked the manuscripts. For example, 4Q285 (sectarian) he ranked 5.3 meaning that 53% of the time this manuscript employs QSP when the opportunity arises. 4Q397 he ranked 7.4, meaning that 74% of the time it employs QSP. 4Q129 (*tefillah*) he ranked 8.8 meaning that it employs QSP 88% of the time. Choose a different manuscript. 4Q135 (*tefillah*) he ranked 3.3 which means that 33% of the time it employs QSP. However, the system clearly begs the question: at what rank can a manuscript be said to be QSP?⁵¹⁶ Using both what he called Tov's intuition and a histogram he created with the manuscripts, Abegg's claim is that with a rank of 2.4 (or 24% use of QSP when possible), a manuscript can be said to employ the Qumran scribal practice.⁵¹⁷ To an extent this seems low, but I will briefly explain Abegg's histogram.

Abegg recorded both sets of data for the biblical and the nonbiblical scrolls in the histogram, saying that each evidence a bimodal curve. ⁵¹⁸ Confusingly, at a later stage, he said that the biblical data is "dramatically asymmetrical." ⁵¹⁹ Of these claims, only one can be correct, and it is the second claim. 65% of the data for the biblical scrolls fit in the first bin (0–1.25), with the other 35% of the data scattered randomly in the other seven bins, creating a right skew (asymmetrical data), not a bimodal curve. ⁵²⁰

There is, though, a roughly bimodal curve for the nonbiblical scrolls. A bimodal curve has two distributions—in this case, QSP and the non-QSP—that

⁵¹⁶ Abegg, "Won Moore Thyme," 178.

⁵¹⁷ Abegg, "Won Moore Thyme, 199.

⁵¹⁸ Abegg, "Won Moore Thyme," 200.

⁵¹⁹ Abegg, "Won Moore Thyme," 200.

⁵²⁰ For the image of the histogram, cf., Abegg, "Won Moore Thyme," 199

intersect at a point. The intersection point of the two distributions indicates the place where one system changes to the other system. In Abegg's histogram, the intersection point is 2.51–3.75, enabling Abegg to say that his data is in "basic agreement with" Toy's intuition for a QSP ranking of a manuscript at 2.4. 522

Abegg claimed that his histogram demonstrates the bi-partite nature of the orthography and morphology used by scribes of the scrolls. He said that his findings are "exactly what we would expect from a collection of manuscripts that evidences two distinct scribal practices: QSP and classical Hebrew. His overarching claim is that the manuscripts produced by scribes trained in QSP are on the right side of the histogram, and scribes trained in the conservative, classical model are on the left.⁵²³ Indeed, these are significant claims, two distinct practices with scribes trained in QSP and scribes trained in classical Hebrew. However, does an analysis of the histogram say all of these things?

To be clear, the histogram shows a roughly bimodal curve for the nonbiblical scrolls; it does not show two clearly distinct humps (or modes of distribution). To claim that the data is "exactly" what we would expect to evidence two systems or scribal schools, then the histogram would show two clearly distinct modes or distributions for both data sets. This would come closer to offering proof that scribes trained and chose to write in one system or another. However, if going with the roughly bimodal curve for the nonbiblical scrolls, one could possibly say that there are two systems, but neither are particularly standardised, meaning there is a range of different ways that the scribes employing each system employed it. I would be careful with claims that one group of scribes trained in one system and another group of scribes trained in another. Rather, one could say that the majority of scribes when penning

⁵²¹ Abegg, "Won Moore Thyme," 201.

⁵²² To be clear, Tov never said 2.4. Abegg took the manuscripts Tov had a "Y" (yes) next as being QSP, see Tov *Scribal Practices*, 339–43. Then Abegg calculated Tov's data into a specific numerical point, 2.4. This may have stemmed from questions raised about QSP, along the lines of "at what point does a manuscript become a QSP manuscript?"

⁵²³ Abegg, "Won Moore Thyme," 200.

nonbiblical texts showed a preference for *plene* / lengthened spellings, but while some scribes applied it diligently to all or most forms, other were sporadic in their application of the forms.

4.7 Conclusions

In ending this discussion on orthography, morphology and scribal practices, I offer observations on four questions. Do the three individual scribes discussed in this chapter, who penned predominantly sectarian texts, employ Tov's QSP? Are plene and lengthened spellings, and scribal markings a sectarian practice? Do the scribes reflect that Second Temple Hebrew orthography and morphology operated in a binary system? What does the manuscript and material evidence reflect of the real-life circumstances behind the scrolls?⁵²⁴

In regards to QSP, a straightforward yes or no answer is not possible. There are ways that the scribes reflect QSP, particularly GQS001, but there are ways that they do not. There are consistencies that the scribes share with the QSP model, but then there are all kinds of divergences from it. All of the details are provided in the chapter, so I will not offer them again. Just to say, the general tendency of the scribes is towards *plene* / lengthened spelling, and this data is supportive of the data collected by Tov. However, the variation in the spelling of words within and between the manuscripts copied by the scribes cast doubt on the idea that what sits behind this practice is the intention of one particular group or sect to create conformity.

Is the use of *plene* / lengthened spellings and scribal markings an expression of sectarianism or sectarian ideologies? That there is variability within the spelling and scribal practice of each scribe and variation between them does not square neatly with concepts of defined sectarian boundaries, particularly when taken to the point of an anti-language. An anti-language is an expression of

⁵²⁴ Regarding these real-life circumstances, more will be elaborated upon in "Chapter 6: Conclusions," with also a few remarks offered in this chapter, below.

220

ideology, and entails that group members learn the system (language / orthography) so to mark them as separate from other groups to which they are opposed. To an extent, the variances could be incorporated into theories an anti-language if the group is envisioned as a long-standing, spatially diverse group such as the Essenes. However, this runs the risk of piling on top of what is already a speculative theory about an anti-language, a second, somewhat speculative theory about the Essenes.

This chapter demonstrated numerous other influences on the scribes' practices, besides sectarian ideologies, which focus on the material evidence. These variables suggest phonetics and pronunciation, and *Vorlage* were a driving force behind the proliferation of the *matres lectionis* and lengthened spelling, and that this in turn speaks to the function of the manuscripts. For example, if these texts were being prepared by groups of scribes to be shared, studied and read aloud by others, offering vowels markers that reflect the syllabic contours of the words would assist the reading, and furthermore the intended didactic processes that go with it. I acknowledge though that regarding the function of these manuscripts I am theorising. In the following chapter (Chapter 5), I continue to discuss the function of the manuscripts copied by GQS001 in his communal context in light of further material evidence of the quality and the codicology of his eight manuscripts.

Regarding the bipartite split—QSP or not QSP, MT spelling or not MT spelling—the evidence creates a complex picture. The formation of two categories has heuristic value, but on the level of the individual scribes and manuscripts, a clear distinction between two categories is not always evident. On the one hand, it is possible that there are numerous different categories, not only two. On the other hand, it is possible that the scribes did not conform to defined categories anyway. The data I presented in this chapter does not support

the idea that these three scribes—who copied sectarian scrolls— between them were trained in any one particular scribal practice, to the exclusion of another. 525

What then does this study of scribes reflect about the real-world circumstances behind the writing and copying of scrolls? First, it is hard to overemphasise the influence of phonetics and spoken register on the use of plene / lengthened forms. Reymond says, "These forms are not purely artificial or archaizing, but reflect in their own ways pronunciations or unique dialects of Hebrew."526 The literary and the spoken are interconnected and interwoven in the spelling practices of the scribes, supporting the conclusion that the scribes prepared these manuscripts to be disseminated orally, for communal reading events and within the context of a study environment. The carefully produced manuscripts—with plene and lengthened spelling and with few spelling mistakes, correction procedures and scribal interventions—in all likelihood were used in reading events. The laxly produced manuscripts, which evidence such things as personal notetaking and the copying of excerpts represent communal study practices, and formed a part of group learning events. The pronunciation of words, the function of the manuscripts, alongside also the influence of the Vorlage, better explain the proliferation of the aleph, yod, waw and he in a significant amount of the Qumran manuscripts than ideas that these four letters were an expression of sectarian ideologies and / or political and religious identity markers.

⁵²⁵ For the suggestion that there were two scribal schools for the training of scribes, evidenced in the orthography and morphology, see: Abegg, "Won Moor Thyme," 200.

⁵²⁶ Reymond, Qumran Hebrew, 234.

5. Chapter Five:

The Codicology, Quality, and Literary Content of the Manuscripts Copied by GQS001

5.1 Introduction

The purpose of the Chapter Four was to profile the spelling and scribal practices of three scribes. The purpose of Chapter Five is the further profiling of GQS001; it collates data on the codicology and handwriting quality of the manuscripts he copied, and correlates the data with the content of his manuscripts. Correlations between the codicological and palaeographical data, with the literary content of the texts copied by an individual scribe from Qumran, have not been delineated before. Moreover, this data on the eight manuscripts copied by this prolific scribe creates new directions for exploring broader questions in the field of Qumran scholarship. How do these texts align with models in the field that associate particular texts with the Qumran group? Why might the scribe have been interested in these eight texts? What were the functions of the manuscripts he copied within the world that he inhabited?

The chapter begins with a focus on the codicological and handwriting quality of the manuscripts copied by GQS001. The exploration queries as to whether the codicological features of GQS001's manuscripts—the size of letters, margins, the spaces between the lines and the format size—are the same across the manuscripts. Alongside these features, this study delineates the quality of writing of each manuscript in relation to aspects of skill, care and beauty. The study asks whether there are ways in which codicological features influence the quality of the manuscripts or vice versa. The collation of this data offers further insight into the handiwork of a prolific Qumran scribe, and furthermore, clues to consider the functions of the manuscripts produced by him.

Following the analysis of the codicology and quality of the manuscripts, the chapter turns to their content. The purpose of this literary analysis on the content of the manuscripts is not exegetical; rather, it is to explore the range of

subject matter of the manuscripts and the types of texts the scribe was copying in terms of Devorah Dimant's categories of sectarian, intermediate sectarian, nonsectarian, biblical and Aramaic. Looking at GQS001's manuscripts in light of these categories provides a framework to explore and critique how this model—and the field as a whole—classifies manuscripts at the same time in terms of authorship, literary content and style, and canonical context. The analysis below confirms the value of Dimant's categories in terms of considering a manuscripts milieu, but shows also how the use of such categories can leave one wanting in terms of understanding the depth and breadth of the literary content of the Qumran corpus, and when considering the complexities of the webs of relationships between different manuscripts.

When thinking back to when I first heard about the Dead Sea Scrolls, the picture that came to mind was of long, beautiful scrolls that could be slowly unwrapped to reveal ancient secrets. The reality is different. A majority of the fragments barely contain ten characters, let alone ten words. Many of them are written in scripts that while legible are far from beautiful; the writing is messy, and appears to be penned by untrained or unskilled individuals, or scribes in training. The long, beautiful scrolls I had envisioned the minority. This chapter focuses on the vast range of quality and production value for the scrolls, with high end, deluxe manuscripts found alongside notes scrawled in elementary hands, and everything in between. It considers where GQS001's manuscripts fit in this spectrum. Where his manuscripts fit along this spectrum of writing quality, provides pertinent clues for inferring about the function of the manuscripts and for what they were produced. In turn, ascertaining the function of the particular manuscripts copied by one scribe, enables deliberation on the sociohistorical context of the writers and individuals involved in copying the texts and disseminating their content.

5.2 Codicology and Quality of GQS001 Manuscripts

This section explores the codicological features of GQS001's manuscripts in tandem with observable and measurable features pertaining to the quality of

writing. The codicological features are the size of letters, margins, the spaces between the lines and the format size. In terms of observing quality, I do this in relation to the level of skill, care and beauty associated with the handwriting. Predominantly, skill, care and beauty are measured by the allied aspects of uniformity, consistency and balance. For example, consistency of the size of the letters, uniformity of the shapes of the strokes, and balance of both the size and shape of letters and strokes in accordance with each other. All of the eight manuscripts were penned in the same type and style, but the quality of the handwriting between some of the manuscripts differs, to degrees.

Aspects of layout contribute to the quality of the manuscript as a whole. Wide margins and a large manuscript size have been associated with high quality, *deluxe* manuscripts.⁵³¹ Additionally, for the very high-quality manuscripts

_

⁵²⁷ See Eibert J. C. Tigchelaar, *Beautiful Bookhands and Careless Characters: An Alternative Approach to the Dead Sea Scrolls*, (paper presented as the 8th Annual Rabbi Tann Memorial Lecture, University of Birmingham, 2018), https://www.youtube.com/watch?v=thB2tH1kwtU. In this presentation, Tigchelaar asks the pertinent question of how do we measure the skill of scribes and the beauty of manuscripts? While challenging his audience to think about how modern-day scholars may be influenced by modern conceptions of what is aesthetically pleasing, he also speaks throughout the presentation of regularity, proportion and consistent adherence to the letterforms of particular types and styles as evidence of skill and beauty.

⁵²⁸ Sirat quoted a distinction applied by Stanley Morrison. He related consistency to the structure of the letter and uniformity to the strokes of the letters. Sirat, *Writing as Handwork*, 319. Balance, on the other hand, relates to the handwriting and the layout of the manuscripts as a whole, down to details such as the harmony between horizontal and vertical strokes, sharp angles and rounded forms and the continuity of the lines. Sirat, *Writing as Handwork*, 305.

⁵²⁹ For all the details pertaining to the type and style of the manuscripts penned by GQS001, see chapter 2.

⁵³⁰ Popović, "Book Production and Circulation," forthcoming. Here, Popović gives a general description of what palaeographers commonly mean by quality, which is, "the ability of the writer to produce text in the desired script style consistently and accurately." However, he raises a challenging question to this description. How do palaeographers handle contexts that do not fit such moulds? For example, highly skilled scribes producing manuscripts at different levels of quality? Popović offers and discusses 4Q62a (4Qlsai) as an example. I encountered with some of GQS001's manuscripts a similar such scenario, discussed further below.

⁵³¹ For a description of the *deluxe* scrolls from Qumran being those of large size penned on large writing blocks with wide margins, see Tov, *Scribal Practices*, 58. For discussions on the potential relationship between large format manuscripts and high-quality manuscripts pertaining to the Psalms Dead Sea scrolls, see Longacre, "Paleographic Style and the Forms and Functions of the Dead Sea Psalm Scrolls," 76–78. For a critique of the over emphasis on codicological dimensions

the scribes balance the spacing between the lines with the size of the letters. Manuscript specialists have hypothesised that there is a relationship between letter size and the quality of manuscripts, but ultimately the relationship is unclear. Sa3

In Table 4 (below) and the subsequent discussion thereof, I outline and explore aspects of GQS001's manuscripts. The initial three features— the size of the letters, the margins, the line spacing (columns 2,3,4)—are measured in mm or cm. Column 5 records each manuscript's format, which I measure in the three categories of small, medium and large. Format includes the scroll height, the column widths, and the length of the scroll itself. Manuscripts are treated as large format if the scroll height is greater than 20cm, and the columns are close to or greater than 10cm, and the scroll itself is circa 3m or more. Scrolls of medium format demonstrate a scroll height of 12–20cm, column widths are below 10cm, and the scroll itself is circa 1m more or less. Small format scrolls are more difficult to classify as these are those that are fragmentary and which less detail remains, but if the evidence suggests a manuscript was smaller than the medium format it is classified as small.⁵³⁴

Column 6 records the quality of the handwriting of the manuscripts. High quality handwriting demonstrates uniformity and consistency, and is considered to be produced by highly skilled and trained scribes. It is commonly described as formal, ⁵³⁵ but can be described as professional or calligraphic. ⁵³⁶ Whereas, if the

and size, as opposed to fine calligraphy, for deluxe manuscripts see Popović, "Book Production and Circulation," forthcoming.

⁵³² Sirat, Writing as Handiwork, 275.

⁵³³ Johnson, *Bookrolls and* Scribes, 155. Popović, "Book Production and Circulation," forthcoming. ⁵³⁴ For the measurements of these categories, I borrow from the work of Longacre on the Psalms manuscripts, and also from Tov in his tomb on the scribal practices, Tov, *Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert*, 74–104; Longacre, "Paleographic Style," 76–77.

⁵³⁵ The problems in DSS scholarship with using formal as a descriptive term for the quality of hand is due to Cross' appropriation of the term as a broad stylistically category. I discussed the terminological ambiguities at length in Chapter 2. See also, Longacre, "Disambiguating," 100–128.
⁵³⁶ Popović, "Book Production and Circulation," forthcoming; Drew Longacre, "Paleographic Style," 67–92; Longacre, "Disambiguating," 100–128.

handwriting looks more like it was produced by scribes in training or untrained writers then it shall be called informal, common or substandard. Uniformity and consistency are associated with carefully produced manuscripts, as opposed to those that may be described as messy or haphazard. Balance is associated with beautiful, possibly *deluxe* (although not always) manuscripts that may be described as elegant, as opposed to inelegant or rough. Uniform use of ornamentation also gives a manuscript a sense of beauty and elegance. Straight, rectilinear lines tend to be more strongly associated with skill and beauty than curvilinear lines, although this not across the board, and if a scribe can balance both this often leads to a particularly elegant looking manuscript. Adherence to roof and base lines adds to the sense of care and beauty given to a manuscript by its scribal hand.

It is possible to create points of distinctions between skill, care and beauty, and thus create a criterion of quality on which to assess handwriting. However, the differences can be subtle. One can distinguish easily enough between professional, elegant and carefully produced manuscripts verses substandard, common and less carefully produced manuscripts. Yet, what of the differences between two informally produced manuscripts; one by a trained scribe and another by a less skilled writer? Or in the case of GQS001, the difference between manuscripts produced by the one scribe, but some that appear as particularly elegant, while others show inconsistencies? While it is not overly complicated to distinguish between careful and careless, skilled and unskilled, professional and common, or elegant and rough, assessing the range of quality within each of these categories is more complex. No doubt though, there are differences of quality within, for example, handwritings classed as professional, or within handwritings classed as unskilled.

_

⁵³⁷ Popović, "Book Production and Circulation," forthcoming; Longacre, "Paleographic Style," 73–76.

⁵³⁸ One of the questions I raise and discuss in this chapter is whether the tendency to treat curvilinear lines as less distinguished, i.e., semiformal, is clarifying as to the quality of the writing.

Column 6 assesses the quality of the manuscripts in relation to the skill, care and beauty evident in the handwriting of each manuscript, from the criteria discussed above. If I was assessing quality in terms of the wider corpus, I would say that the manuscripts penned by GQS001 are all of highest quality among the DSS corpus. ⁵³⁹ If I was assessing these manuscripts in relation to the geometrical beauty of Greek inscriptions in antiquity, I would consider these manuscripts rather low in quality. Table 4 (col. 6) compares the quality of the eight manuscripts penned by GQS001 in relation to each other. Differences are discerned between those that I perceive of as the highest quality, to those of medium quality, to those of the least quality.

Table 4. Material aspects of G-QS001's manuscripts

Q	Letter size	Line space	Margins
4Q161	3.5 –4mm. ⁵⁴⁰ Final <i>mem</i> 4.5mm. <i>Lamed</i> 6mm.	7–8mm	Top unknown Bottom 2cm.
4Q166	3.5–4mm. Final <i>mem</i> 4.5mm. <i>Lamed</i> 6mm.	7–8mm	2cm top and bottom.
4Q171	3–3.5mm. Final <i>mem</i> 4mm. <i>Lamed</i> , 5mm	6–7mm	1.7cm top and bottom
4Q215	3–3.5mm. Final <i>mem</i> 4mm. <i>Lamed</i> 5mm.	7–8mm	Top, 2cm. Bottom unknown

⁵³⁹ Discussed further in Section 5.3, "Comparison with other Dead Sea Scroll Manuscripts."
⁵⁴⁰ These general size measurements are averages based on letters such as *aleph, bet, gimel, he, kaph, mem, resh, shin.* If at any point the general letters stand-out as consistently bigger then I mark this in the table. *Yod* and *waw* are of course smaller.

4Q397	3–3.5mm. Final <i>mem,</i> 3.8. <i>Lamed</i> 5mm.	5–9mm	Unknown
4Q439	3–3.5mm Final <i>mem,</i> 4mm. <i>Lamed,</i> 5–6mm.	6–7mm	Unknown
4Q474	2.5–3mm. Final <i>mem,</i> 4–4.5mm. <i>Lamed,</i> 5-5.5mm.	6–7mm	Unknown
11Q18	3–3.5mm. Final <i>mem,</i> 4mm <i>Lamed</i> 5mm.	6–7mm	Top 2.5cm (frag. 10). Bottom unknown

Q	Format Size	Quality
4Q161	Medium	High quality; carefully produced; consistent
		shaping of letterforms; calligraphic; elegant.
4Q166	Medium	High quality; carefully produced; consistent
		shaping of letterforms; calligraphic; elegant.
4Q171	Medium, but close to large.	Medium quality; carefully produced, but
	Height = 17.8	with some mistakes. There is an inconsistent
	At least 4 columns, 11cm in	emphasis on the curvature of the strokes.
	width	Remains professional.
4Q215	Medium	Very high quality; carefully produced;
		calligraphic. Very elegant with a balance
		between curvilinear and rectilinear lines.
4Q397	Its fragmentary nature	Somewhat lower quality. Unbalanced line
	makes it impossible to	spacing—feels cramped in places, while
	measure column height or	spacious in other places. Slightly larger range
		of letter size makes it more inconsistent;
		remains professional

	width. It is not of small format; likely medium. 541	
4Q439	Column width 10.5, but no other evidence. Likely small; possibly medium.	High quality; carefully produced; consistent shaping of letterforms; calligraphic; elegant.
4Q474	Column height 10.13, but no other evidence. Small or medium.	Somewhat lower quality. Maintains the ornate, curvilinear style, but lacks the consistency and balance of most of the other manuscripts. Remains professional.
11Q18	Highly fragmentary, so indeterminate. In all likelihood, medium, but close to large. ⁵⁴²	Medium quality; Most fragments are elegant and carefully produced, but some evidence mistakes. Calligraphic. Professional.

Below, I draw out both the regular and rarely occurring codicological features from Table 4. The aim is to recognise the scribe's tendencies and to discern any

⁵⁴¹ 4Q394 and 4Q396, the other two largest MMT manuscripts demonstrate dimension for medium format scrolls. Qimron, Strugnell, DJD 10: 3 and 15, 16.

⁵⁴² García Martínez and Tigchelaar discuss measurements of 11Q18, but these do not lead to a conclusive answeras to its original size. DJD 23: 305–308. As an unopened scroll the height was 10.6cm; the height of largest unbroken fragment is 8.25 reconstructed with a second piece to make the height 8.55cm. This height would suggest medium format. However, the largest of the margins is 2.5cm, associated with large fragment scrolls. Neither the width of the columns nor the length of the whole scroll is clear. Van de Ploeg mentioned twenty-six fragments being unrolled in twenty-five revolutions. The problem is that García Martínez and Tigchelaar argue that the calculation of the exterior revolution of the scroll being 11–12cm is not compatible with the margins and the contents of the scroll, unless the columns' widths were very irregular. However, they do say that, "it is plausible that a column width was less than the width of one revolution, so that it most cases a fragment comprised of one column." García Martínez and Tigchelaar, DJD 23:307. This means that the column width was below 11cm but that the scroll may have been up to twenty-five columns long.

correlations between the codicological features and the quality of the handwriting.

5.2.1 Letter Size

In terms of the letter sizes, mostly the letter sizes sit between 3–3.5mm, with *lamed* and also to degrees final *mem*, being bigger. Overall, the letter sizes of 4Q161 and 4Q166 are a touch larger than the other manuscripts. While 4Q474 has somewhat smaller letters to the average for this scribe, its final *mems* are bigger in comparison with its surrounding letters. In terms of how letter size relates to quality, I am not convinced that any definitive statements can be made. One can note that 4Q161 and 4Q166 are of higher quality than 4Q474, and some of the other manuscripts with slightly smaller writing; but this would only be a very small piece of evidence on which to suggest that the scribe writes neater when the letter sizes are bigger.⁵⁴³

5.2.2 Line Spacing

In terms of the line spacing, four of the manuscripts are copied with a distance of 6–7mm and three are copied with a distance of 7–8mm. 4Q397 is the anomaly. Herein is found a line distance of 5mm and a line distance of 9mm, with the remaining lines being in between. It is difficult to surmise why this would be, but it gives some of the fragments on this manuscript an unbalanced appearance, and lowers the quality of the manuscript as a whole. Where a greater difference

⁵⁴³ In a study on the Oxyrynchus manuscripts, William Johnson found a correlation between elegant scripts and large letter size. William A. Johnson, *Bookrolls and Scribes in Oxyrhynchus* (Toronto: University of Toronto Press, 2004), 155–60. In response to this finding from Johnson, in a study of the Isaiah and *Serekh* manuscripts, Popović very tentatively proposed that unlike Johnson's data, "perhaps for the scrolls, smaller script size is to be associated with better quality copies." This evidence was based chiefly on the *Serekh* manuscripts, which demonstrated that the smaller the size of the writing the higher the quality of writing. (These small sizes he measured at between 1.5–2mm and 2–2.5mm). Popović added though, further research on this is needed. The writing of GQS001 did not support the argument of smaller script being of higher quality; however, Popović's evidence is far more extensive than the eight manuscripts here.

between sizes exists, either with letter size or line spacing one can surmise that less care was given by the scribe to these manuscripts.

5.2.3 Margins

Of the five manuscripts where there are margins, one is 2.5cm, three are 2cm, and one is 1.7cm high. Longacre associates margins larger than 1.5cm with large format scrolls. However, these manuscripts do not conform to this standard, as the scrolls copied by GQS001 are predominantly of medium format. Only 4Q171 and 11Q18 come close to being of large format.

Large margins are also associated with high quality, elegant and deluxe manuscripts. While the manuscripts copied by G-QS001 are not *deluxe*, my argument is that his manuscripts are of the highest quality among the corpus, and these large margins offer reinforcement to this claim.

5.2.4 Manuscript Preparation

The size of margins and line spacing are associated with the preparation of the manuscripts, which happens before any text is written. An interesting question in relation to this data is whether GQS001 was involved with the preparation of the manuscripts? However, I find it difficult to determine from this data whether he was or was not involved in the preparation practices of manuscripts. On the one hand, there are small differences in the size of the margins and the line spacings. As they are not all identical, this could lead one to the immediate conclusion that the scribe was not involved in the preparation. On the other hand, regarding the margins, three are precisely the same, with another two being slightly larger or slightly smaller. Does that then flip it, suggesting that the scribe was involved in the production? The data shows a similar pattern with the line spacing. Four manuscripts are precisely the same as each other; another three are precisely the same as each other; and the difference between the two groups is only 1–2mm. (The eighth manuscripts, 4Q397, is an anomaly). Again, does this suggest that despite small differences the scribe was involved in the manuscripts'

⁵⁴⁴ Longacre, "Paleographic Style," 76.

preparation? While I am inclined to think that he may have been, ultimately, I have to leave it as a question. The data, at this stage, is not conclusive. The differences between these manuscripts are slight, but ultimately it cannot be claimed that they are prepared in an identical fashion.

5.2.5 Format

In terms of the format size, either all of these scrolls were of medium format, or six were medium and two were small. Ultimately, there are not enough clues as to the original size of 4Q439 and 4Q474 to know for certain. The column width of 4Q439, and the column height or 4Q474, both of which are greater than 10cm could suggest the manuscripts were once of medium format. Yet, with only one fragment remaining of each it is also possible they were of small format.

4Q161, 4Q166 and 4Q215 are clearly of medium format, and also 4Q171 and 11Q18. Although, the latter two come close regarding some of the measurements to being of large format. 4Q171 has a column height and width which is close to being associated with a large format scroll; however, indications are that the length of the scroll itself, while unknown, did not reach over one metre, let alone three metres. 11Q18, while the column dimensions suggest squarely the medium format, the length of the scroll itself may have measured over two metres. 545

Longacre argued in regards to the Psalms scrolls that there is a defining relationship between script and format. His argument was that the high quality, calligraphic and formal scripts were reserved for the large format scrolls, and that medium and small format scrolls were written in simple semiformal and informal scripts. Depending on how one views the quality of GQS001's manuscripts depends on whether GQS001 conforms to this standard set by Longacre. Longacre comments on the script type and style associated with GS001's manuscripts (the ornate, curvilinear), suggesting that while these manuscripts are beautiful, professionally produced manuscripts, their curvilinear

⁵⁴⁵ Cf. n. 542.

233

lines mean they are less formal, and not to be associated with the highest quality of manuscripts. ⁵⁴⁶ However, in section 5.2.1, I discuss Longacre's arguments further, suggesting—differently than he—that curvilinear scripts can be representative of the highest quality scripts. Therefore, medium format scrolls can display not only simple, semiformal scripts, but also the highest quality ones.

5.2.6 Quality

From the data collected above, I gleaned that of GQS001's manuscripts 4Q215 is the one of the highest quality and elegance. This is because the manuscript balances a frequent use of sharper lines in conjunction with the curvilinear lines of this style. 4Q161 and 4Q166 are also of a high quality with consistent letter forms and uniform shaping of curvilinear strokes. 4Q439 is also of high quality; although maybe with a touch more range in the forming of the letters.

With the remaining four manuscripts a discerning eye may notice the quality drop in areas. The writing of 4Q171 is less uniform as the others, displaying more of a wildness about it, due to an inconsistent emphasis on the curving of letter strokes. 11Q18 also emphasises roundedness, and some fragments exhibit inconsistency in the shape of letter forms. Additionally, in 11Q18 there is one messy looking interlinear correction added by the hand himself. 4Q397 and 4Q474 demonstrate inconsistencies in letter size and line spacing that lower the elegance of these manuscripts. While the inconsistent line spacing of 4Q397 leads to an imbalanced feel; for 4Q474 the inconsistent letter size and occasional divergence from the guide lines demonstrates less care in production.

In terms of quality, GQS001 is a highly skilled scribe evident in his execution of the letter forms of the ornate, curvilinear style. However, while all his manuscripts are professionally produced and demonstrate his skill, I have

⁵⁴⁶ Longacre, "Paleographic Style," 73.

assessed that not all of the manuscripts exhibit precisely the same level of care and beauty.⁵⁴⁷

5.3 Comparison with other Dead Sea Scrolls

In order to put the above data into perspective, one needs comparisons with other evaluations of codicological features and handwriting quality. While there is not a plethora of this data to draw on, I can access such data from the work of Popović on the Isaiah and Serekh manuscripts, and from Longacre on the Psalms scrolls. Fortunately, is that Isaiah and Psalms are among the most copied texts in the Qumran corpus. How do the codicological features in the group of manuscripts copied by GQS001 compare with other groups of manuscripts; namely, the Isaiah, Serekh and Psalms manuscripts? My comparison below—which sets out to answer this question—is not the full picture; but addresses the state of the art in the field, and positions my evaluation of GQS001 manuscripts with other evaluations of the quality and codicological features of particular groups of manuscripts.

An overarching purpose in making such comparison relates to content and function. What are the relationships between the quality of a manuscript and its content? For example, scholars have claimed that biblical manuscripts are associated with higher quality manuscripts.⁵⁴⁸ Does the data from GQS001, and the data on the Isaiah and Psalms and the *Serekh* confirm a distinction between

⁻

⁵⁴⁷ This finding is reminiscent of a finding by Popović regarding 4Q62a. Popović, "Book Production and Circulation," forthcoming. He says, "Finally, 4Q62a preserving only part of Isa 56:7–57:8, is to my mind a wonderful example of a very experienced, skilled scribe who, however, did not apply himself here fully by demonstrating an elegant script. The fragments rather give the impression of a skilled but quickly written text (cf., variance in letters, see, e.g., ayin, mem and he in the two fragments). The writing skill may be that of a professional scribe, yet the copy seems originally not to have been a professional bookroll but rather an excerpt, possibly also indicated by the rather large size of the script (~3.5–4mm)."

⁵⁴⁸ Tigchelaar suggests that this claim may be traced back to Cross' seminal article on the development of the Jewish scrips, where all of the examples of formal script are from biblical texts and virtually all the examples of semiformal and semicursive are from nonbiblical scripts. Tigchelaar, *Beautiful Bookhands*. Recently, Longacre continued to offer support to such an idea in his work on the Psalms manuscripts, Longacre, "Paleographic Style," 67–92.

high-quality biblical manuscripts and lower quality sectarian and nonsectarian manuscripts? What role do codicological features play?

The third layer is function. What did those who wrote, copied and collected the manuscripts use them for? Moreover, how did they use them? The quality and codicology of an individual manuscript provides clues as to the possible purpose for which it was written, and for whom, and the contexts in which the manuscript was read and circulated. Before, however, an exploration of these questions, I rehearse the data from Popović and Longacre in the following three charts.

Letter sizes of the Isaiah manuscripts and how these relate to categories of quality.

Table 5. Isaiah manuscripts from Qumran and Murabba'at. 549

Quality	2–2.5mm	2.5–3mm	3– 3.5mm	3.5–4mm	3.5– 4mm	4.5– 5mm
Elegant		4Q57?		4Q69?		
Professional	1Q8, 4Q55,	1QIsa ^a ,		4Q62a?		
	4Q56, 4Q58	4Q59, 4Q60,				
		4Q61, Mur3				
Substandard	4Q64		4Q63,	4Q65, 4Q66	4Q62	4Q67
			4Q68			

236

⁵⁴⁹ Popović, "Book Production and Circulation," forthcoming.

<u>Letter sizes of the Serekh manuscripts and how these relate to categories of quality.</u>

Table 6. Serekh manuscripts from Qumran. 550

Quality	1.5-	2-	2.5-	3–	3.5-	4–	4.5-
	2mm	2.5mm	3mm	3.5mm	4mm	4.5mm	5mm
Elegant							
Professional	4Q258,	4Q256,		1QS	4Q257		
	4Q264	4Q260					
Substandard		5Q11	4Q263		4Q259	4Q261,	4Q255
						4Q262	

<u>Format size of the Psalms manuscripts and how these relate to categories of quality.</u>

Table 7. Psalms manuscripts from Qumran, Naḥal Ḥever and Masada. 551

Quality	Indeterminate	Small	Medium	Large
Calligraphic	1Q11, 4Q97,	4Q89, 5Q5	2Q14, 3Q2,	4Q85, 4Q87,
Formal	4Q98 ^c , Mas1f		4Q91, 4Q98°	4Q92, 4Q98 ^b ,
				8Q2, 11Q5, 11Q6,
				11Q7, 11Q8,
				5/6Hev1b, Mas1f
Calligraphic semiformal	4Q96		1Q10, 4Q84,	4Q83, 4Q98
Common		4Q94?	4Q90	
Semiformal				

⁵⁵⁰ Popović, "Book Production and Circulation," forthcoming.

⁵⁵¹ Longacre, "Paleographic Style," 77, 86.

Common informal	1Q12, 4Q95,	4Q98 ^g	4Q86, 4Q93	
Current	4Q98f		4Q88	
Informal				

This data on the Isaiah, *Serekh* and Psalms manuscripts in comparison with the GQS001 data leads to some interesting conclusions and questions. First, however, I offer explanations of the different categories of quality found in Tables 5, 6 and 7 and how they compare with one another.

Longacre's categories of calligraphic formal and calligraphic semiformal align with Popović's categories of elegant and professional. Yet, the overlap is not as straight-forward as the category of elegant being akin to the category of calligraphic formal, or professional being akin to the calligraphic semiformal. Possibly all of Longacre's large calligraphic formal (cf., Table 7, 4Q92 or 11Q5) belong to Popović's category of elegant; but the small calligraphic formal (cf., Table 7, 4Q89 or 5Q5) belong to the professional category. This means manuscripts Longacre categorised as a calligraphic formal script could belong in either Popović's category of elegant or professional scripts depending on the format size of the manuscript. 552 Longacre's common semiformal and common informal readily aligns with Popović's category of substandard.

Longacre's calligraphic semiformal category is the category he placed manuscripts copied in the ornate, curvilinear type and style. This is the type and style of GQS001. Longacre perceived that the calligraphic semiformal operated on a different level to the formal, rectilinear scripts. He acknowledged that hands of the ornate, curvilinear scripts may on occasions aesthetically rival the

⁵⁵² I am not entirely clear whether the Psalms manuscripts of medium format and penned in the calligraphic formal, would be categorised according to Popović's system as elegant or professional, or a mix of both.

calligraphic formal, but concluded that they are not of the highest level of scripts, or for the highest level of classical literature. He explains:

"Perhaps the best explanation is simply that these elegant curvilinear hands functioned as a lower literary register. They are infrequently used for quality copies of the scriptures that were later included in the Hebrew Bible, but they are very common in other literary manuscripts. According to Tigchelaar, these scripts are used almost exclusively for non-biblical Hebrew manuscripts with full orthography and long morphological forms, which suggests to me a non-classical literary register. While not generally attaining to the highest standards of professional literary production expected for presentation copies of classical literature, these hands were nevertheless clearly and elegantly written by skilled (in most cases probably professional) writers in order to be legible and useful for others." 553

I have considered these notions—that the ornate, curvilinear is less distinguished, and that the biblical texts are of a higher literary register than their nonbiblical counterparts of a lower literary register—in light of all of the data on the manuscripts collected above.

Table 5 shows that 10% of the Isaiah manuscript are penned in an elegant script, 51% in a professional script, and 39% in a substandard script. Table 7 shows that 60% of the Psalms manuscripts are penned in a calligraphic formal script, 14% in a calligraphic semiformal script, and 26% are penned in a common script. Table 6 shows that 50% of the *Serekh* manuscripts are professional and 50% are substandard, and none are elegant. Therefore, according to this data set, biblical texts are more likely to be copied in professional, formal scripts than in non-professional,

⁵⁵³ Longacre, "Paleographic Style," 73.

common, scripts. Whereas, the manuscripts of the *Serekh*, the sectarian text *par excellence* do not show a preference for either professional or untrained hands. This may continue to evidence a higher degree of scripts of skill, care and beauty being applied to biblical books. Or at least biblical books such as Isaiah and Psalms.

But what of the manuscripts copied by GQS001? None of the manuscripts GQS001 copied are biblical; and his lines curve. Longacre classed his hand as calligraphic semiformal. Therefore, does GQS001 offer further evidence that only the most distinguished hands copied biblical texts? Or does his hand suggest that we need to expand our notions of what we consider the most formal and the most elegant? Is the category of semiformal—applied by Cross and also by Longacre—for curved lines still appropriate? A second layer to this discussion is whether GQS001 carried the same notions that we carry in the modern world about classical, high register literature and nonclassical, lower register literature?

Regarding whether we need to expand our notions of the most formal, I am inclined to say yes. I do not find the nomenclature of semiformal, applied to lines because they are curved, helpful. GQS001 evidences a highly skilled scribe who penned high-quality, beautiful manuscripts in a curvilinear script. One would not apply the term *deluxe* to GQS001's manuscripts, nor refer to them as prestigious, presentation copies, but I am reluctant to suggest that the quality of the handwriting is semiformal (like for example 1QS or 1QIsaa). Aesthetically, his most high-quality manuscripts—4Q215, 4Q161 and 4Q166—are very elegant, but all his manuscripts are well produced, and the term semiformal for any of his manuscripts would be misleading. As previously discussed, Cross created the category of round semiformal for the curvilinear script type of the

Herodian period, but it should not therefore follow that this means that it is lower quality script for lower register manuscripts.⁵⁵⁴

The question of literary register is complex. The data on the large format, calligraphic formal Psalms scrolls shows as Longacre argued that the ancients recognised and formally distinguished a "book" of Psalms from simply the reuse of its Psalmic content. 555 Additionally, modern readers of biblical literature distinguish a difference between Psalms and Isaiah as classical literature, and for example, New Jerusalem and the Testament of Naphtali as nonclassical literature. Is this enough then to suggest that the worldview of GQS001 considered a clear distinction between biblical books as high literary register, and other predominantly nonbiblical texts as a lower literary register? Furthermore, what precisely—beyond our categories of biblical and nonbiblical—would have qualified such a distinction of high and low register for ancient readers and writers?

Resolving such questions with a scribe who did not copy biblical manuscripts is largely theoretical. However, one may theorise, for example, that GQS001 did not copy standalone biblical texts because of their sacredness. Moreover, that the sacredness of a text was a qualifier, alongside its age, for an ancient to consider the text as operating on a higher literary plane, and therefore reserved for the most formal of script types. However, I would be cautious in readily equating sacredness, however that should be defined, to the biblical texts in their pre-canonical form, over and above nonbiblical texts. A number of scholars have argued

_

⁵⁵⁴ In a presentation, Tigchelaar suggested the possibility that Cross' nomenclature of semiformal for this Herodian script was influenced in part because very few of the biblical manuscripts were penned the "round semiformal." Tigchelaar, *Beautiful Bookhands and Careless Characters*. This does not mean that we should keep perpetuating notions that formal scripts are for biblical scripts, while less formal scripts are for nonbiblical manuscripts.

⁵⁵⁵ Longacre, "Paleographic Style," 84.

that for those associated with the Qumran manuscripts, their notion of sacred or authoritative texts extended beyond the biblical.⁵⁵⁶

In regards to manuscripts copied by GQS001, von Weissenberg and Uusimäki suggested that the *Yahad* movement saw the *pesharim* (three of which were copied by GQS001) as a form of human-divine communication, which indeed is the very requirement for a sacred text. ⁵⁵⁷ They propose that stark contrasts between early revelation (e.g. biblical texts) and late exegesis (e.g. *pesharim*) miss that for the *Yahad* the emphasis and importance is on interpretation (e.g. biblical 1QS 8:15) as much, if not more, than on the base text. ⁵⁵⁸ Recent exegesis could not have been classical literature if classical means distant and non-

⁵⁵⁶ Hanne von Weissenberg, Elisa Uusimäki, "Are there Sacred Texts in Qumran? The Concept of Sacred Text in Light of the Qumran Collection," in *Is there a Text in this Cave? Studies in Textuality of the Dead Sea Scrolls in Honour of George Brooke*, eds. Ariel Freedman, Maria Cioata and Charlotte Hempel, STDJ 119 (2017): 21–41; Casey D. Elledge, "Rewriting the Sacred: Some Problems of Textual Authority in Light of Rewritten Scripture from Qumran," in *Jewish and Christian Scriptures: The Function of Canonical and Non-Canonical Religious Texts*, eds. James H. Charlesworth, Lee Martin McDonald, JCTC 7 (London: T&T Clarke, 2010), 87–112. Additionally, scholars use the terms sacred and authoritative in a similar manner, arguing that authority was given to texts beyond the biblical corpus. Florentino García Martinez "Beyond the Sectarian Divide: The Voice of the Teacher as an Authority-Conferring Strategy in Some Qumran Texts," *The Dead Sea Scrolls: Transmission of Traditions and the Production of Texts*, ed. Sarianno Metso, Hindy Najman and Eileen Schuller STDJ 92(Leiden: Brill, 2010), 227-244;

For scholars who discuss the authoritative status of the some of the Enoch and Aramaic literature (nonbiblical), see Michael Knibb, "Reflections on the Status of the Early Enochic Writings, in *Authoritative Scriptures in Ancient Judaism*, ed. Mladen Popović, *JSJ* 141 (2010): 143–55; Eibert Tigchelaar, "Aramaic Texts from Qumran and the Authoritativeness of Hebrew Scriptures: Preliminary Observations," in *Authoritative Scriptures in Ancient Judaism*, ed. Mladen Popović, JSJSup 141 (Leiden: Brill, 2010), 155–171. For discussions that the *pesharim* (nonbiblical) demonstrate the authoritativeness of recent history and memory, see, John J. Collins, "Prophecy and History in the Pesharim," *Authoritative Scriptures in Ancient Judaism*, ed. Mladen Popović, JSJSup 41 (Leiden: Brill, 2010), 209–226. For discussions on parabiblical books claiming authority, see Mladen Popović, "Prophets, Books and Texts: Ezekiel, Pseudo-Ezekiel and the Authoritativeness of Ezekiel Traditions in Early Judaiam," in *Authoritative Scriptures in Ancient Judaism*, ed. Mladen Popović, JSJSup 141 (Leiden: Brill, 2010), 227–51.

⁵⁵⁷ Von Weissenberg and Elisa Uusimäki suggested that "sacred texts may include any textualized form of human-divine communication and divinely inspired interpretation." Von Weissenberg, Uusimäki, "Are there Sacred Texts in Qumran?" 24.

⁵⁵⁸ Von Weissenberg, Uusimäki, "Are there Sacred Texts in Qumran?" 34.

contemporary. Yet, sacredness imbues a text with status. All this to question the proposition that the ancients distinguished newer sacred texts from older sacred texts by application of the most of formal scripts for the older, more classical, higher literary register texts.

To round of this discussion on literary register, I contend that the care and consideration GQS001 applied to his manuscripts conveys time and energy was given by the scribe to refining the manuscripts and giving them artistic quality. The reasons for this are no doubt overdetermined, and could include the personality traits of a scribe who took pride in his handiwork. However, the intention behind this care and consideration could well have been that these eight texts—for the scribe and for those he copied them for—were of deep significance. These were not manuscripts, as Longacre suggested, of a lower literary register, but as important and as worthy of circulation as a large format Psalms manuscript or any other written text.

5.4 Codicology, Quality, and the Function of a Manuscript

In this section, I explore how the codicological features, and the quality of the manuscripts produced by GQS001 speak to the function of them, and what they may have represented to him and to those for whom they were penned. The reasoning behind such an exploration is that aspects of handwriting and codicology have left clues for deciphering the contexts for which manuscripts were prepared and used.

Daniel Falk, Longacre and Popović explored the material aspects of manuscripts, and how these relate to the content, to assess for what and for whom a manuscript was produced. Falk's study demonstrated what the material aspects of the prayer and liturgical scrolls suggest about the social context for

which these prayer texts were produced.⁵⁵⁹ Longacre compared the handwriting, format size and content of all of the examples of the Psalms manuscripts, asking after the literary register and function of each individual Psalm manuscript.⁵⁶⁰ Popović focused on the Isaiah and *Serekh* manuscripts and what the material aspects suggest about the publication of these texts and the intended audience they were being circulated to.⁵⁶¹ Here, I continue in a similar vein to these scholars, but my case study consists of eight manuscripts that are all of a different literary content, which were produced by one scribe. I explore what may be possible to ascertain about how this scribe viewed the purpose of his work within the social world that he inhabited. However, before discussing my conclusions about GQS001, I briefly outline the conclusions from Falk, Longacre and Popović from their manuscript case studies.

In the distinctive features of individual prayer and liturgical works, Falk recognised distinctive profiles of manuscripts. These profiles were: "economical and rustic personal copies, elegant commercial-grade portable copies, and large *deluxe* editions." Falk imagined a commercial market for the modest number of the elegant, professionally produced scrolls of the small, portable format, and which contained incantations and apotropaic hymns. However, these scrolls produced for a commercial market he saw as in the minority. He suggested that most were economical and rustic copies for personal use. Within and between those produced for commercial markets and those that were simply personal copies he envisioned further possible usages such as scholar's study editions or official and master's copies. Feature of individual prayer and liturgical works, Falk recommercial works, Falk recommendation and large deluxe.

•

⁵⁵⁹ Daniel K. Falk, "Material Aspects of Prayer Manuscripts at Qumran," in *Literature or Liturgy? Early Christian Hymns and Prayers in their Literary and Liturgical Context in Antiquity*, ed. Clemens Leonhard and Hermut Löhr, WUNT 2/363 (Tübingen: Mohr Siebeck, 2014), 33–88.

⁵⁶⁰ Longacre, "Paleographic Style," 67–92.

⁵⁶¹ Popović, "Book Production and Circulation," forthcoming.

⁵⁶² Falk, "Material Aspects," 81.

⁵⁶³ Falk, "Material Aspects," 74.

⁵⁶⁴ Falk, "Material Aspects," 81.

When comparing the thirty-five Dead Sea Psalms manuscripts, Longacre demonstrated a correlation between the size of a manuscript, how closely the content relates to the MT and 11Q5 Psalters, and the quality of the handwriting.⁵⁶⁵ The correlation is that the larger the scroll, and the more closely it relates to the MT or 11Q5, the more formal, professional and rectilinear the writing will be. Differing are the single excerpts of Psalms or the collections that differ from MT or 11Q5; these are penned in informal hands, and function as what he calls personal copies, working drafts or for scholarly study. Longacre categorised the handwriting into literary scripts and common scripts. The literary scripts are the calligraphic, formal book-hands reserved for prestigious presentation copies (11Q5) or the Psalms scrolls prepared for communal gatherings that included study gatherings, liturgical performance or perhaps entertainment. The common scripts are the informal, sometimes semiformal scripts used for more everyday practical purposes such as notes or memory exercises. They could be used for intellectual engagement but not for public dissemination.566

While acknowledging that handwriting skill exists on a spectrum and not in boxes, Popović's categories for handwriting quality are the elegant, the everyday professional and the substandard. Pertaining to the *Serekh* and Isaiah manuscripts, Popović suggests that the majority of the substandard manuscripts that exist predominantly as excerpts were personal copies, used for scribal training exercises or for study and memorization. The larger, elegant or everyday professional manuscripts were for broader settings of studying and reading together. In the main, he suggests that these activities, whether scribal training or large group reading events, happened within a private, communal context. However, he leaves room for the possibility that some of these

⁵⁶⁵ Falk, "Material Aspects," 82–83.

⁵⁶⁶ Longacre, "Paleographic Style," 1–26.

⁵⁶⁷ Popović, "Book Production and Circulation," forthcoming.

⁵⁶⁸ Popović, "Book Production and Circulation," forthcoming.

⁵⁶⁹ A private, communal context may initially appear as an oxymoron; however, he does not mean private as synonymous with personal, but private in the sense of existing in a contained network of

manuscripts, either the substantial professional copies or the substandard excerpts, may have been circulated on the trade network.⁵⁷⁰

Sitting alongside this large collection of economic and rustic, common and informal, substandard and even the everyday professional manuscripts, to which a majority of the DSS belong—the elegance of GQS001's manuscripts standout.⁵⁷¹ Thus, taking into account the ideas of the previous scholars above, it is clear that the manuscripts copied by this scribe are not an example of a scribal training exercise, or for a study exercise or simply for his own personal use. For example, Popović suggested that 4Q63 was a training exercise due to irregular inking, letter variance, and irregular interlinear spacing.⁵⁷² Falk suggested that 4Q255 was a personal copy because of the crude, cursive script, lack of spacing between words and unevenly spaced lines.⁵⁷³ None of these characteristics can be applied to GQS001's manuscripts. Therefore, in all likelihood, they were penned for the use of others and for a broader audience. In the conclusion of the chapter, when I discuss the function of the scribe's manuscripts, I offer concrete examples of what I mean by "penned for the use of others," and for what, for whom, and for when.

At this stage, it may be possible to offer hypotheses from the data and what it implies about the purpose of GQS001's manuscripts, their role and function at Qumran. However, any remark at this stage runs the risk of being preemptive, as there has been no discussion of the literary content of the manuscripts. In conjunction with material aspects of certain scrolls, Falk suggested a relationship between incantations and apotropaic hymns (content), and the commercial market. Longacre suggested that the function of Psalm

_

people, as opposed to broad and complicated trade networks. Popović, "Book Production and Circulation," forthcoming.

⁵⁷⁰ Popović, "Book Production and Circulation," forthcoming.

⁵⁷¹ I would add that it is not just GQS001's hand that is a standout, but a small portion of the manuscripts penned in this particular style, for example 2Q24, 4Q184 and 4Q436. Although many of these manuscripts are of lower quality, such as 4Q267, 4Q434 and 4Q531

⁵⁷² Popović, "Book Production and Circulation," forthcoming.

⁵⁷³ Falk, "Material Aspects," 54.

excerpts whose *content* vary from MT are simply working drafts. Popović pointed out how we view the production and circulation of the *Serekh* and Isaiah manuscripts differently, by virtue of the *content* and the group we identify the *content* of the *Serekh* manuscripts with.⁵⁷⁴ This makes clear how content—and also the literary categorisation of a manuscript—guides and limits what we think is possible regarding the audience, social context and circulation of said manuscript. Therefore, before offering any hypotheses about the function of GQS001's manuscripts and what might be learnt about his intended audience, I consider first the content of the manuscripts copied by him, and how they are categorised.

5.5 Literary Content and Categories

The focus of this section (5.5) is the literary content of the manuscripts copied by GQS001. The section will be divided into two parts.

- Part 1, briefly outlines in two or three paragraphs for each manuscript the subject matter of the text. This is not a critical analysis, but rather a general description.
- Part 2, is a discussion of each manuscript in relation to the literary category it belongs, according to the five literary categories—sectarian, nonsectarian, intermediary sectarian, biblical and Aramaic—proposed by Dimant. This taxonomic model has been influential in the field in shaping how texts are grouped together, and how each group is understood in relation to each other. Part 2 offers analyses pertaining to why each manuscript of GQS001 belongs to the category it does, and how the categories can both illuminate and detract from the content of each text. Part 2, concludes with a brief assessment of the use of such taxonomic categories in light of GQS001's manuscripts.

⁵⁷⁴ Popović, "Book Production and Circulation," forthcoming.

Following the outline of the literary content, I return in section 5.7 to the question proposed above. What does the literary content coupled with the codicological features suggest about the function of the manuscripts within the world that this scribe inhabited? What does it mean that this scribe copied these texts?

5.5.1 The Subject Matter of the Texts Copied by GQS001

5.5.1.1 4Q161—Pesher Isaiaha

4Q161 is an interpretation of Isa. 10:22–34 and 11:1–5. From the fragmentary remains of 4Q161, it is clear that the author of *Pesher* Isaiah^a interpreted the passages from Isaiah in light of a war with the Kittim. Less clear though is who the author envisioned the Kittim to be, and when the war with them occurred, or was meant to be occurring? Numerous attempts at answering the who and when questions of 4Q161 by Joseph Amusin,⁵⁷⁵ Hanan Eshel,⁵⁷⁶ and James Charlesworth⁵⁷⁷ said the *Kittim* were the Seleucids, and the text described a battle in Akko that was historical to its author. ⁵⁷⁸ In his article on 4Q161, Alex

⁵⁷⁵ Joseph D. Amusin, "The Reflection of Historical Events of the First Century BC in Qumran Commentaries (4Q 161; 4Q 169; 4Q 166)," in HUCA 48 (1977): 123-152 at 131-32. ⁵⁷⁶ Hanan Eshel, "Kittim in the War Scroll and the Pesharim," in Historical Perspectives: From the

Hasmoneans to Bar Kokhba in Light of the Dead Sea Scrolls: Proceedings of the Fourth International Symposium of the Orion Center for the Study of the Dead Sea Scrolls and Associated Literature, 27-31 January, 1999, eds. David M. Goodblatt, Avital Pinnick, Daniel R. Schwartz STDJ 37 (Leiden: Brill, 2001), 29-44.

⁵⁷⁷ James Charlesworth, The Pesharim and Qumran History. Chaos or Consensus (Grand Rapids, Michigan: Eerdmans, 2002).

⁵⁷⁸ Precisely, the argument is that it refers to a campaign of 103BCE, known to modern day scholars from Josephus' War. This campaign was between Ptolemy Lathyrus IX and Alexander Jannaeus. Jannaeus' army was losing but Cleopatra III sends support to Jannaeus to secure his victory. The reasons scholars align 4Q161 to these events in Josephus' War are the mention of Akko and the borders of Jerusalem, alongside the narrative that the Kittim were winning but then they were overcome. Eschel argued that the epithet Kittim was interchangeable, making it possible that in 4Q161 the Kittim are the Seleucids, even if this epithet depicts the Romans in the majority of the other Qumran manuscripts. Eshel, "Kittim," 42.

Jassen argued differently.⁵⁷⁹ He said that the *Kittim* represented the Romans, who were the oppressors of Judaea current to when the text was composed and copied. Jassen says the text envisioned a future battle when the *Kittim* would be defeated. Jassen explains that the purpose of 4Q161 and its description of the War with the *Kittim* is not to remember a historical battle, but rather to describe an exegetical and eschatological one.⁵⁸⁰

While the mention of the place of Akko in 4Q161 may offer a clue to a battle with the Seleucids, there is much to be said for the likelihood of Jassen's understanding. In other Qumran manuscripts that mention the *Kittim*, they are more commonly associated with the Romans than the Seleucids. The palaeographic dates situate the majority of manuscripts that mention the *Kittim* at the time of the Roman Empire. Second, the Prince of the Congregation / $N\bar{a}\hat{s}\hat{i}$ $Ha-\bar{E}d\hat{a}$, who appears in 4Q161 appears also in the War Scroll and the *Sefer Ha-Milhamah* as the hero of the battle. The War Scroll and the *Sefer Ha-Milhamah* are easily understood as eschatological texts, and with its many

⁵⁷⁹ Alex Jassen, "Re-reading 4QPesher Isaiah A (4Q161) Forty Years After DJD V," in *The Mermaid* and the Partridge: essays from the Copenhagen Conference on revising the texts from Cave 4, eds. George Brooke and Jesper Høgenhaven, STDJ 96 (Leiden: Brill 2011), 57–90 at 61. ⁵⁸⁰ Jassen, "Re-reading," 57–90.

⁵⁸¹ George Brooke, "The Kittim in the Qumran Pesharim," in *Images of Empire*, ed. Alexander Loveday, JSOTSup 122 (Sheffield: JSOT Press, 1991), 135–59 at 136.

⁵⁸² For the dating of the War Scroll see, Maurice Baillet, *DJD VII: Qumran Grotte 4: III (4Q482-520)* (Oxford: Clarendon, 1982). Baillet dates 1QM to 30–1 B.C.E. For the dating of 1QpHab as either 25 BCE–25 CE or 1–50 CE see, Pieter B. Hartog, The Final Priests of Jerusalem and the Mouth of the Priest: Eschatology and Literary History in Pesher Habakkuk," in *DSD* 24 (2017): 59–80 at 79. See also, Annette Steudel, "Dating Exegetical Texts from Qumran," in *The Dynamics of Language and Exegesis at Qumran*, eds. Devorah Dimant, Reinhard G. Kratz FAT 2 (Tübingen: Mohr Siebeck, 2009), 39-53 at 47. The palaeographic dating and C14 dating of 4Q161 to 30–1BCE has been discussed in this book.

⁵⁸³ Robert Kugler, "The War Rule Text and a New Theory of the People of the Dead Sea Scrolls: A Thought Experiment," in *The War Scroll, Violence, War and Peace in the Dead Sea Scrolls and Related Literature : Essays in Honour of Martin G. Abegg on the Occasion of His 65th Birthday*, eds. Martin Abegg, Kipp Davis, Kyung Baek, Peter Flint, and Dorothy Peters, STDJ 115 (Leiden: Brill, 2015), 163–72; George Brooke, "Text, Timing and Terror: Thematic Thoughts on the War Scroll in Conversation with the Writings of Martin G. Abegg, Jr." in *The War Scroll, Violence, War and Peace in the Dead Sea Scrolls and Related Literature: Essays in Honour of Martin G. Abegg on the*

overlaps with the War Scroll, the battle in 4Q161 is also better understood as eschatological battle, as opposed to an historical one.

5.5.1.2 4Q166—*Pesher* Hosea^a

4Q166 interprets Hosea 2:8–14. In these verses, God is taking back from a female figure his gifts of grain, wine, oil, silver and gold. He is putting an end to her feasts and festivals and destroying her vines and fig trees. He is angry that she followed other lovers and forgot Him. Roman Vielhauer describes Hos. 2 as "a judgment discourse portraying Israel as God's spouse, an unfaithful adulteress."

Amusin offered an historical reflection on 4Q166, influenced by his idea that 4Q161, 4Q166 and 4Q169 reflect the socio-political world of Ancient Judaea towards the end of the Hasmonean period (103–63BCE). The mention of the presence of strangers (4Q166 ii 13, 16) and famine (4Q166 ii, 12) in the *pesher* sections Amusin uses as historical pegs to align events occurring in 4Q166 with events mentioned by Josephus that occurred in 65 BCE. Drawing on the work of Amusin, Tal Ilan argues that there are clues in 4Q166 to align it with historical events and figures. She says that that the time before the famine, when "they ate, became replete, and forgot God" (4Q166, ii 3) referred to the rule of Queen Shelamzion. Ilan acknowledges that there is no mention of Queen Shelamzion by name in 4Q166, but that the descriptions of an "unfaithful wife who played

Occasion of His 65th Birthday, eds. Kipp Davis, Kyung Baek, Peter Flint, Dorothy Peters STDJ 115 (Leiden: Brill, 2015), 49–66.

⁵⁸⁴ Roman Vielhauer, "Reading Hosea at Qumran," in *The Mermaid and the Partridge: essays from the Copenhagen Conference on revising the texts from Cave 4*, eds. George Brooke and Jesper Høgenhaven (Leiden: Brill 2011), 91–108 at 92.

⁵⁸⁵ Joseph D. Amusin, "The Reflection of Historical Events of the First Centruy BC in Qumran Commentaries (4Q161, 4Q169 4Q166)," *HUCA* 48 (1977), 123–152.

⁵⁸⁶ For all of the many details that bring together such a claim, see, Amusin, "The Reflection of Historical Events," 147–48.

⁵⁸⁷ Tal Ilan, "Shelamzion in Qumran: New Insights," in *Historical Perspectives: From the Hasmoneans to Bar Kokhba in Light of the Dead Sea Scrolls: Proceedings of the Fourth International Symposium of the Orion Center for the Study of the Dead Sea Scrolls and Associated Literature, 27-31 January, 1999*, eds. David M. Goodblatt, Avital Pinnick, Daniel R. Schwartz STDJ 37 (Leiden: Brill, 2001), 57–68;

the harlot" describe her, and that in 4Q166 the verses from Hosea just as much as the exegesis are being used to lament the Queen's reign. 588

Moshe Bernstein argues differently.⁵⁸⁹ For two reasons he sees that 4Q166 is modelled on Jubilees 6.34–38. First, in Hosea 2:13 and in Jubilees there is the forgetting or ceasing of the feast, new moons and the sabbaths in this same order. ⁵⁹⁰ Second, the *pesher* section of 4Q166 share an identical, idiosyncratic idiom with Jubilees, which speaks of the people walking in the festivals of the nations. Bernstein argues, "it is not unlikely that the words in the text of Hosea recalled for the author of the *pesher* the text of Jubilees, whose treatment of the prophetic text then led him to the content of the *pesher*." ⁵⁹¹ Bernstein proposes a new reconstruction and translation of 4Q166; ii: 16–17, that makes clear the alignment of the *pesher* section in 4Q166 with Jubilees. The current reconstruction and translation reads:

פשרו אשר

[כול המוע]דות יוליכו במועדי הגואים

"Its interpretation is that they fix all celebrations in agreement with the festivals of the nations." 592

⁵⁸⁸ Ilan, "Shelamzion in Quman," 62-63.

⁵⁸⁹ Moshe J. Bernstein, "Walking in the Festivals of the Gentiles. 4QpHosea^a and Jubilees 6.34–38," in *Reading and Re-Reading Scripture at Qumran* (2 vol. Set), STDJ 107 (2013); 674–685.

⁵⁹⁰ Berstein provides a translation from, O.S. Wintermute, trans., "Jubilees," in *The Old Testament Pseudepigrapha*, James Charlesworth, ed., (New York: Doubleday, 1985), 2.68. "And all the sons of Israel will forget, and they will not find the way of the years. And they will forget the new moons and (appointed) times and the sabbaths. And they will set awry all of the ordinances of the years. For I know and henceforth I will make you know—but not from my own heart, because the book is written before me, and is ordained in the heavenly tablets of the division of days—lest they forget the feasts of the covenant and walk in the feasts of the gentiles, after their errors and after their ignorance." Berstein, "Walking in the Festivals," 677.

⁵⁹¹ Bernstein, "Walking in the Festivals," 680.

⁵⁹² Florentino García Martínez, Eibert J.C. Tigchelaar, *The Dead Sea Scrolls: Study Edition* (Leiden: Brill, 1997), 331.

Bernstein reconstructs and translates instead:

פשרו אשר[שכחו]

מועדי הע]דות ויליכו במועדי הגואיםו ⁵⁹³

"Its interpretation is that they forgot the festivals of the covenant and walked in the festivals of the nations."

In regards to the subject matter of 4Q166, I am more inclined to agree with Bernstein than Amusin or Ilan, or others who have tried to translate 4Q166 in a Hasmonean historical setting. ⁵⁹⁴ At their core, the *pesher* sections of 4Q166 are intertextual in nature. They draw on both Hosea and Jubilees to insist that regarding the appointed times of the calendar as fixed by God deviations and sins are occurring. Moreover, 4Q166 is uttering the eschatological expectations of the community; the *pesharist* is foretelling a punishment for the calendar deviations and for the casting aside of God's laws.

5.5.1.3 4Q171—Pesher Psalms^a

4Q171 spans Psalms 37:8–40 and Psalms 45:1–2. Like many Psalms, Psalm 37 is a dualistic one, which contrasts the fates of the wicked and the righteous. While the wicked may prosper now, ultimately they perish. While the righteous may possess little now; ultimately they inherit the earth. The dualism of the Psalm is reflected in the *pesher* sections of 4Q171. On the side of the righteous is the Teacher of Righteousness / Interpreter of Knowledge and his followers the Congregation of the Chosen / Congregation of the Poor. On the evil side is the Wicked Priest / the Man of Lies, and his followers the Ruthless of the Covenant. As the group on the side of evil is made up of a Priest and followers who are

⁵⁹⁴ See also, Vielhauer, "Reading Hosea at Qumran," 91–108.

⁵⁹³ Bernstein, "Walking in the Festivals," 682.

ruthless with the covenant, it is more than likely that 4Q171 is a portrayal of a conflict occurring within Judaism, and not as 4Q161, a portrayal of a battle with foreign oppressors. 4Q171 is littered with so-called sectarian epithets for the significant players and the groups aligned with them, who take centre stage in the conflict ⁵⁹⁵

Regarding the Teacher of Righteousness, Pieter B. Hartog explains that while scholars in early readings of the *pesharim* took them to be exegetical teachings of the Teacher, 596 increasingly this changed. Rather, in modern scholarly interpretations the Teacher became one who was represented in the pesharim as an individual to be remembered. Hartog says, "the pesher commentators determine the image of the Teacher; the Teacher does not determine the contents of the *pesharim*." 597 Hartog's perspective that the *pesher* commentators (in general) determine the image of the Teacher cannot be applied to either 4Q161 or 4Q166 (as they do not mention the Teacher), but it readily applies to 4Q171. 4Q171 creates an image of the Teacher as God's elected leader for the community, and the speaker of truth against the Man of Lies. 4Q171 1 iii: 16–17 describes him as, "The one who God chose to stand, who he installed to found the community of his chosen ones, and straightened out his path, in truth." In regards to the eschatological vision of 4Q171, 4Q171 refers to a specific forty-year period of struggle of which following, the wicked are consumed and the Congregation of the Chosen receive their inheritance.

٠

⁵⁹⁵ Below, in section 5.3.2 I further discuss what is meant by sectarian epithets and their role in sectarian texts.

⁵⁹⁶ In 1QpHab VII 5 and 1QpHab II 8–9, claims are made about the scroll containing the words and insights of the Teacher.

⁵⁹⁷ Pieter B. Hartog, "Interlinear Additions and Literary Development in 4Q163/Pesher Isaiah C, 4Q169/Pesher Nahum, and 4Q171/Pesher Psalms A," in *RevQ* 28 (2016): 267—77, at 268. However, to be precise, this can only be true for 1QpHab, 4Q171 and 4Q173 (also a Psalms *pesher*) as these are the only *pesharim* that make any direct reference to the Teacher of Righteousness.

5.5.1.4 4Q397 — Migsat Ma'ase ha-Torah (MMT)

The *Miqṣat Maʿase ha-Torah* (MMT) is extant in six copies, including 4Q397. It is written from a first-person perspective; a "we" group writing to a "you" group (the you is both singular and plural), outlining a position on numerous halakhic concerns that they perceive others are deviating from. There are debates on whether to call MMT, for example, a letter, an act of communication or an epistolary treatise; however, in this debate about nomenclature, perhaps the pertinent aspect is simply that MMT says: "we have written to you." The tone of the "we" group towards the "you" group is not antagonistic. It has been described as both conciliatory and deferential. The writers of MMT acknowledge that whoever "you" are, they have understanding of the Law.

In terms of who the pronouns refer to, the most common perspective is that the "we" group are the Qumran sectarians, and the "you" group are external to the sectarians. However, Gareth Wearne argues for the possibility that the Qumran movement was instead the "you" group. ⁶⁰¹ Steven Fraade's argument is that the "you" addressees are part of the "we" group, or potential members thereof. In other words, MMT was compiled not to an extramural addressee but to an intramural one. ⁶⁰² However, the dominant perspective remains that the "we" and the "you" are two separate entities. ⁶⁰³

-

⁵⁹⁸ Charlotte Hempel, "The Context of 4QMMT and Comfortable Theories," in *The Dead Sea Scrolls: Texts and Context*, ed. Charlotte Hempel STDJ 90 (Leiden: Brill, 2010). Hanne von Weissenberg, *4QMMT: Reevaluating the Text, the Function and the Meaning of the Epilogue*, STDJ 82 (Leiden: Brill, 2009), 117–20. Gareth Wearne, "4QMMT: A Letter to (not from) the Yaḥad," in *Law, Literature, and Society in Legal Texts from Qumran: Papers from the Ninth Meeting of the International Organisation for Qumran Studies, Leuven 2016*, ed. Jutta Jokiranta and Molly Zahn, STDJ 128 (Leiden: Brill, 2019), 99-126; John J. Collins "4QMMT and History," in Miqṣat Maʿase ha-Torah, ed. Reinhard G. Kratz, SAPERE 37 (Tübingen: Mohr Siebeck, 2020), 161–79.

⁵⁹⁹ Collins "4QMMT and History," 163-65.

⁶⁰⁰ Wearne, "4QMMT," 100; Collins, "4QMMT and History," 171.

⁶⁰¹ Wearne, "4QMMT: A Letter to," 99-126.

⁶⁰² Stephen Fraade, *Legal Fictions: Studies of Law and Narrative in the Discursive Worlds of Ancient Jewish Sectarians and Sages. JSJ* 147 (2011): 88–90.

⁶⁰³ Collins, "4QMMT and History," 170–71. If one desires to speculate further about precisely who the "you" singular was, Collins explains the history of scholarly hypotheses about the sect writing

There is additionally a third group in MMT, a "they" group, towards whom the tone is particularly negative. The editors of MMT associated the "they" group with the Pharisees, 604 and more recently Collins reiterated the link with the Pharisees and the "they" group. 605 Von Weisenberg offers that the "they" group were the presiding priests in the Temple, who the Qumran group felt were defiling the offerings and the sacrifices through improperly carrying out the rituals and engaging in improper unions. 606 Associating the "they" group with the ruling Priests is highly plausible given MMT's concern with the actions of the Priests, and also that the text states that the Priests are responsible to carry out the rituals in such a way so as not to bring guilt on the people (4Q394, 3–7 i, 15–17).

Due to the fragmentary nature of the manuscript of 4Q397 (copied by GQS001), it does not comprise of all of the halakhot the MMT composition as a whole prescribes, but it includes many. There are halakhot on the handling of bones, hides and sacrificial animals; forbidden sexual unions with Ammonites and Moabites; purity guidelines regarding contamination and liquid streams; 607 gifts and tithe made to priests. 4Q397 is concerned with the behaviour of people with skin wounds, insisting that those afflicted must stay outside of the holy places, and partake in sacred meals and the eating of sacred foods until the sunsets on the eighth day. There is an ambiguous law regarding the sons of

-

to a High Priest, who was either Hyrcanus I or Hyrcanus II, depending on the date one assigns to the composition. Collins, "4QMMT and History," 174–78.

⁶⁰⁴ Qimron, Strugnell, DJD 10: 114.

⁶⁰⁵ Collins, "4QMMT and History," 174.

the fragmentary state of the text, but that most references to them are in rulings that deal with sacrifice or slaughter. Hanne Von Weissenberg, *4QMMT*: *Reevaluating the Text, the Function and the Meaning of the Epilogue*, STDJ 82 (Leiden: Brill 2009), 136. For examples from the text, cf., 4Q394, which states, "Concerning the offering of the gentile grain that they are [.....]" and allowing their touch to become defiled;" "Concerning the sacrifice of the sin offering that they are boiling in vessel of bronze and thus defiling [.....];" "Concerning the cereal offering of the sacrifice of wellbeing, they are to set it aside daily;" "Concerning the hides of cattle and sheep which they [.....].

⁶⁰⁷ A well-known controversy between Pharisees and Sadducees.

Aaron (the priests) and who they are permitted to marry. Was it reiterating the forbidden nature of relationships with gentiles or was it excluding priests also to marry Israelite women of lower stature?

5.5.1.5 11Q18 New Jerusalem (NJ)

The New Jerusalem (NJ) is extant in seven copies, including 11Q18. NJ has two protagonists; an angel and a seer. The angel guides the seer through the vision of the new city of Jerusalem. The seer is thought to be an important figure in Israel's history, possibly Jacob or Enoch. From the city gates the vision moves through the streets, houses and banquet halls, until it reaches the Temple. The descriptions of the houses and rooms are practical but the vision contains fantastical descriptions of monumental walls and city streets that glitter in gemstones. There are twelve gates, named after the twelve tribes of Israel.

NJ is an apocalyptic / eschatological text. In the Aramaic and Hebrew apocalyptic literature of Ancient Judaea, visions of the new Jerusalem vary. For example, by the time of the writing of Revelations, the new Jerusalem is situated in the heavenly realms. Initially, regarding the NJ manuscripts, scholars wondered if Aramaic NJ also envisioned a heavenly Jerusalem. García Martínez argues against this notion. He says that the new Jerusalem in NJ belongs on earth. He says, "the plans for the city and the temple of the New Jerusalem text represent a city of gigantic dimensions, covered with precious stones, a city that will be built by God at the end of days: not a heavenly Jerusalem, but the very

⁶⁰⁸ Eibert Tigchelaar (agreed also by Andrew Perrin) argued that the seer is Jacob. Eibert Tigchelaar "The Character of the City and the Temple in Aramaic New Jerusalem," in *Other Worlds and Their Relation to This World: Early Jewish and Ancient Christian Traditions* ed. T. Nicklas, *JSJ* 143 (2010); Andrew B. Perrin, "The Aramaic Imagination: Incubating Apocalyptic Thought and Genre in Dream-Visions among the Qumran Aramaic texts." in *Apocalyptic Thinking in Early* Judaism, eds. Sidnie White Crawford and Cecilia Wassen, *JSJ* 182 (2018): 110–40 at 130–31.

Michael Langlois said that the seer was Enoch. Michael Langlois, "New Jerusalem," in *T&T Clarke Companion Volume to the Dead Sea Scrolls*, eds. Charlotte Hempel and George Brooke (Great Britain: T&T Clarke, 2019), 332–34.

earthly city and the very earthly temple described in the War Scroll, and destined to endure forever."⁶⁰⁹

5.5.1.6 4Q215—The Testament of Naphtali

The Testament of Naphtali is concerned with the genealogy of Bilhah and Naphtali. The first paragraph of 4Q215 mentions Laban freeing Ahiyot—who was Devorah's brother—from captivity. This is followed by Laban giving Hannah to Ahiyot, and the two of them bearing their children—Bilhah and Zilpah. The second paragraph explains that Laban then gave Zilpah to Leah and Bilhah to Rachael as maidservants. Rachael then gave Bilhah to Jacob to bear him children, and Jacob and Bilhah bore Naphtali and Dan. The genealogy of this passage gives Naphtali and Dan respectable lineage.

White Crawford explains that Jubilees more than Genesis is concerned with the purity of all the matriarchs. ⁶¹² She says there are other Qumran texts that share this concern, and "are at pains to show that the matriarchs are the proper, endogamous spouses for the patriarchs and that their sons are the chosen heirs of the promise." ⁶¹³ 4Q215 is an example of one of these texts, with its particular focus on the genealogy of Naphtali and his mother Bilhah. The central aim of the Testament of Naphtali is to give Naphtali a proper Aramean

⁶⁰⁹ García Martínez, "New Jerusalem," 288.

⁶¹⁰ It is likely that in the ancient world the Testament of Naphtali existed in two traditions; the Greek Tradition and the Hebrew (possibly Aramaic) tradition. Therefore, when talking about the Testament of Naphtali in relation to 4Q215, I am referring to the Hebrew / Aramaic tradition. In 4Q215, lines 1-5 (the top paragraph) do parallel the *Greek Testament of Patriarchs Naphtali*, but lines 7–11 are unparalleled in the Greek. However, these lines, lines 7–11, are paralleled in the *Midrash Bereshit Rabbatti*. For more details, see Michael Stone, "The Genealogy of Bilhah," *DSD* 3 (1996): 20–36.

⁶¹¹ Even the meaning of their names is given. Zilpah is the name of the city that Laban was held captive, and the name Bilhah was given to her by Hannah because she hurried to suckle. ⁶¹² Sidnie White Crawford, "There is Much Wisdom in Her," in *Celebrate Her for the Fruits of Her Hands: Essays in Honor of Carol L. Myers*, ed. Susan Ackerman Charles E. Carter and Beth Alpert Nakhai (Winona Lake: Eisenbrauns, 2014), 133–51.

⁶¹³ White Crawford, "There is Much Wisdom in Her," 147–48.

genealogy, and with also the mention of Zilpah to show that all the children of Jacob came from the same ancestral source. ⁶¹⁴ In Genesis, Devorah (Ahiyot's sister in 4Q215) is Rebeka's nurse. ⁶¹⁵ Therefore, 4Q215 in making Ahiyot Laban's kin aligns Bilhah and Zilpah, and thus Naphtali, Dan, Asher and Gad in the Abrahamic lineage. ⁶¹⁶ In the Hebrew Bible, all that readers learn of Bilhah is that she was a maid to Laban, who was given to Rachel. Both Jubilees and 4Q215 expand the story of this matriarch, providing her with more status and significance.

5.5.1.7 4Q474—The Text Concerning Rachael and Joseph

4Q474 survives in only one small fragment. The remains of the manuscript suggest its focus is Rachael, although it is not possible to know how long the text once was. Rachael is named in the text, whereas Joseph is only mentioned as her son. 4Q474 line 2 it says, "she rejoiced in a son"; line 4 says, "she asked the Lord to give her another son"; line 5 says, "the Lord loved Rachel exceedingly and that he showed her mercy." Interestingly, 4Q474 and 4Q215 (both penned by GQS001) are the only two Qumran manuscripts that mention Rachael, besides of course, Genesis and Jubilees texts.

White Crawford explains that the comment in this manuscript that the Lord loved Rachael exceedingly— אהב יהוה מאודה רחל —is remarkable. It parallels Genesis' usual claimthat Jacob loved Rachael exceedingly. According to White Crawford, "this mark of divine favor is not assigned to any other matriarchs anywhere else in the biblical tradition." Therefore, while very small and fragmentary, 4Q474 stands out as significant for this special honour that it bestows on Rachael.

⁶¹⁴ Michael Stone, "The Genealogy of Bilhah," 20–36.

⁶¹⁵ White Crawford, "There is Much Wisdom in Her," 148.

⁶¹⁶ Stone and White Crawford explain that also Laban rescuing Ahiyot from slavery signifies their kinship. Stone, "The Geneaology of Bilhah, 32; White Crawford, "There is Much Wisdom in Her," 148.

5.5.1.8 4Q439 Lament by a Leader

4Q439 is a small fragment. However, in what little that remains of this text one encounters an image of God that Elisha Qimron described as נועד ומתמיה; daring and surprising. It is possible that one may also find Qimron's interpretation surprising, as it is different from the initial interpretation of the text, and the interpretation by which 4Q439 received its name. For Qimron, 4Q439 is not a lament by a leader, but a lament by God.

The editors of 4Q439 called the text "Lament by a Leader" because they believed that the first-person narrator of the text was the leader of the sect. They said, "4Q439 was clearly part of what was once a lament by a leader of a community. The Leader is lamenting the foolishness and perhaps wickedness and destruction of his people." For such an interpretation special mention should be made of the line ברית אנשי סוד; in the covenant of the men of my council. 620 אנשי סוד is commonly seen as an epithet to describe the people of the sect, and therefore when treated with a first-person singular suffix "my secret council," the editors inclined to think the subject of the "my" was the leader of the secret council.

Qimron looked at the text afresh, asking who was the subject of the lament?⁶²¹ With a wider view of how the text as a whole parallels with the biblical text, the *Hodayot* and the Damascus Document, Qimron suggested that the first-person subject of the text is God. I will not list all of the parallels,⁶²² but one stands out as particularly relevant to the subject matter.

⁶¹⁷ Elisha Qimron, "An Interpretation of an Enigmatic Scroll / פתרון טקסט סתום צצגילות מדבר הודה" in *Tarbiz* 70 (Jerusalem: Mandel Institute, 2001), 627–30 at 630.

⁶¹⁸ Qimron, "An Interpretation," 630.

⁶¹⁹ DJD 29, 335.

 $^{^{620}}$ As mentioned in discussions of the sectarian texts, אנשי or men of, is seen as specific sectarian terminology.

⁶²¹ Qimron, "An Interpretation," 628–30.

⁶²² For all his parallels see, Qimron, "An Interpretation," 628–30.

מי – wit a קיר מים, my eyes a fountain of water parallels Jeremiah 8:23 – מי. יתן ראשי מים <u>ועיני מקור דמעה</u> ואבכה יומם ולילה את חללי בת עמי. "Oh, that my head was waters, <u>and my eyes a fountain of tears</u>, that I might weep day and night for the slain daughter of my people." Qimron argues that the writer of 4Q439 found in Jeremiah the validation for the image he created of a God shedding tears.

Tigchelaar recognised overlaps of 4Q439 with 4Q469.⁶²³ While both 4Q439 and 4Q469 are small fragments, their overlaps are clear. This suggests to me the possibly this text existed in not just one copy, but at least two copies at Qumran. Tigchelaar also suggested that there are three allusions in 4Q439 with Zephaniah 3.⁶²⁴ Of these allusions, only אנשי בוגדות is a direct overlap and the other two overlaps, while the language is reminiscent, are not direct overlaps.

If one was to take all the allusions suggested by Qimron and Tigchelaar of 4Q439 with biblical and sectarian texts, it to a lot for such a small fragment. However, the author clearly drew on scriptural sources to compile the text. Furthermore, the parallels with scripture further suggest that the subject of this passage is not the leader of the sect, but rather God. It is God to whom the city of Jerusalem belongs, it is God to whom the righteous belong, it is God to whom the secret council belongs, and it is God who is lamenting with his eyes a fountain of tears.

⁶²³ Eibert Tigchelaar, "More Identifications of Scraps and Overlaps," *RevQ* 19 (1999): 61–68.

5.6 The Literary Categories of the Texts Copied by G-QS001

Five categories— sectarian, nonsectarian, intermediary sectarian, biblical and Aramaic—shape the taxonomy of the Qumran scrolls.⁶²⁵ These categories were developed by Dimant over time, and in conversation with the field. ⁶²⁶

Five of the manuscripts copied by GQS001 can be categorised accordingly as sectarian; the three *pesharim* (4Q161, 4Q166, 4Q171), the MMT text (4Q397), and Lament by the Leader (4Q439). The New Jerusalem (11Q18) text is written in Aramaic, and therefore, this manuscript falls readily into the category that Dimant set aside for all of the manuscripts penned in the Aramaic language. 4Q215, the Testament of Naphtali and 4Q474, the Text concerning Rachael and Joseph are classified as nonsectarian texts.

In what follows, I discuss the five sectarian texts under the heading of "Sectarian," the New Jerusalem under the heading of "Aramaic," and the two remaining texts under the heading of "Nonsectarian." I offer analyses pertaining to why each manuscript or text is thought to belong to the category it does, and ask whether and how, or how not, the categories operate to illuminate the literary content of each text. This analysis offers the foundation on which to ask

_

⁶²⁵ For discussions about how Dimant's system has created and shaped the taxonomy of the Qumran scrolls, see, Eibert Tigchelaar, "Classifications of the Collection of Dead Sea Scrolls and the Case of Apocryphon of Jeremiah C," *JSJ* 43 (2012): 519-550; Gwynned de Looijer, *The Qumran Paradigm: A Critical Examination of some of the Foundational Hypotheses of in the Construction of the Qumran Sect* (Williston: SBL Press, 2015).

⁶²⁶ When Dimant initially conceptualised her categorisation system, she perceived three categories. Biblical texts, texts that that use community terminology (CT), and texts that use non-community terminology (NCT). 626 Subsequently, she found that the nomenclature of sectarian for the CT texts, and nonsectarian for the NCT was more easily adopted by scholars. 626 The separate category for Aramaic texts, and the intermediary sectarian category were added later. Devorah Dimant, "Qumran Manuscripts: Content and Significance," in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls,* FAT 90 (Tübingen: Mohr Siebeck, 2014), 27–56; Devorah Dimant, "The Qumran Manuscripts: Content and Significance," in *Time to Prepare the Way in the Wilderness: Papers on the Qumran Scrolls by the Fellows of the Institute for Advance Studies of the Hebrew University, Jerusalem, 1989–1990, eds. Devorah Dimant and Lawrence Schiffman, STDJ 16 (Leiden: Brill, 1995), 23–58.*

what GQS001 and the manuscripts he copied means for conceptions of a sectarian scribe.

5.6.1 The Sectarian Texts

According to Dimant's classification system, the sectarian corpus from the Qumran caves is represented by thirty-three compositions and circa two-hundred and fifty manuscripts. Dimant distinguishes four areas that determine the content and subject matter of a sectarian text. 1) The organisation and practice of a particular community; 2) the history of this community and its contemporary circumstances; 3) the theological and metaphysical outlook of the community, and 4) the unique biblical exegesis espoused by the community. Furthermore, a sectarian text is imbued with a particular terminology. For example, words that are self-referential to the community or community members, אנשי היחד, עדת בהירו, עדת בהירו הרשע, מטיף הכזב, אנשי הלצון, Or terms relating to the community's histories and controversies, אנשי הלצון, מטיף הכזב, אנשי הלצון, or terms that express dualism, such as—אור/חושך.

The Qumran Rule texts stand as the sectarian texts *par excellence*, alongside also by the *pesharim* manuscripts. Pertaining to Dimant's four areas of content and subject matter (above), the *pesharim* as a group of texts fall into areas 2, 3 and 4. When discussing the specific texts copied by GQS001 and how they relate to literary categories (below), I start with the three *pesharim* copied by him. I outline their sectarian markers *vis-à-vis* Dimant's model, and assess

⁶²⁷ Devorah Dimant, "Introductory Essay: The Study of the Dead Sea Scrolls—Past and Present," in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls. Collected Studies,* FAT 90 (Tübingen: Mohr Siebeck, 2014), 1–24 at 17.

⁶²⁸ Dimant, "Qumran Manuscripts," 32.

⁶²⁹ The examples are minimal. For the exhaustive list of the parameter for recognising a sectarian document see: Devorah Dimant, "The Vocabulary of the Qumran Sectarian Texts" in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls. Collected Studies,* FAT 90, eds. Konrad Schmid, Mark Smith, Hermann Spieckermann (Tübingen: Mohr Siebeck, 2014), 67–91.

how illuminating the literary category is to understand the contents of the texts. At the outset, I list in Table 8 the lexical criteria in the three *pesharim* that indicate they are sectarian manuscripts, as in accordance with Dimant's taxonomic system.

There are twelve *pesharim* in total, so that GQS001 copied three of them is noteworthy. This scribe must have been well acquainted with and particularly interested in the form of exegesis and prophecy the *pesharim* pursued, which married ideologies and eschatological expectations with sacred texts.

5.6.1.1 The Pesharim 4Q161, 4Q166 and 4Q171

Table 8: Markers of Sectarian Literature in 4Q161, 4Q166 and 4Q171.

	Group or Group Members' Titles	Community's Controversy
4Q161	אנשי חילו	נשיא העדה
	1i:24- Men of War	2–6ii:15- Prince of the Congregation
	~ Overlaps with 1QM ii:8 and 4Q169 3– iii:11	~ Overlaps with 1QSb v:20, 1QM v:1, 4Q285 4:2, 4:6, 4:10 and CD.
4Q166		
4Q171	עדת בהירו	איש הכזב
	1–2ii:5 / 3–4iii:5-	1i:26 / 5–10iv:14- Man of Lies
	Congregation of his Chosen	~Overlaps with 1QpHab and CD.
	~Only found in	
	4Q171	למליץ דעת
		1i:27- Interpreter of Knowledge
		~Overlaps with 1QH ^a

עדת האביונים	עריצי הברית
1–2ii:10 / 3–4iii:10 -	1–2ii:14 / 3–4iii:12 - Ruthless of the Covenant
Congregation of the Poor	~Overlaps with 1QpHab ii:6
~Only found in	
4Q171	מורה הצדק
	3–4iii:15 / 3–4iii:19 - Teacher of Righteousness
עצת היחד	~Overlaps with 1QpHab and 4Q173
1–2ii:15 / 5–10iv: 19	
Community of the Yahad	הכינו לבנות לו עדת
~ Overlaps with 1QS vii:2 / viii:1 and 1Q14	3–4iii:16- He established him to found the Community
and 4Q259 and 4Q265	~While 1QpHab and 4Q173 mention the Teacher, this is the only place where the Teacher is claimed as the founder of the community.
	הכוהן הרשע אשר צופה הצדיק ומבקש להמיתי

5–10iv:8- The Wicked Priest who watches the

~Overlaps with 1QHab xi:4, where the Wicked Priest pursues the Teacher of Righteousness to

righteous one, seeking him to kill him.

I discuss below the details of each column, under their respective headings.

swallow him.

Group or Group Members' Titles

One of Dimant's defining markers of a sectarian text are appellations that are self-referential to a community or to community members. However, only 4Q171 uses the classic community names, which incorporate עצה and עצה (see Table 8). Regarding names for group members the general word is אנשים היחד; for example, אנשים היחד. In 4Q161, the theme is war and therefore the group members are the אנשים חילו

Community Controversies

Terms relating to the community's history and controversies are primarily found in the exegetical texts and the Damascus Document. Dimant suggests that the controversies were largely represented by epithets that characterise groups or significant persons with particular qualities or attributes. 4Q171 is littered with these epithets, both for significant people and for the group (cf., Table 8). In 4Q171, the characteristics applied to either a person or to a group operate to qualify the position of the person or group on the side of either good and evil. For example, the person on the good side is the Teacher of Righteousness / Interpreter of Knowledge; on the bad side is the Wicked Priest / the Man of Lies. In terms of the groups, on the good side is the Congregation of the Chosen / Congregation of the Poor; on the bad side is the Ruthless of the Covenant.

The character in 4Q161 associated with the community's controversies is the Prince of the Congregation / Nāśî Ha-Ēdâ. This character is associated with the defeat of the *Kittim* here in 4Q161, and also in the War Scroll and the *Sefer Ha-Milhamah*. He is the warrior in the battle of the eschaton who ensures the victory for the righteous priests and the Sons of Light.

⁶³⁰ This title for group members is also found in 4Q169 and 1QM.

⁶³¹ Dimant, "The Vocabulary," 75.

⁶³² It is unclear whether the Teacher of Righteousness and the Interpreter of Knowledge are the same or two different people. This obscurity exists also with the Wicked Priest and the Man of Lies.

<u>Pesher, פשר</u>

In 4Q166 (4QpHos^a) there are no references to titles for the group or group members, or to the community's controversies, or to any other sectarian marker. However, Dimant suggests that the term פשר is a sectarian marker when associated with sectarian ideas. ⁶³³ The sectarian theological outlook in 4Q166 could be the deviations from the appointed times of the calendar as fixed by God, and the eschatological expectations of punishment for these deviations.

Comparisons

While there are virtually no direct overlaps between these three *pesharim*, both 4Q161 and 4Q171 share direct overlaps and common themes with the War Scroll. Thus, while these *pesharim* were not written with each other in mind, it appears as likely that the authors and copiers had in mind the War Scroll—or at least traditions surrounding this text—when they penned 4Q161 and 4Q171. These overlaps are listed and discussed below:

לכול גדודיהם בשוב גולה בני אור ממדבר העמים :1QM i

All the troops will *return* from exile, the sons light from the *desert of the people*.

4Q161: 2-6ii:14- בשובם ממדבר הע[מים

When they return from the desert of the people.

שבי המדבר -1:4Q171: 3–4iii

Returnees from the desert.

The reference to the Sons of Light returning from the desert of the people is the third line of 1QM; thus, the context is the beginning of the battle. Consequently, 1QM can help readers of the now fragmentary *pesher* Isaiah to understand its context. Readers can reason that the setting of 4Q161—or the "when"—is at the beginning of the battle, and the "they" are the Sons of Light. The rare phrase in

⁶³³ Dimant, "The Vocabulary of the Qumran Texts," 86.

4Q161 and 1QM "the desert of the people," is a direct parallel. 4Q171 is somewhat different, speaking only of the "returnees from the desert." Yet, the parallel is clear, suggesting that the returnees in 4Q171 are again the Sons of Light.

למלחמת כתיאים -10iii:7 למלחמת כתיאים

War of the Kittim

Both 4Q161 and 1QM describe a war with the *Kittim*. Dimant does not identify the *Kittim* with sectarian literature. This may be because the *Kittim* also reference a foreign army in the biblical literature. While the use of the term *Kittim* to designate a foreign enemy is not strictly sectarian, the war with the *Kittim* is a common theme in a number of the large and well-known Qumran texts; namely, the War Scroll manuscripts, the *Sefer ha-Milhamah* manuscripts and 1QpHab.

4Q171: 1-2ii:7- הרשעה לסוף ארבעים השנה אשר יתמו

At the end of forty years, the wicked will be complete.

Another overlap with 1QM is found in 4Q171. 4Q171 explains that at the end of the forty years the wicked will be complete. One could argue that forty is a significant number due to the forty years that those fleeing Egypt spent in the desert. Therefore, it is a coincidence that the events of the War Scroll take place over a forty-year time span, as does the completion of the annihilation of the wicked in 4Q171. However, as this is not the only reference to 1QM in 4Q171 (see above, the returnees of the desert), and because the annihilation of the wicked is also the theme of the War Scroll, I would argue that this reference in 4Q171 is intentional.

<u>Is the demarcation of these three *pesharim* as sectarian illuminating?</u>

As discussed, the three *pesharim* are different from each other in terms of their terminology, their narratives and their themes. The only clear similarity, contentwise, between these manuscripts, besides them all being *pesharim*, is that 4Q161 and 4Q171 share terminology with the War Scroll. If three manuscripts, which

not only share the category of sectarian but also share the category of *pesharim*, and that were copied by the one scribe, can handle such a range of content, and be so different in terms of their sectarian markers, one might suggest that the category of sectarian does not operate as particularly illuminating to the range of ideas and narratives that are present in the *pesharim*.

However, is the title sectarian for these three manuscripts illuminating from the perspective that it situates 4Q161, 4Q166 and 4Q171 as authored and copied within the sectarian group? It does seem likely that in the case of the *pesharim*, previously written texts (including biblical and nonbiblical texts) were integrated and merged with the views and experiences of a group, or movement of people. However, the range of epithets applied to the group or movement and the range of ideas explored between 4Q161, 4Q166 and 4Q171 suggest a variety of ways that members self-identified and engaged with this group or movement.⁶³⁴

Hartog observes that the *pesharim* drew on elements from a range of interpretive and exegetical traditions, such as Mesopotamian oneirocrital writings and Alexandrian commentaries. ⁶³⁵ He demonstrates that the *pesharim* operate "as the work of scholars and intellectuals who worked in a globalized context and upheld relations with other communities of scholars and

⁶³⁴ In recent Qumran scholarship there are many discussions that reflect the Qumran group as a large and wide-ranging network of people, and references to the group as such make their way into a significant amount of articles. However, for just a few examples among many, see, Schofield, From Qumran to the Yahad; Charlotte Hempel, "Community Structures and Organization," in The Qumran Rule Texts in Context: Collected Studies, TSAJ 154 (Tübingen: Mohr Siebeck, 2013), 25-45; idem, "Emerging Communities in the Serekh," in The Qumran Rule Texts in Context, Collected Studies, TSAJ 154 (Tübingen: Mohr Siebeck, 2013), 79–96. John J. Collins, Beyond the Qumran Community: The Sectarian Movement of the Dead Sea Scrolls (Grand Rapids: Eerdmans, 2010); Pieter B. Hartog, Pesher and Hypomnema: A Comparison of Two Commentary Traditions from Hellenistic-Roman Period STDJ 112 (Leiden: Brill, 2017), 238. Jutta Jokiranta, Social Identity and Sectarianism in the Qumran Movement, STDJ 105. (Leiden: Brill, 2013); Mladen Popović. "Networks of Scholars: The Transmission of Astronomical and Astrological Learning between Babylonians, Greeks and Jews." in Ancient Jewish Sciences and the History of Knowledge in Second Temple Literature, eds. Jonathan Ben-Dov and Seth L. Sanders. (New York: New York University Press, 2014), 153–94; idem "Book Production and Circulation," forthcoming. 635 Hartog, Pesher and Hypomnema, 238.

intellectuals throughout the Hellenistic world."⁶³⁶ However, how does such a depiction work alongside notions of the *pesharim* as core sectarian texts? He addresses this question by taking the view that the Qumran movement was a network of groups across Judaea, from Qumran to Jerusalem and beyond. The origin of the *pesharim* can remain with the Qumran group—even when considering that the adoption of the commentary genre was the influence of the connections of other intellectual groups across the Hellenistic and Roman worlds—when the context of the Qumran group is wider than images of an isolated sect.⁶³⁷

Considering these ideas, I find that the category of sectarian text applied to 4Q161, 4Q166 and 4Q171 works to the point that it reflects that those responsible for authoring these three texts in all likelihood belonged to the same movement, and that this movement was connected to the scrolls in the Qumran caves. However, the term lacks a degree of sophistication and nuance when considering the range of content in the manuscripts and the extent of the group and its sociohistorical context.

5.6.1.2 Migsat Ma'ase ha-Torah (MMT)

Sectarian Markers in MMT

MMT is categorised as one of the Qumran Legal texts. This revered category it shares with the sectarian texts *par excellence*, the *Serekh Ha-Yahad* (S) and the Damascus Document (D). However, MMT is distinct from S and D as it is classified as a Halakhic Rule text, ⁶³⁸ while S and D are the constitutional Rule texts.

⁶³⁶ Hartog, Pesher and Hypomnema, 21.

⁶³⁷ Hartog, Pesher and Hypomnema, 26–28.

⁶³⁸ Certainly, scholars discuss the appropriateness of the use of term halakha to describe Qumran legal texts. A central problem raised with the use of the term is that it is emic and anachronistic. This is becuase הלכה as a noun to describe Jewish law was first attested in the Rabbinic corpora, which emerged at a date later than when the Qumran material was penned. Despite this, scholars suggest that the practice of halakha informs the Legal texts from Qumran. John Meir states that, "unless we engage in a strange form of nominalism, the absence of the noun in no way affects the

Distinctions are made between Halakhic and Rule (constitutional) texts, but these distinctions are fairly ambiguous. ⁶³⁹

Charlotte Hempel acknowledged a close relationship between MMT and D, particularly regarding the halakhic sections, and she argues for the possibility that the authors/compilers of these texts handled a related source. ⁶⁴⁰ Hempel was not saying that MMT was modelled on D or vice versa, but that they drew on a common antecedent. Structurally, one can point to commonalities, such as both D and MMT employ introductions for the halakhot with the preposition של של Both MMT and the D are deeply concerned with priestly matters, reflecting inner priestly disputes and issues surrounding misconduct and disqualifications of priests. Both MMT and D focus on purity issues regarding types of discharges and skin diseases. This length of ritual purity for an impure person (for example, men with discharge, menstruating women or those with skin eruptions) was until the

presence of the reality. Still, it is wise to be aware when we use labels anachronistically." John P. Meir. "Is There Halakha (The Noun) at Oumran?" JBL 122 (2003). 150–155 at 154.

Yaakov Sussman has a broad chronological conception of halakha. He sees the Tannaitic halakha as the final consolidation of an halakhic system that evolved from biblical times and through the Second Temple period. Yaakov Sussman, "The History of Halakha and the Dead Sea Scrolls," DJD 10: 179–200 at 179–80.

In terms of distinctions between halakha and non-halakha Sarianna Metso says, "In the case of biblical or scriptural material, it proved necessary to have a broader historical perspective than the watershed year of 70 C.E. The same is true of the legal material found at Qumran; it too should be placed on the continuum of broader legal developments of Second Temple Judaism." Sarianna Metso, "Challenging the Dichotomy between Halakhah and Community Legislation," DSD 11 (2004), 61–69, at 61–62.

639 Sarianna Metso has stated that practically such divisions are understandable. Typically, the distinctions are made either on the basis that constitutional rules relate to community life and halakha relates to broader aspects of religious life, or on the basis that halakha is scriptural exegesis and constitutional rules are not, precisely. However, methodologically this has problems because the boundaries between these are not so clear either within or between texts. Sarianna Metso, "Constitutional Rules at Qumran," in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment*, eds. Peter W. Flint and James C. VanderKam (Leiden: Brill, 1998), 186–210 at 187. See also, Sarianna Metso, "Challenging the Dichotomy," 61–69.

⁶⁴⁰ Charlotte Hempel, "The Context of MMT and Comfortable Theories," in *The Dead Sea Scrolls, Texts and Contexts*, ed. Charlotte Hempel, STDJ 90 (Leiden: Brill, 2010), 275–92 at 276.

sunsets on the eighth day. Finally, the biblical verses dealt with in MMT and D from Leviticus follow the same sequence.⁶⁴¹

Despite these parallels, when turning to the literary category of the MMT one finds that it is a more difficult text to classify than the Damascus Document. Unlike the Damascus Document, the MMT contains almost none of the lexical criterion that designate a manuscript sectarian. Dimant stated that MMT does not employ a single sectarian term. (Although, I found one in 4Q398: 14–17ii:5; The Council of Belial / ועצת בליעל). (Although, I found one in 4Q398: 14–17ii:5; The Council of Belial / ועצת בליעל). On the one hand, Dimant argued that texts and manuscripts should only be classified as sectarian if they exhibit certain lexical criteria. On the other hand, she says that "the case of MMT reinforces rather than discards, the distinction between sectarian and non-sectarian texts." I disagree. On the level that the term sectarian is a literary category based on literary data, a manuscript written from a first-person plural perspective (a 'we' group), but that is basically devoid of the so-called sectarian lexicon, does not reinforce distinctions between sectarian and nonsectarian texts, but blurs the lines between them.

Even more than the lack of sectarian terms, the language is not reminiscent of sectarian language. Hempel addressed the curiosity of the language of MMT by suggesting that the text was written in an halakhic

⁶⁴¹ Charlotte Hempel, "The Laws of the Damascus Document and 4QMMT," in *The Damascus Document: A Centennial of Discovery. Proceedings of the Third International Symposium of the Orion Center, 4–8 February 1998*, eds. Joseph Baumgarten, Esther Chazon and Avital Pinnick. STDJ 34 (Leiden: Brill, 2000), 69–84.

⁶⁴² Devorah Dimant, "Sectarian and Nonsectarian Texts from Qumran: The Pertinance and Usage of a Taxonomy," in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls. Collected Studies*, FAT 90 (Tübingen: Mohr Siebeck, 2014), 101–111 at 105.

⁶⁴³ The term בליעל is found in biblical texts, but Dimant distinguishes what the term means in biblical texts in contrast to what it means in the Qumran texts. In biblical texts the term indicates the abstract quality of wickedness. In Qumran texts it is used in terms of a pronoun. Its use in 4Q398 was as a pronoun—The Council of Belial—meaning that in MMT it is possible to recognise one of the specific terms, which Dimant outlines as part of the sectarian lexicon. Devorah Dimant, "Sectarian and Nonsectarian Texts from Qumran," 109.

⁶⁴⁴ Dimant, "Sectarian and Nonsectarian Texts from Qumran," 105.

register.⁶⁴⁵ Dimant argued that the language in MMT is different because it is formulated in a late Hebrew dialect of Mishnaic Hebrew employed by the Jewish literati at the time.⁶⁴⁶ This claim is not substantiated by Qimron. He contends that the theological sections of MMT used "biblicised" language, and that while the language of the halakhic sections are less similar to biblical Hebrew, it should still not be equated with Mishnaic Hebrew. For example, he says that the use of שו instead of אשר gives a superficial impression of Mishnaic Hebrew, but that one should not ignore the evidence that points to different conclusions. Qimron suggests that the Hebrew of the MMT may evidence a spoken register.⁶⁴⁷ Noam Mizrahi agreed, saying that the MMT as a letter, far more than any other work at Qumran, matches the vernacular form of the language.⁶⁴⁸ Mizrahi also gives examples where MMT aligns with Rabbinic Hebrew, such as the plural form of Ton; the use of hor for liquid; or the preference in MMT for Aramaic loanwords such as instead of Jun for blind.⁶⁴⁹

The discussion above demonstrates that on the level of nomenclature and language the term sectarian is imprecise. However, can the term sectarian designate the MMT as authored by the community? A longstanding scholarly claim about MMT is that it represents sectarian polemics from the early years of the movement, and that the separation mentioned in the epilogue of MMT is a

-

 $^{^{645}}$ She did not say precisely what is a halakhic register, but emphasised its importance in linguistic classifications. Hempel, "The Context of MMT," 91.

sof This claim is not substantiated by Elisha Qimron. He says that the theological sections of MMT uses "biblicised" language, and that while the language of the halakhic sections are less similar to biblical Hebrew, it should still not be equated with Mishnaic Hebrew. For example, he says that the use of -ש instead of אשר gives a superficial impression of Mishnaic Hebrew, but that there are differences in its use. Elisha Qimron, "Observations on the History of Early Hebrew (1000 BCE–200 CE) in the light of the Dead Sea Documents," in *The Dead Sea Scrolls; Forty Years of Research*, eds. Devorah Dimant, Uriel Rappaport, Yad Yizthak Ben-Zvi, STDJ 10 (Leiden: Brill, 1992), 349–61 at 355–56.

⁶⁴⁷ Qimron, "Observations," 355-56.

⁶⁴⁸ Noam Mizrahi, "The Language of the MMT," in Miqṣat Maʿase ha-Torah, ed. Reinhard G. Kratz, SAPERE (Tübingen: Mohr Siebeck, 2020): 67–84, at 69–70.

⁶⁴⁹ For a plethora of other examples where MMT linguistically aligns with Rabbinic Hebrew, see Mizrahi, "The Language of the MMT," 70–73.

reference to the rupture that occurred between the breakaway Qumran sect with its parent group, or potentially other groups participating in the Temple cult.⁶⁵⁰ Even for scholars who have been less sure of the circumstances surrounding the penning of the manuscript, until recently it went almost undisputed that the MMT was authored by the Qumran community. Wearne, however, proposed a thought experiment. "What would it look like if we viewed MMT as a letter sent not from, but to a separatist community?"⁶⁵¹

While Hempel does not go so far as to say that the MMT was authored by another group, certainly, she does not see the text as being about the rupture that speaks to the early origins of the Qumran group. Furthermore, she says that "the text's significance may go far beyond the confines of a particular group." ⁶⁵² She places the MMT in its wider Judaic context, envisioning it as a text that is representative of "different Jewish groups engaged in legal debate and thrashing out their views in a lively manner." ⁶⁵³ She argues such halakhic debate would have concerned all involved in Jewish observance and lore, and that the debate is of a similar but earlier ilk of the Rabbinic literature.

This view that the halakhic debate concerns the wider Judaean population, not specifically one group is a new and nuanced perspective. Yaakov Sussman described MMT as a polemical document about halakhic matters, which elucidates that it is not theology nor national and political issues that govern sectarian polemics, but rather halakhic concerns.⁶⁵⁴ Lawrence Schiffman argued

-

⁶⁵⁰ Hempel explains that initial readings MMT claimed that it was a letter from the Teacher of Righteousness to the Wicked Priest to air his concerns about a number of practices. Charlotte Hempel, "4QMMT in the Context of Dead Sea Scrolls and Beyond," in Miqṣat Maʿase ha-Torah, ed. Reinhard G. Kratz, SAPERE (Tübingen: Mohr Siebeck, 2020): 117–36 at 118. See also, DJD 10: 119–21. A second influential theory on the MMT suggested it was a letter penned during the early split, which explained the conciliatory tone that had not yet become deeply embedded in antagonism. Hempel, "4QMMT in the Context," 120. See also, Florentino García Martínez, "Qumran Origins and Early History," in *Qumranica Minora I, Qumran Origins and Apocalypticism*, ed. Eibert Tigchelaar, STDJ 63 (Leiden: Brill, 2007), 1–30, at 17–21.

⁶⁵¹ Wearne, "A Letter to," 102.

⁶⁵² Hempel, "Comfortable Theories," 291

⁶⁵³ Hempel, "Comfortable Theories," 291.

⁶⁵⁴ Sussman, "The History of Halakha," 185, 191.

that at the centre of sectarian polemics during Second Temple Judaism were halakhic concerns. ⁶⁵⁵ Suggestions from Dimant argued that the explicit polemics and the attitude towards Jewish law correlate with Qumran sectarian texts. ⁶⁵⁶ Where Hempel differs from all these perspectives is that she questioned how strictly polemical MMT was, and whether it did contain sharp differences in the interpretation of the Law from a so-called "they" group. She says that, "far from offering a singular voice, both sides of the halakhic arguments reflected in 4QMMT are attested elsewhere in the Scrolls." ⁶⁵⁷ Ultimately, she contends, in light of MMT and other texts that engage with halakha that there is no unified stance on the halakhot, and therefore the MMT, and the DSS as a whole, speak to Judaean legal debate beyond a single group or movement. ⁶⁵⁸

Is the literary category of sectarian for MMT illuminating?

It appears as likely that the MMT demonstrates halakhic issues that were debated widely in the socio-cultural world of ancient Judaea. Therefore, the MMT is not purely a representation of sectarian halakhot vs. not sectarian halakhot. In turn this opens up a number of possibilities regarding whether the authorship of the text, or at least parts of it, go beyond the Qumran movement. It certainly throws into question that the function of the text operated as a justification for a split, for those who studied, copied and engaged this text. In light of these new and nuanced perspective of the MMT, the category of sectarian may not be particularly illuminating to the setting and context of the text, and what is happening in it.

5.6.1.3 Lament by a Leader

As discussed above in section 5.5.1.8, 4Q439 was initially interpreted as a text written from the perspective of the leader of a / the community. Though the

⁶⁵⁵ Lawrence Schiffman, The Courtyards of the House of the Lord, STDJ 75 (Leiden: Brill, 2008), 17.

⁶⁵⁶ Devorah Dimant, "Sectarian and Nonsectarian Texts," 101–11 at 105.

⁶⁵⁷ Hempel, "4QMMT in the Context," 135.

⁶⁵⁸ Hempel, "4QMMT in the Context," 136.

editors did not apply the label of sectarian text, from such a perspective it would be classified as sectarian. Dimant lists it also as a sectarian text, in the genre of sectarian poetical and hymnic works.⁶⁵⁹

If one prefers Qimron's reading of the 4Q439, does this change the category to which it belongs. Would it be better now to categorise it as a nonsectarian text? According to the categories under discussion, likely not. Whether it is a lament by the leader or lament by God, the use of the term אנשי סודי that mentions "men of my council," a sectarian epithet that overlaps with 1QHa 6:29, means that 4Q439 exhibits sectarian terminology. The use of terminology does need to be coupled with sectarian subject matter such as practices, histories, outlooks or biblical exegesis, but 4Q439 could be argued to represent a sectarian outlook or a form of biblical exegesis.

Is the literary category of sectarian for 4Q439 illuminating?

When considering who authored this text, there is no reason to argue against the notion that it could have been penned by someone involved with the group or movement of people who collected the majority of scrolls. Given the biblical overlaps one could potentially make the case that it is a nonsectarian text that reworks the Hebrew bible. However, the sectarian epithets and overlaps with sectarian texts would make it difficult to easily make this case. Therefore, without any further evidence of what more was written in this text, the title of sectarian illuminates the authors of this text, but less so its content.

5.6.2 Aramaic Texts

After the publication of all the Aramaic manuscripts, Dimant saw it as worthwhile to study them as a distinct entity in the Qumran library. She said that "only in this way do individual Aramaic compositions acquire their proper significance,

_

⁶⁵⁹ Dimant, "Qumran Manuscripts," 42.

and their origin and background may be investigated."⁶⁶⁰ She created a separate literary category to which she perceived that all the Aramaic texts should be classified. While such a category is clearly demarcated by language, Dimant argued that there are also well-defined characteristics and themes within the Aramaic texts that warrant them a separate literary category. Dimant divided the thematic content of the Aramaic texts into five discrete groups: Works about the period of the flood; works dealing with the history of the patriarchs; visionary compostions; legendary narratives and court themes; astronomy and magic. Additionally, she added a category for what she called "varia."⁶⁶¹ Most, she says, belong to the first two listed themes, and most of the Aramaic corpus of scrolls, unlike the Hebrew corpus of scrolls, deals with pre-Sinaitic times and figures.⁶⁶²

Of the Aramaic group of scrolls, Machiela said that, "Aside from being composed in Aramaic, the literature is marked by a number of repeated subgenres in a constellation distinctive from the Hebrew bible." Machiela's subgenres overlap with those recognised by Dimant, but they are not identical, and some of the themes are entirely new. A feature he sees as unifying to these six is that they are written from the first-person perspective: 664 The six subgenres are:

- 1) Revelatory visions, or at times apocalypses, which often concern future events or God's plans for his people.
- 2) scientific descriptions (including geography and astronomy).
- 3) tales of Jews in foreign lands,

⁶⁶⁰ Devorah Dimant, "The Qumran Aramaic Texts and the Qumran Community," in *Flores Florentino: Dead Sea Scrolls and Other Early Jewish Studies in Honour of Florentino García Martínez* eds, Anthony Hilhorst, Émile Puech and Eibert Tigchelaar, JSJ 122 (2007), 198–207 at 199.

⁶⁶¹ Dimant, "The Qumran Aramaic Texts," 200-01.

⁶⁶² She says that, "These different orientations may stem from the notion that in antediluvian and patriarchal times, knowledge of Hebrew, the sacred language, was confined to a few individuals, and only revelation at Mount Sinai was Hebrew publicly revealed to the people of Israel." Dimant, "Apocrypha and Pseudepigrapha," 166–67.

⁶⁶³ Machiela, "Situating the Aramaic Texts," 91.

⁶⁶⁴ Machiela, "Situating the Aramaic Texts," 91.

- 4) wisdom or ethical discourses infused with dualistic language of two paths. 665
- 5) a serious concern over proper marriage and endogamy;
- 6) a heightened interest in women's names and roles when compared with earlier books of the Hebrew Bible, often employed in support of the marriage theme. 666

The reader may have noticed above that Dimant refers to the Aramaic "corpus," whereas Machiela references the Aramaic texts as existing in a "constellation." Hanneke van der Schoor offers a comparative discussion of such terms as collection, corpus and constellation, and what scholars may mean when applying these terms to the Aramaic groups of texts. ⁶⁶⁷ I found helpful her explanation of the use of the term constellation by scholars, and how in turn this term relates to the term corpus. She says,

"Perrin introduces the metaphor of a 'constellation' to the Qumran Aramaic texts. To be sure, the concept of a 'constellation' is, at least for Perrin, not necessarily a different designation of the Aramaic compositions but, rather, an explanation of what the concept of a 'corpus of Aramaic texts' entails. The Aramaic texts may be linked to each other in several limited but overlapping clusters. His functional analysis of the use of dream-visions has resulted in an intriguing interplay of three overarching concerns: the exegetical interaction

⁶⁶⁵ Daniel Machiela, "Situating the Aramaic Texts from Qumran: Reconsidering Their Language and Socio-Historical Settings," in *Apocalyptic Thinking in Early Judaism: Engaging with John Collin's The Apocalyptic Imagination*, "eds. Sidnie White Crawford, Cecilia Wassen (Leiden: Brill, 2018), 88-109, at 91.

⁶⁶⁶ Daniel Machiala, "The Aramaic Dead Sea Scrolls: Coherence and Context in the Library of Qumran," in *The Dead Sea Scrolls at Qumran and the Concept of a Library*, STDJ 116 (2016), 244-58 at 252.

⁶⁶⁷ Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 98–107.

with (details in) the Hebrew Bible; the dreaming by priestly patriarchs or related to the temple and past, present, and future priesthood; and an attention to the course and configuration of history. These concerns, however, are not meant to be three separate categories." ⁶⁶⁸

One learns here from Perrin and van der Schoor that the constellation metaphor acknowledges that a number of different themes operate at different levels in different texts within the Aramaic corpus, while at the same time reflecting that there are connection points between these themes across the group of texts. The nomenclature of "constellation," therefore, better handles than "corpus" the fact that the categories scholars separate out as discrete overlap considerably. A final illuminating aspect of the term constellation is pointed out by van der Schoor when she says, "The metaphor is employed to address the reflection that what we as scholars observe (e.g., the textual features we notice) are not necessarily conventions the authors of the texts consciously attempted to adhere to or were even aware of." Indeed, these thematic categories used to demonstrate that the Aramaic corpus is a distinct entity from the Hebrew corpus are modern scholarly conceptions.

While there is nothing unusual or inherently wrong in wanting to study the Aramaic manuscripts separately to the Hebrew manuscripts, and to understand the corpus or constellation in its own right, more and more overlaps between the Hebrew and Aramaic corpuses are revealing themselves. One might argue that there are also constellations between the Hebrew and Aramaic texts. In light of GQS001 copying one of the Aramaic texts, alongside his Hebrew texts, I am interested in the interaction between his Aramaic text (New Jerusalem) and his Hebrew texts. However, in thinking about how the manuscripts copied by this

-

⁶⁶⁸ Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 103. Cf., also, Daniel A. Machiela and Andrew B. Perrin, "Tobit and the *Genesis Apocryphon*: Toward a Family Portrait," *JBL* 133 (2014), 111–32.

⁶⁶⁹ Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 104.

scribe relate to models in the field, I briefly touch on how the New Jerusalem relates to the Aramaic corpus of texts.

5.6.2.1 New Jerusalem (NJ)

Markers of the New Jerusalem as an Aramaic text

The manuscript that GQS001 copied in the Aramaic language is 11Q18 (NJ). This text fits into the categories of a revelatory or visionary composition, as discussed above. Dimant says there are seven Aramaic compositions that fit into this group.⁶⁷⁰ NJ is a vision concerning God's future plans for the city of Jerusalem and its Temple. NJ was written in the first-person perspective, by a figure who was likely understood by readers at the time to either be the patriarch Jacob or Enoch.⁶⁷¹ While Ezekiel and Moses have also been suggested to be the seer, van der Schoor (among others) argued the unlikelihood of this from the observation that Aramaic texts deal solely with pre-Mosaic figures or figures in a foreign setting.⁶⁷²

Is the literary category of Aramaic illuminating to the literary content of the text?

As mentioned above, the category of Aramaic is illuminating to the content of NJ in its status as a revelation or visionary composition written from the first-person perspective of a pre-Mosaic figure. However, there are aspects of NJ that relate more strongly to themes associated with the sectarian, intermediary sectarian and nonsectarian literature.

Alongside Dimant and Machiela, scholars are more commonly on the page that states the Aramaic texts are nonsectarian;⁶⁷³ and that those

⁶⁷⁰ E.g., The Four Kingdoms, Apocryphon of Daniel, Words of Michael, Birth of Noah, Apocryphon of Levi, Pseudo-Daniel. Dimant, "The Qumran Aramaic Texts," 201. ⁶⁷¹ Cf. n. 608.

 $^{^{672}}$ Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 124.

⁶⁷³ See as three examples among many, Jonthan Ben-Dov, "Hebrew and Aramaic Writing in the Pseudepigrapha and the Dead Sea Scrolls: The Ancient Near Eastern Background and the Quest for

responsible for writing the Aramaic texts were not associates of the Qumran movement. ⁶⁷⁴ This relates to compositions, but also that most if not all of the Aramaic manuscripts were penned elsewhere from Qumran. ⁶⁷⁵ García Martínez, has likely been the loudest opposition against an outright conclusion that the Qumran community could not have composed texts in Aramaic. ⁶⁷⁶ Two possibilities in his early studies that he considered as possibly sectarian by authorship are NJ and Visions of Amram. ⁶⁷⁷ In a similar vein, Daniel Stökl Ben Ezra, on a study of four Aramaic texts (4Q426, 4Q534, 4Q541, 4Q558) with messianic conceptions, says that they are roughly compatible with sectarian texts and that, "There are no contradictions in terms that clearly suggest that one of the four texts investigated could not under any circumstances have been authored by a member of the Qumran group." ⁶⁷⁸

For this study on the texts copied by GQS001, the relationship of NJ to the so-named sectarian literature is an interesting one. While it is not within my capacity to state whether or not NJ was composed by the Qumran movement, I

-

a Written Authority," Tarbiz 78 (2008–2009): 27–60; Andrew B. Perrin, *The Dynamics of Dream-Vision Revelation in the Aramaic Dead Sea Scrolls*. (Göttingen: Vandenhoeck & Ruprecht, 2015) 26 passim. Robert Jones, "Priesthood, Cult, and Temple in the Aramaic Scrolls from Qumran," (PhD Diss., McMaster University, 2020), 239–40, passim.

⁶⁷⁴ Van der Schoor points out that along with ideas of collection bound together by shared elements, characteristics, and content are ideas about a community. Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 152. There are scholars who have argued that the Aramaic texts were connected to a scribal group or community with priestly interests. See particularly, Jones, "Priesthood, Cult, and Temple in the Aramaic Scrolls from Qumran."

⁶⁷⁵ Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 136–37.

⁶⁷⁶ García Martínez, "Aramaic Qumranica Apocalyptica," 439–40. Van der Schoor explains that also Milik suggested 4QPseudo-Danielc (4Q245), the Epistle of Enoch, and the Abraham section of the Genesis Apocryphon, as possibly sectarian in origin, and also that Collins agrees with García Martínez's objection that Aramaic texts are not automatically non-sectarian. Specifically, Collins references to an elect group in 4Q243 and 4Q245 and the List of False Prophets (4Q339). Van der Schoor, "Qumran Scholarship through the Lens of the Testament of Qahat (4Q542)," 138–39.

⁶⁷⁸ Daniel Stökl Ben Ezra, "Messianic Figures in the Aramaic Texts from Qumran," in *Proceedings of the Conference on the Aramaic Texts from Qumran at Aix-En-Provence (June 30-July 2, 2008)*, eds. Katell Berthelot, Daniel Stökl Ben Ezra, STDJ (Leiden: Brill, 2010), 515–44 at 538–39.

find the intertextual connection points between NJ and a number of sectarian texts clarifying as to the interests of GQS001, and when considering if it is always helpful to see the Aramaic texts as a distinct corpus from the Hebrew texts in terms of thematic content.

García Martínez and Tigchelaar suggest that between NJ and the War Scroll there are shared traditions in regards to the coming eschatological war.⁶⁷⁹ García Martínez sees a more robust connection than Tigchelaar. García Martínez draws a direct line in the minds of the sectarians between the battle in the War Scroll and establishment of the new Temple and the new city of Jerusalem in NJ.⁶⁸⁰ For Tigchelaar the connections are more tenuous.⁶⁸¹ However, he does attest to the shared tradition between NJ and 1QM of an eschatological conflict between Jacob's descendants and a series of nations including the *Kittim*—and the consecutively ordered in both texts—Edom, Moab and the Sons of Ammon.⁶⁸²

On the one hand, while Machiela argues that the Aramaic corpus is distinct, on the other hand, he suggests that the Aramaic texts influenced "the conceptual construct within which the communities understood themselves and read their authoritative Hebrew scriptures." The connection points discussed above between NJ and the War Scroll may offer a concrete example of an Aramaic text influencing the conceptual construct in which the people behind the scrolls understood their world as apocalyptic.

Tigchelaar suggests two other parallels that NJ shares with texts that are not Aramaic. First, Jubilees, which is a nonsectarian text, and second, the Temple

⁶⁷⁹ Florentino García Martínez, "New Jerusalem at Qumran and the New Testament," in *The Land of Israel in Bible, History, and Theology: Studies in Honour of Ed Noort*, eds. Noort, E., Vos, J. C. de, Ruiten, J. van. VTSup 124 (2009), 277–89. Lorenzo Ditommaso, *The Dead Sea New Jerusalem Text: Contents and Context*, TSAJ 110 (Tübingen: Mohr Siebeck, 2005). Eibert Tigchelaar "The Character of the City," 117–31.

⁶⁸⁰ García Martínez, "New Jerusalem at Qumran," 287.

⁶⁸¹ Tigchelaar, "The Character," 125.

⁶⁸² See 1QM i:1 and 4Q554: 13.

⁶⁸³ Machiela, "The Aramaic Dead Sea Scrolls," 255.

Scroll, which was classified as an intermediary sectarian text. He says that the real focus of NJ is not the new city but the new Temple, and that the Temple of NJ "should be identified with the new Temple of the new creation referred to in Jub. 1:27–29 and 11QTa XXIX 8–10."⁶⁸⁴ Additionally, in a study of the architectural representation of NJ, Hugo Antonissen also points to many overlaps between NJ and the Temple Scroll, which from his perspective share similar characteristics in this regard with Ezekiel.⁶⁸⁵

The language between NJ, the War Scroll, Jubilees and the Temple Scroll is different. However, categorising the Aramaic texts as distinct from the sectarian and intermediary sectarian texts, leads one down a path of thinking that they are also defined by characteristics and themes that separate them from the sectarian texts. However, I am inclined to agree with García Martínez and Tigchelaar. NJ in its vision of the establishment of a new city and a new Temple, which follows the eschatological battle with the Kittim, Edom, Moab and the Sons of Ammon is not defined by characteristics and themes that are separate from the sectarian texts, such as the War Scroll and the Temple Scroll, but by themes associated with it. Furthermore, that NJ shares both parallel themes and terminology with the War Scroll is particularly interesting being that it was copied by GQS001, who also copied 4Q161 and 4Q171, both of which share parallel themes and terminology with the War Scroll.

The dating of NJ and other Aramaic manuscripts

While I am not convinced that GQS001 would have seen NJ as different in terms of the themes that it explores, obviously he would have seen the language as different. For this, 11Q18 stands out as the most unusual of all of GQS001's manuscripts. Further aspects that make 11Q18 stand out as unusual is the cave it was copied in, and that it has been implied that the copying of particular Aramaic

⁶⁸⁴ Tigchelaar, "The Character," 131.

⁶⁸⁵ Hugo Antonissen, "Architectural Representation Technique in New Jerusalem, Ezekiel and the Temple Scroll," in *Aramaica Qumranica: Proceedings of the Conference on the Aramaic Texts from Qumran at Aix-En-Provence (June 30-July 2, 2008)*, eds. Katell Berthelot, Daniel Stökl Ben Ezra, STDJ (Leiden: Brill, 2010), 485–513.

compositions was more prevalent in periods earlier than the period that GQS001 worked (50–1BCE). Milik said that the Qumran scribes gradually lost interest in copying the books ascribed to Enoch. As GQS001 worked in the early Herodian period, I was curious to compare the palaeographic dates of the NJ manuscripts with Enoch, and the broader Aramaic corpus. Does 11Q18 also stand out for being copied this late? Or were lots of scribes working on Aramaic manuscripts at this time? Were certain Aramaic compositions more popular than others at certain periods?

In terms of the palaeographic dates of the NJ manuscripts, Puech and Langlois say that 4Q544a is the earliest copy; they dated it to the mid-late Hasmonean period, or to the first half of the first century BCE.⁶⁸⁷ I agree with Puech and Langlois that 4Q544a is the earliest copy, but I am tempted to date it earlier. The manuscript exhibits no late features, and exhibits some very early features. ⁶⁸⁸ Puech acknowledged 4Q544a exhibited archaic features, but still dated it mid-late Hasmonean. I am inclined to say it is safely mid Hasmonean and penned in the late second century BCE.

Puech's and Langlois' dating of 4Q544 as late Hasmonean is reasonable. The four remaining NJ manuscripts—4Q555, 5Q15, 2Q24 and 11Q18—I would certainly date as Herodian. ⁶⁸⁹ 4Q555 is a formal, ornate rectilinear script. ⁶⁹⁰ 5Q15 is a beautiful, and professionally produced manuscript, exhibiting Herodian uniformity large *ayins*, final forms, double stroke *he*, bent tips of *ayin* and *shin*. Chapters Two and Three above discuss at length the handwriting of 11Q18. Here,

⁶⁸⁶ Milik, The Books of Enoch, 7.

⁶⁸⁷ Puech, DJD 37; Michael Langlois, "New Jerusalem," in *T&T Clarke Companion Volume to the Dead Sea Scrolls*, eds. Charlotte Hempel and George Brooke (Great Britain: T&T Clarke, 2019), 332–34.

⁶⁸⁸ The size of the letters, large *aleph*s and small *ayins*, align with early scripts. Other early features are the very short left legs of *aleph* that do not come close to reaching the base line; *he* has a one stroke roof, final *kaf* and *nun* are large, but they have the same shape as the medial *kaf* and *nun*. ⁶⁸⁹ 1Q32 is very fragmentary and the writing looks different on the two largest fragments (frag. 1 and 14), which are assigned to this manuscript, so I am not going date it.

⁶⁹⁰ It is uniform in its letter sizes, *he* has a double stroked roof, and *ayin* and *shin* have bent tips on their right arms.

I simply observe that the handwriting as opposed to being rectilinear is a curvilinear round script. 2Q24 is penned in the same style as 11Q18.

There are eleven manuscripts ascribed to the Books of Enoch. These are 4QEn^{a-g} and 4QEnast^{a-d.} Milik dates 4QEn^{a-g} manuscripts from the middle of the second century BCE to the late first century BCE. The date range for the 4QEnastr^{a-d} manuscripts is wider. Milik dated 4QEnast^a early, in the archaic period, circa 200 BCE. 4QEnast^c he saw as later, but still archaic, or very early Hasmonean. 4QEnast^d he dated to the second half of the first century BCE and 4QEnastr^b late; he said it was penned in "the beautiful classical writing of the Herodian Period."⁶⁹¹

There are nine copies of the Book of Giants from caves 1, 2, 4 and 6. Puech classified 4Q531, 4Q533, 6Q8 4Q532 and 4Q530 as Hasmonean, and dated them to the first half of the first century BCE. 1Q23, 2Q26, 4Q203, 4Q206a he assigned to the Herodian period.⁶⁹²

There are three to six copies copies of the Testament of Levi (4QLevi^{a-f}) depending on your stand point. In the DJD edition, Michael Stone in communication with Cross categorised all six Levi manuscripts as late Hasmonean and dated them to circa 50 BCE. Milik, who had a different arrangement again from Stone or van der Schoor of the manuscripts (cf., n 693) dated 4Q214ab (4QLevi^{e-f}) in the third quarter of the second century BCE, as he perceived this manuscript to be penned by the same scribe as 4QEnf. Regarding dating, I am inclined to agree with Milik regarding 4Q214ab; there is

⁶⁹¹ J.T. Milik, The Books of Enoch. 5.

⁶⁹² Emile Puech, DJD 31: 12.

⁶⁹³ The editors of the DJD edition posited that there are six copies of the Testament of Levi. (4Q213, 4Q213³, 4Q213¹, 4Q214¹ and 4Q214¹), Stone and Greenfield, DJD 22: 1–72. Hanneke van der Schoor suggested that rather than six copies of the Levi documents, there are only three copies. She says that 4Q213, 4Q213³, 4Q213¹, 4Q214 are the one manuscript. Hanneke van der Schoor, "The Assessment of Variation: The Case of the Aramaic Levi Document," *DSD* 28 (2021): 179–206, at 193–206.

⁶⁹⁴ Stone and Greenfield, DJD 22: 1–72.

⁶⁹⁵ Milik, The Books of Enoch, 6.

evidence to suggest that this manuscript was penned earlier than the late Hasmonean period. The manuscripts with the 4Q213 sigla (whether they make up one manuscript or three manuscripts) portray later features than Milik's 4Q214ab manuscript. 97

The above delineated palaeographic dates are recorded in Table 9.

Table 9. Palaeographic dates of the four most prevalent compositions in the Aramaic manuscripts.

	200-150BCE	150-100BCE	100-30BCE	Herodian 30BCE+
NJ		4Q544a	4Q544	4Q555, 5Q15,
				2Q24, 11Q18
Enoch	4Q208, 4Q210	4Q201, 4Q202,	4Q211	4Q209
		4Q204, 4Q205,		
		4Q206, 4Q207		
Giants			4Q531, 4Q533,	1Q23, 2Q26,
			4Q532, 4Q530	4Q203,
				4Q206a, 6Q8
Levi		4Q214ab	4Q213,	
			4Q213 ^a ,	
			4Q213 ^b ,	
			2Q214	
Total	2	8	10	9

⁶⁹⁶ Samekh is consistently wide open; qop has a very short tail; waw and yod have developed no common features as yod has a wide-open head and short tail, while waw has small, closed head and longer tail. Letter sizes are inconsistent in this manuscript.

⁶⁹⁷ 4Q213 and 4Q213^a the *samekh* is closed (not present in 4Q213^b) and in all the tail of *qop* is long. *Waw* and *yod* are starting to exhibit similar features in shape and size. The 4Q213 manuscripts are far more square than 4Q214ab. Interestingly, *ayin* can be small in all three 4Q213, but it is not consistently small, so I am not inclined to date the manuscripts as earlier on this one feature.

Table 9 shows a different distribution for the NJ manuscripts than the Enoch and Levi manuscripts. Milik's suggestion that Qumran scribes must have gradually lost interest in the books ascribed to Enoch, ⁶⁹⁸ is supported by the skewed data regarding the Enoch manuscripts to the second century BCE. While the Testament of Levi was most commonly copied in the first century BCE, so later than Enoch, the manuscripts were all copied before the Herodian period. The Book of Giants was copied frequently in both the late Hasmonean and Herodian; however, a touch more copies can be linked to the Herodian period. NJ has a clear majority of manuscripts being copied in the Herodian period. NJ was copied more prevalently in the later periods than the Enoch and Levi manuscripts. Therefore, one can suggest that NJ and the Book of Giants were more popular in the Herodian period than Enoch or Levi, which were more regularly copied in the pre-Herodian periods.

Data worth considering alongside this data comes from Machiela. He showed that all the thirty-three Aramaic manuscripts from Cave 1, 2, 5, 6 and 11 (missing cave 4) were copied after 50 BCE. 699 According to his data only the cave 4 Aramaic manuscripts are from the earlier periods. Machiela broke down the data on the date ranges of all of the Aramaic manuscripts (approximately one hundred and thirty manuscripts, so far more than in Table 9) according to the caves in which they were found. His data concludes that from Cave 4 the date range was 200 BCE–50 CE, while the other caves are later and from 50 BCE–50

.

⁶⁹⁸ Milik, The Books of Enoch, 7.

⁶⁹⁹ Machiela, "The Aramaic Dead Sea Scrolls," 249. While I did not do an extended palaeographic analysis on all of the Aramaic fragments from Cave, 1,2,3, 5,6 and 11 (excluding Cave 4), I had a look at the main ones. Generally speaking, it easy to see what Machiela is alluding to, as all the Aramaic manuscripts large enough to judge jump out as Herodian. 1QGenApocry is an Herodian manuscripts, and also the NJ and Giants texts also from Cave 1. Cave 2, NJ and Giants are Herodian. Cave 5, NJ is Herodian. Cave 11, NJ and Targum Job also Herodian. Cave 6 the Daniel text is Herodian. The only possible exception is 6Q8. Puech dates this mid to late Hasmonean, while Machiela says Herodian. This is a borderline case. The small *ayin* and large cursive *taw* (particularly in final position) may suggest earlier than Herodian; however, the long tails on final *kaf* and *qof*, and the similar serifs on *bet* and *resh* may suggest developed. I am therefore inclined to say that this is an Herodian manuscript, which preserves some earlier forms, such as *ayin* and *taw*.

CE.⁷⁰⁰ Machiela argued that his data cautions against suggestions that there are any striking differences between the Hebrew and Aramaic corpuses in terms of the palaeographic dating and when the scribes were copying the manuscripts.⁷⁰¹

Second, while the chronological difference between a late Hasmonean and early Herodian manuscripts is not large, the styles are distinct. However, there is always the possibility that the differences in style between these closely aligned periods are not solely based on dates alone, but may point to a spatial difference. The discrete styles may be influenced by the area from which scribes came, where they were trained, or where they worked.

Was GQS001 rare in copying an Aramaic manuscript at the end of the first century BCE, or were lots of scribes working on Aramaic manuscripts? Maybe a touch fewer Aramaic manuscripts were being copied by Hebrew scribes in this later period, though NJ proved popular in the early Herodian period. An alternative explanation may also be that particular compositions were more popular or more widely copied in certain places, such as Qumran.

5.6.3 The Nonsectarian Texts

It is assumed that the provenances of the numerous compositions categorised as nonsectarian are from outside the Qumran group, which is likely the chief reason that these texts are classified as such. Additionally, Dimant argued that nonsectarian is distinguished as a literary category in its own right by its style, and connections to other genres of ancient Jewish writings. She perceives the

⁷⁰⁰ Machiela, "The Aramaic Dead Sea Scrolls," 245–46.

⁷⁰¹ Machiela, "The Aramaic Dead Sea Scrolls," 249.

Additionally, Daniel Stökl Ben Ezra on the palaeographic dating of the Aramaic manuscripts assesses that, "many copies, if not most, are clearly late Hasmonean or early Herodian." Stökl Ben Ezra, "Messianic Figures in the Aramaic Texts from Qumran," 543.

The palaeographic dates of late Hasmonean, early Herodian is also when the scribes copied the majority of the Hebrew manuscripts.

nonsectarian compositions as clearly different in style, theme and vocabulary to the sectarian writings. She divides the nonsectarian manuscripts into two types:

- "1. Texts that rework the Hebrew Bible; and
- 2. nonbiblical narratives, often of historical import."⁷⁰²

Nonsectarian texts have fallen under the terms Apocrypha and Pseudepigrapha;⁷⁰³ indeed, texts as The Wisdom of Ben Sira, Tobit, Enoch and Jubilees were previously categorised as so. However, the previously unknown nonsectarian manuscripts in the Qumran collection were, obviously, not part of the recognised apocryphal and pseudepigraphal canon.⁷⁰⁴ Therefore, there are debates about whether Apocrypha and Pseudepigrapha are helpful titles for the unknown works of the DSS.⁷⁰⁵ There are overlaps between the material in the

⁷⁰² Dimant, "Apocrypha and Pseudepigrapha," 165.

⁷⁰³ In the 50's Milik and Cross, loosely categorised the DSS as biblical, sectarian and the remaining as apocryphal and pseudepigraphic. Józef T. Milik, *Ten Years of Discovery in the Wilderness of Judaea* SBT 26 (London: SCM, 1959), 23-43; Frank M. Cross, *The Ancient Library of Qumran* (3d ed.; Minneapolis: Fortress, 1995), 44.

⁷⁰⁴ Michael Stone offers a definition of Apocrypha: "Jewish works of the period of the Second Temple not included in the Hebrew Bible but which are to be found in the Greek and Latin Old Testaments." He perceives that the term Pseudipigrapha is more difficult to define but that these books are those that are not of the official Apocryphal canon but are connected to the Bible or the biblical period, mostly written in the Second Temple period and mostly Jewish. Michael Stone, "The Dead Sea Scrolls and the Pseudepigrapha," in *DSD* 3 (1996), 270–295 at 270.

⁷⁰⁵ Dimant says the terms are not necessarily problematic if they are applied in a literary-descriptive sense, but not in an historical canonical sense. Dimant, "The Qumran Manuscripts," 30 n.12; idem, "Apocrypha and Pseudepigrapha at Qumran," in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls*, eds. Konrad Schmid, Mark Smith, Hermann Spieckermann (Tübingen: Mohr Siebeck, 2014), 153–170.

Hindy Najman and Tigchelaar argued that terms such as apocrypha and pseudepigrapha applied to these previously unknown texts are "unhelpful at best, and detrimental at worst." Hindy Najman, Eibert Tigchelaar in "A Preparatory Study of the Nomenclature and Text" in *RevQ* 26 (2014): 305–325 at 315.

Justnes contended that the labels of Apocrypha and Pseudipigrapha are as anachronistic as sectarian, nonsectarian and biblical. He says, "This terminology (sectarian et al.) is misguided in historical analyses since it imports artificial, anachronistic, and relatively fixed clusters of texts to the collection of texts at Qumran. The same goes for labels like Apocrypha/'apocryphal' and

Apocrypha and Pseudepigrapha and some of the texts from Qumran.⁷⁰⁶ However, one obvious problem is that the channel of transmission of the Apocrypha and Pseudepigrapha is usually via Christians, either in Greek or in translations made from Greek.⁷⁰⁷ The previously unknown nonsectarian scrolls from Qumran were not transmitted as such. They are transmitted and translated directly from a fixed archaeological context in their original language.⁷⁰⁸ As a way of dealing with such problems of nomenclature, editors and scholars created more contemporary genre categories such as parabiblical texts, rewritten bible and rewritten scripture for many of the nonsectarian manuscripts; however, again there are debates about which of these titles are most appropriate.⁷⁰⁹

Two of the manuscripts penned by GQS001 fall into the category of nonsectarian. Additionally, these two texts make interesting case studies for questions regarding the use of such genre categories as Pseudepigrapha and Rewritten Scripture. In the following section, when discussing the category of nonsectarian for 4Q215, I elaborate further on the use of the categories of pseudepigraphic or rewritten scripture for this text.

_

Pseudepigrapha /pseudepigraphical." Årnstein Justnes, "On Being a Librarian: Labels, Categories and Classifications," in *The Dead Sea Scrolls at Qumran and the Concept of a Library*, eds Sidnie White Crawford, Cecilia Wassen STDJ 116 (Leiden: Brill, 2016), 15–30, at 20.

⁷⁰⁶ Stone, "The Dead Sea Scrolls and the Pseudepigrapha," 272.

⁷⁰⁷ Stone, "The Dead Sea Scrolls and the Pseudepigrapha," 270–71.

⁷⁰⁸ Stone, "The Dead Sea Scrolls and the Pseudepigrapha," 271.

⁷⁰⁹ For a few significant examples among many of discussion pertaining to this nomenclature, see: Daniel Falk, *The Parabiblical Texts, Strategies for Extending the Scriptures among the Dead Sea Scrolls,* ds. Philip Davies, Lester Grabbe, LSTS 63 (London: T&T Clark International, 2007) 18; George J. Brooke, "Between Authority and Canon: The Significance of Reworking the Bible for Understanding the Canonical Process," in *Reworking the Bible: Apocryphal and Related Texts at Qumran*, eds. Esther Chazon, Devorah Dimant and Ruth Clements, STDJ 54 (Leiden: Brill, 2005), 85-104; Sidnie White Crawford, *Rewriting Scripture in Second Temple Times*. eds. Peter W. Flint, Martin G Abegg Jr, Florentino García Martínez, SDSSRL (Michigan: William B Eerdmans, 2008) 4; Molly Zahn, "Rewritten Scripture," in *The Oxford Handbook of the Dead Sea Scrolls*, eds. Timothy Lim, John Collins (Oxford: Oxford University Press, 2010) 323–36.

5.6.3.1 Testament of Naphtali (4Q215)

Is the literary category of nonsectarian illuminating?

The literary category of nonsectarian elucidates two aspects of the Testament of Naphtali. First, that this text was not authored by the group who authored the identified sectarian texts, such as the *pesharim*. The content of both the *pesharim* and the Testament of Naphtali revolve around scriptural texts, be they biblical or nonbiblical. However, while the *pesharim* are styled by an exegetical structure that is recognised as sectarian, the style of the Testament of Naphtali as a rewriting or reworking of the Genesis and Jubilees narratives is recognised as nonsectarian. This difference in style and approach to the scriptural texts is a second aspect that the literary category of nonsectarian can illuminate about 4Q215.

Perhaps, the foremost problem with categorising this manuscript as nonsectarian is it is classified by what it is not; i.e., not sectarian. It is the same if one was to use the classification of nonbiblical for the manuscript. The nomenclature of "non" implies not; not as significant as its counterpart of sectarian or biblical. However, one should consider that this would have been a particularly significant text to those who saw themselves in the line of the tribe of Naphtali. As a response to Stone's question, "why Naphtali?," Vered Hillel asked "Why not Naphtali?" In her article she reasons that Naphtali emerges in textual traditions surrounding him as a "proto-Joseph" figure. Rachael prayed for a son like Naphtali from her own womb, and as a result of her prayer Joseph is like Naphtali in all things. Hillel says that the role of servitude Naphtali could have inherited as a result of being borne to Bilhah is removed in the Naphtali traditions. All this to emphasise and elucidate the deep significance of the text, and therefore to elevate it from its status as either not sectarian or not biblical.

_

⁷¹⁰ Vered Hillel, "Why not Naphtali?" in *Things Revealed: Studies in Early Jewish and Christian Literature in Honor of Michael E. Stone*, eds. Esther Chazon, David Satran and Ruth Clements, *JSJ* 89 (2004): 279–289.

⁷¹¹ Greek Testament of Naphtali, 1:7, 8.

⁷¹² Hillel, "Why not Naphtali?" 286.

From the perspective of codicology and palaeography, GQS001 did not treat the Testament of Naphtali differently from other texts he copied. While all of GQS001's manuscripts are professionally produced, the Testament of Naphtali is of the highest quality among them. Does this also suggest the text was significant? Would the contemporary title of Pseudepigrapha better establish the status of 4Q215 than nonsectarian? 4Q215 portrays a developed Naphtali tradition in the Second Temple period, ⁷¹³ in a tradition akin the pseudepigraphic text of Jubilees. One may also suggest it relates remotely to the apocryphal text of Tobit with him being an important figure in the tribe of Naphtali. ⁷¹⁴ However, precisely what the biographic material 4Q215 reveals about Bilhah and Naphtali was unknown from writings of the Pseudepigrapha and Apocrypha. They were known instead from a Midrashic writing. ⁷¹⁵ This indicates a possible Hebrew or Aramaic channel of transmission for the Testament of this Patriarch, ⁷¹⁶ excluding the title of pseudepigraphic as precise or illuminating.

What of the other terms circulating in the field for the nonsectarian texts, such as parabiblical, rewritten bible or rewritten scripture? Rewritten scripture is certainly a better description for 4Q215 than parabiblical or rewritten bible, given that the thematic parallels are largely with Jubilees and the Testaments (nonbiblical). However, rewritten scripture has also been labelled as artificial and anachronistic. Justnes portrayed the terms biblical and scriptural as one in meaning. He says, "Words like 'biblical' or 'scriptural' de facto create artificial clusters of texts within the 'Qumran library' itself, which in turn may

.

⁷¹³ Stone, "The Genealogy of Bilhah," 34.

⁷¹⁴ For an example of an important figure in the line on Naphtali is Tobit. See, The Book of Tobit, 1:1, 4, 5; 7:3.

⁷¹⁵ Midrash bereshit rabbati—An eleventh century work associated with R. Moses the Preacher of Narbonne.

⁷¹⁶ In Stone, "The Dead Sea Scrolls and the Pseudepigrapha," 273, the author explains, "Of the twelve sons of Jacob, we have material definitely associated only with Levi and Naphtali, and those texts, as we have stated, are not identical by any means with the Testaments of the Twelve Patriarchs. The importance of this fact for the ongoing debate over the Jewish or Christian character of the Testaments of the Twelve Patriarchs is very considerable." See also, Stone, "The Genealogy of Bilhah," 36.

function as forces of their own, with collective power and influence."⁷¹⁷ While one cannot critique the notion that words function as forces, I am not clear that the meaning of the words biblical and scriptural should be seen as functioning as one and the same.

In using the term "rewritten scripture" I would not mean to imply that the Hebrew canon was fixed in any way at this time; only that certain texts reworked and rewrote other texts in a process akin to intertextuality. Moreover, while the canon was in no way fixed, the evidence of the *pesharim* and the rewritten nature of many of the texts in the corpus, suggest that the people behind the scrolls had notions of sacred scriptures. Therefore, I am not convinced that rewritten scripture is a term that need be overly critiqued or avoided in discussions about terminology, if one is reaching for a label already in circulation.

White Crawford says that rewritten scripture has a recognisable *base text* and a recognisable degree of *intervention* for the purpose of exegesis.⁷¹⁹ With this being the description of Rewritten Scripture, I was curious to test if such a label, as Justnes says, is artificial and anachronistic. I wonder whether GQS001, in the same way as contemporary scholars, may have recognised in the Testament of Naphtali relevant narratives from Genesis and Jubilees (base texts), and in turn if he would have recognised where the author of the Testament played with and reworked these narratives (intervention)? For all intents and purposes, it seems plausible that scholar-scribes in the Second Temple period saw similar intertextual connections as scholars notice now. In all likelihood, they saw more.

Therefore, I argue that applying the simple title of rewritten scripture, and recognising the webs of relationships between different texts, is a far more helpful way of illuminating the content of this manuscript than suggesting it

⁷¹⁷ Justnes, "On Being a Librarian," 23.

⁷¹⁸ Cf., n. 556, for discussion and references.

⁷¹⁹ White Crawford, "There is Much Wisdom," 134.

belongs to the literary category of nonsectarian. Dimant recognised that nonsectarian texts rework and rewrite Hebrew biblical narratives, or narratives of historical importance, meaning there is no real contradiction here. Except to say that the nomenclature of rewritten scripture illuminates much more nuance and depth about what the text does, than the nomenclature of nonsectarian. For scholars nonsectarian may give a sense of who the text was not authored by, but the title of rewritten scripture elucidates to all what manuscripts falling under the title are about.

5.6.3.2 Text Concerning Rachael and Joseph (4Q474)

Is the literary category of nonsectarian illuminating?

The first title given to 4Q474 was the Apocryphon of Joseph.⁷²⁰ As per the discussion above pertaining to the nomenclature of Apocrypha and Pseudepigrapha, the title of Apocryphon of Joseph for 4Q474 applied numerous characteristics to the text that are not there, which must have been the rationale for changing it.

The point that GQS001 copied 4Q474—a manuscript that gives the status of loved by God to Rachael—elevates the significance of this manuscript. Due to GQS001, this text that may have once been overlooked in the field as a small, fragmented, nonsectarian text, can now be considered an important text to the people associated with Qumran.

That which I said about how the category of nonsectarian elucidates 4Q215, I could say about 4Q474. The category makes clear the authors of this text were not the same authors of the *Serekh* and *pesharim* etc. Also, that the style of the text is a rewriting and reworking of biblical or historically important narratives. As this text is a reworking of an historically important narrative, what

_

⁷²⁰ Justnes, "On Being a Librarian," 17.

I said about "rewritten scripture" as a more illuminating category than nonsectarian applies also to 4Q474.

5.6.4 Conclusions regarding the Literary Categories of the texts copied by GQS001

This section explored the manuscripts copied by GQS001 in relation to the most influential model in the field for categorising Qumran manuscripts. The exploration suggests that the literary categories of sectarian and nonsectarian operate in ways that are helpful in determining whether the author of a particular text was connected, or not, with the groups or movement associated with the Serekh Ha-Yahad. Even while at the same time acknowledging that when it comes to attempting to cluster these texts into groups based on origin there are a lot of assumptions and a lot of unknowns. 721 One example that I discussed above is MMT and the inherited assumption that this composition is unequivocally sectarian, when its origin, and the pools that it was circulated in, may have had a far broader reach. A second example, also discussed above, is there are ways in which the commentary genre of the pesher can be situated in Mesopotamian, Hellenistic and Roman contexts that go far beyond Qumran. This is not to say the pesharim were not authored by the movement associated with Qumran, but rather to say that the *pesharim* are connected to traditions that go well beyond sectarian traditions. It is these further reaches that get lost in the current and dominant taxonomic nomenclature that revolves around sectarian.

-

⁷²¹ Tigchelaar articulated some of these assumptions and unknowns. "In what manner, if at all can one correlate one or more groups of texts from the collection of Dead Sea Scrolls with one or more discrete sociological groups? In Dimant's work this question is not posed, since the existence of a broader movement, which authored a substantial part of the texts is assumed. Nonetheless several aspects of the problem should be mentioned. First, (assuming a movement or group that authored text) which elements in a text would enable one to attribute this text to that movement or group, and vice versa, to exclude provenance from that group? Second, the choice of the core group of texts determines one's criteria." Eibert Tigchelaar, "Classifications of the Collection of Dead Sea Scrolls and the Case of Apocryphon of Jeremiah C," JSJ 43 (2012) 520–50 at 528–29.

In this section, I suggested that the nomenclature of sectarian and nonsectarian applied to the manuscripts copied by GQS001 is not particularly illuminating to the depth, breadth and significance of the content of the manuscripts. The sectarian manuscripts copied by this scribe explore numerous different themes, ideas and narratives. While the differences are pronounced, it would be difficult to find any one theme that they all have in common. One commonality I noticed though, was between 4Q161 and 4Q171, and the direct overlaps both share with the War Scroll. Additionally, 11Q18—which is an Aramaic text—shares overlaps with the War Scroll. Another commonality I noticed was that four of the manuscripts copied by GQS001 share overlaps and parallels with Jubilees. Scholars have discussed—and for good reason—4Q166, 11Q18, 4Q215 and 4Q474 in relationship with Jubilees. These four manuscripts have been categorised into three different categories; 4Q166 as sectarian, 11Q18 as Aramaic, and 4Q215 and 4Q474 as nonsectarian. This means that from an intertextual angle, 4Q166 shares more on common with 11Q18, 4Q215 and 4Q474, which are categorised differently from it, than it does with 4Q161 and 4Q171, which are categorised the same as it.

In this discussion of the literary content of these manuscripts, one of the most compelling characteristics of the content were the connections that each text shared with other texts. Noticing the intertextual nature of the corpus as a whole, and the webs of relationships between the different texts, ultimately illuminated each individual manuscript in ways that were not clear before noticing the connections, and when classifying the pieces of literature in a contained taxonomic system of five categories. In Chapter Six, I explore the possibility that one of GQS001's main interests in the texts that he copied was intertextuality.

5.7 Literary content, handwriting quality, codicological features and the function of GQS001's manuscripts in his sociohistorical context.

Having now discussed the literary content, I return to the question proposed at the end of section 5.4. What was the function of GQS001 manuscripts, and who

was his intended audience? To answer this question, I first delineate the potential functions of manuscripts and their intended audiences under three main headings. Second, from this list of possible functions, I explore the most likely intended purpose of GQS001's manuscripts. The three main headings are:

- Broad and intricate trade networks;
- Communal gatherings;
- Personal use copies.

Regarding broad and intricate trade networks, one can imagine commercial markets existing for the trade of compact-sized portable scrolls, *deluxe* manuscripts and large presentation copies of important texts.

Regarding communal gatherings, one can imagine these existing for intellectual engagement, education and the dissemination of laws and purity practices. Manuscripts were copied and circulated for study groups, group reading events, liturgical performances, ritual events, such as covenant ceremonies, blessing and curses, sabbath practices. Some manuscripts reflect scribal training exercises and the master's copies.

Manuscripts said to be personal use copies reflect such things as working drafts, personal scholarly study, notes, memory exercises and personal use portable scrolls.

GQS001

I have discussed in my descriptions of GQS001's handwriting that he was a professional scribe. His manuscripts were produced with skill, care and beauty, evidenced by the consistent reproduction of letter forms according to the ornate, curvilinear style of writing with its wavy, undulating strokes. The quality of the manuscripts copied by this scribe is higher than the quality of the manuscripts associated with personal use copies, working drafts, notes and activities such as memory exercises. That GQS001 penned his manuscripts for a broader audience and for the use of others is apparent. Less clear though is what type of audience GQS001 had in mind. Was he producing manuscripts for a small group of acquaintances or scholars, or a larger social network such as a religious

group or sectarian movement? Or, is their potential that he prepared his manuscripts for a book trading market?

To answer this question, I first consider the letter size, line spacing and the format size of the manuscripts. Second, I consider the content of the manuscripts. These two aspects aid in narrowing down the potential context for use and intended audience of the manuscripts.

The medium format size of these manuscripts, on the one hand rules out their use as large, *deluxe*, prestigious, presentation copies; on the other hand, it rules out their use as small portable copies prepared for the commercial market.

The letter sizes of GQS001's manuscripts were predominantly 3–3.5mm. The spacing between the lines was 6–7 or 7–8mm, which means that the blank spaces left between the writing is an equivalent size—or at times larger—than the writing itself. 3–3.5mm is not among the largest script size for the DSS; nor though is it small in comparison to other scripts.⁷²² It is a regular, legible script.

The line spacing lends the manuscripts a spacious, balanced feel, which fosters legibility for reading. The consistency of the line spacing across the manuscripts suggest the distance of the line spacing was aforethought in the preparation process of the manuscripts.

The quality of the manuscripts, the medium format, letter size and line spacing all point towards the use of these manuscripts in communal gatherings and reading events.

Finally, what does the content of the manuscripts suggest about the function of the manuscripts? How do the categories to which they belong

297

⁷²² Cf., Tables 5 and 6 of this chapter, for the letter sizes of the *Serekh* and Isaiah manuscripts. Falk also noted the letter sizes for some of the prayer and liturgical manuscripts. Between these two scholars the data sample is extensive. In no scroll did writing measure over 5mm, but writing could go down as small as 1.5mm. More commonly the DSS are in the range between 2–3mm than 4-5mm, but 3–3.5mm is basically average. Popović "Book Production and Circulation," forthcoming; Falk, "Material Aspects of Prayer Texts," 63–68.

influence perspectives about the function? These manuscripts are now grouped as copied by this one prolific Qumran scribe. In light of this, which manuscripts conform to what one might expect of their function, and which manuscripts offer surprises?

Their categorisation as sectarian manuscripts means that the *pesharim*, the Lament of the Leader and MMT would be fairly quickly considered to function within the context of the sectarian group. Yet, what of NJ, the Testament of Naphtali, and the Text Concerning Rachael and Joseph, which are categorised as Aramaic and nonsectarian? Would these texts normally be considered as important for dissemination within the Qumran movement? These three texts come as more as a surprise to be identified and copied for communal gatherings at Qumran. Yet, I argue that all eight of them functioned within the movement to be intellectually engaged with and for education purposes.

When considering further surprises of a Qumran scribe, one may also note what there is no evidence of GQS001 copying. The inclusion of MMT suggests that one of the manuscripts prepared by this scribe related to the dissemination of purity laws; however, the rules and laws concerning community or organisational structure do not appear in his writings. There is no evidence that any of his manuscripts were used for ritual events, such as covenant ceremonies, blessing and curses or sabbath practices. Nor does it appear that any were prepared for liturgical performances. No manuscripts now categorised as biblical appear in his writings.

While his manuscripts, therefore, do not seem to have been used for ceremonies, rituals or liturgy, what can be inferred by the range of the content of the manuscripts produced by GQS001 is deep intellectual engagement and group study in a wide range of subject matter and topic areas. Subject matter on the *Kittim*, $N\bar{a}\hat{s}\hat{i}$ $Ha-\bar{E}d\hat{a}$ and an eschatological war. Subject matter on a civil conflict between the Teacher of Righteousness and the Wicked Priest. There are debates on the halakhot and the standards of the Priests. There are images of God shedding tears for his people. There are apocalyptic visions of the New Jerusalem and its Temple. There are texts about the Matriarchs, about Bilhah and

Naphtali's pure lineage, and Rachael's beloved status. This scribe—and those that he copied texts for— certainly engaged a wide range of interests. Plausibly, this engagement occurred in both small groups of scholars and large group reading events primarily for study, education and knowledge dissemination purposes.

Finally, I consider the function of these manuscripts as master's copies for scribal training exercises. On the one hand, the evidence that 5-6/8 of these manuscripts occur only in one copy makes it difficult to claim these are master's copies used for training other scribes. If that was the case, one would expect additional copies of the same text. On the other hand, the style of writing of the manuscripts paints a different picture. As previously discussed, the lamed with the wide and curved lower part is emulated across approximately ten percent of the Qumran manuscript collection. Therefore, it would appear that manuscripts employing this particular *lamed*, coupled often with a particular *aleph* with a wavy middle stroke, were widely read, and discernably other scribes or writers replicated and reproduced the style. At this stage, one can only imagine (not prove in any way) a precise context such as scribal school in which this emulation of style happened. Nonetheless, the prevalence of the developed, ornate, curvilinear style of writing means that at least some of the manuscripts penned in the style were used as master's copies and in scribal training exercises (possibly at Qumran). However, precisely which ones would be difficult to say.

6. Chapter Six: Conclusion

The purpose of this study was to view the Qumran scrolls through the lens of individual scribes. While previous studies have offered important reflections on the group/s of scribes who copied the scrolls and their group practices, here the focus was the individual scribes. It was a previously unidentified scribe who penned eight of the Qumran manuscripts who sat at the heart of this study. Although other identified scribes were brought into the equation; most particularly when reviewing processes of scribal identification in Qumran studies (Chapter Two), but also when reviewing models specific to spelling and scribal practices of Qumran scribes (Chapter Four). The scribes in this study created windows on to the handwriting practices, spelling practices, codicological features, quality of the manuscripts, and the literary content of the Qumran scrolls.

Each chapter developed their own propositions and conclusions of which it would not be useful to simply repeat here. Perhaps, more useful is to conclude by offering reflections on a final topic that intersected with many discussions in this book, and that interweaves its way into many aspects of Qumran studies. This is the topic of sectarianism, and the scribes who copied the sectarian texts. What does GQS001 and the manuscripts he copied mean for conceptions of a "sectarian scribe"?

To start though, a note on the nomenclature of "sectarian scribe." Might such terminology be outdated? Are the scribes of the scrolls really perceived as sectarian? Or is the situation far more nuanced? White Crawford describes the cache of scrolls, as a whole, as being a sectarian collection that was shaped by "scholar-scribes." Popović characterises the Qumran cache as "a scholarly,

⁷²³ Sidnie White Crawford, "The Qumran Collections as a Scribal Library," in *The Dead Sea Scrolls at Qumran and the Concept of a Library*, eds Sidnie White Crawford, Cecilia Wassen STDJ 116 (Leiden: Brill, 2016), 109–131. White Crawford, *Scribes and Scrolls*, 9, passim.

school-like collection of predominantly literary texts."⁷²⁴ Hempel defines the "Qumran Rule texts as complex scribal artefacts produced by literary elites in the Second Temple period."⁷²⁵ In considering the rule texts of the Damascus Document and also the *Serekh*, Jokiranta describes the ideal personalities of the Qumran movement as "knowing but self-reflective scholars."⁷²⁶ Finally, when speaking of those who were engaged with the dissemination of the *pesharim*, Hartog speaks of scholars and intellectuals.⁷²⁷ These five perspectives demonstrate that more than sectarian ideologues, the scribes involved in the production and transmission of texts were intellectuals. Has the dominant conception of the authors, copiers and compilers of the scrolls, including the sectarian ones, becomes scholar scribes? If so, where does the concept of sectarian scribes fit?

While including the language of "scholar" White Crawford continues to argue that the scholar scribes were members of the Essene sect. While Hempel makes clear she does not conceptualise the Rule texts as functioning as handbooks for members of a sect participating in an isolated sectarian lifestyle, she does not discount the function of these texts in their entirety in the life of Qumran movement. Hartog and Jokiranta also perceive that the scholars and intellectuals that they speak of were part of the Qumran movement. However,

⁷²⁴ Popović, "Qumran as Scroll Storehouse," 554.

⁷²⁵ Charlotte Hempel, "Reflections on Literacy, Textuality, and Community in the Qumran Dead Sea Scrolls," in *Is there a Text in this Cave?: Studies in Textuality of the Dead Sea Scrolls in Honour of George J. Brooke,* eds. Ariel Feldman, Charlotte Hempel and Cioatā Maria, STDJ 119 (Leiden: Brill, 2017), 69–82 at 82.

⁷²⁶ Jokiranta, "Essene Monastic Sect, 70 Years After: Social-Scientific Notes on Scrolls Labelling," *Henoch* 19 (2017), 56–72 at 65. See also, Jokiranta, "Sociological Approaches to Qumran Sectarianism," 201–27, at 205. Here Jokiranta lists places in the Damascus Document that demonstrate a central value of education, guidance, and interpretation (CD 2: 3; 6: 14; 13: 7–13), and places in the *Serekh* that insist that knowledge be shared among the proper circle ((1QS 8: 11–12, 17–18).

⁷²⁷ Hartog, *Pesher and Hypomnema*, 293, passim.

⁷²⁸ White Crawford, Scribes and Scrolls.

⁷²⁹ Hempel, "Reflections on Literacy," 78.

⁷³⁰ Hartog, *Pesher and Hypomnema*, 26, passim. Jokiranta, Essene Monastic Sect, 70 Years After," 65.

when discussing how the Qumran movement cultivated scriptural study, created new literature and transformed the personality of members Jokiranta also wondered if this, "set standards for other *sectarian* groups to follow or to compete with." Popović says, "However one conceives of the configuration of the people behind the scrolls, texts were central in their social activities....

Through the writing, copying and studying of texts, the scrolls anonymous scribes and teachers constructed a textual community of highly intellectual and scholarly character."

If we take these five scholars as representing the mainstream gamut of perspectives in the field, the nomenclature of sect and sectarian is still readily applied by some; while others nuance the language to use movement, or others use both sect and movement side by side. Others broaden it all the more with the language of a textual community, which could be a sect, could be a movement, or could be an area that drew people to it as texts held there a central place. All this to say that concepts of sects and sectarianism are still present in the field, but they have been adapted, modified, nuanced and deeply reflected upon.

When these scholars speak of the Essene sect, Qumran sectarians, Qumran movement and / or Qumran textual community, mostly they envision this group as existing both at, and beyond Qumran. However, I would suggest that GQS001 more than likely lived, worked and copied his texts at Qumran or in the vicinity thereof. Placing this scribe at Qumran rests on a combination of factors, which many scholars see as self-evident and foundational to Qumran scholarship, but others see as speculative. These factors are as follows: First, based on the proximity of the caves to the site of the Khirbet Qumran, and the inkwells found there, at least some of the scrolls found in the caves were copied

-

⁷³¹ Jokiranta, "Sociological Approaches," 210.

⁷³² Mladen Popović, Multilingualism, Multiscripturalism, and Knowledge Transfer in the Dead Sea Scrolls and Graeco-Roman Judaea," in *Sharing and Hiding Religious Knowledge in Early Judaism, Christianity, and Islam*, eds. Mladen Popović, Lautaro Roig Lanzillotta, Clare Wilde, JCIT 10 (Berlin: Walter de Gruyter, 2018), 46–71 at 48.

at the site.⁷³³ Second, that there were scribes copying scrolls at the Khirbet Qumran in the early Herodian period;⁷³⁴ perhaps even that the early Herodian period represents a time when there was a burst of copying at Qumran.⁷³⁵ Third, manuscripts copied by common scribes, particularly those scribes whose

⁷³³ The literature on the topic of the scrolls' relationship to Khirbet Qumran is vast, and revolves primarily around aspects of archaeology. The seven or eight inkwells found at Qumran are a preeminent piece of archaeological evidence to suggest that some of the scrolls in the caves were copied at the Khirbet Qumran. Kaare Lund Rasmussen et. al, accounted for a total of seven inkwells, and helpfully listed when and by whom each inkwell was found. Kaare Lund Rasmussen et. al, "The Constituents of the Ink from a Qumran Inkwell: New Prospects for Provenancing the Ink on the Dead Sea Scrolls." *JAS* 39 (2012): 2956-2968, at 2957. In "Book Production and Circulation," Popović suggested that the number of inkwells may well be eight. Stephen Goranson, "Further Qumran Archaeology: Publications in Progress." *BA* 54 (1991): 110-111, noted that other archaeological sites in the region do not attest to such high numbers of inkwells, concluding therefore that significant scribal activity and scroll copying happened at Qumran.

Of course, archaeologists who perceive in the site of Khirbet Qumran as separate from the scrolls put forth other arguments for the purposes of the inkwells. One example among many is from Yizhar Hirschfeld. He said that an owner and staff of an estate for commercial business used the inkwells. Yizhar Hirschfeld, *Qumran in Context: Reassessing the Archaeological Evidence* (Massachusetts: Hendrickson, 2004), 96.

However, generally speaking, the inkwells are primary evidence that there was scroll copying at the site.

 734 That GQS001 copied manuscripts in the early Herodian period is justified on the palaeographic dating of the manuscripts copied by him, and on the C14 dating of 4Q161, which aligns squarely with where Yardeni dated this manuscript. Groningen, Lab ID. GrA-69810; GrM-10661; GrM-10662: BP Years = 2028 ± 18 or 1-σ-calibrated 45 BCE–10 CE and 2-σ-calibrated 55 BCE–60 CE.

4Q171 (also penned by scribe GQS001) was carbon dated in the Tuscon, Lab ID. AA-13420: BP Years $1944 \pm 23 \ 1$ - σ -calibrated 30 CE-125 CE and 2- σ -calibrated 5 CE-205 CE. Overall, this dating would suggest that 4Q171 was penned in the first century CE, though the earliest date for 4Q171 is a touch later than 4Q161. However, as it is the same scribe as 4Q161, we would argue that the earliest C14 dating for this manuscript is applicable.

For discussion on the archaeology of Qumran in the Herodian period, which permits scribes working there, see Jodi Magness, "The Chronology of the Settlement at Qumran in the Herodian Period," in *Debating Qumran: Collected Essays on its Archaeology*, ISACR 4 (Leuven: Peeters, 2004), 41–61; Dennis Mizzi and Jodi Magness, "Was Qumran Abandoned at the End of the First Century BCE?" *JBL*, 135, (2016): 301–20 at 301, passim.

In terms of the dating of the inkwells, unfortunately, Rasmussen et al's attempt at radio carbon dating the ink traces on one of the inkwells was not successful. Rassmussen, et. al, "The Constituents of the Ink," 2965.

⁷³⁵ On palaeographic grounds, the largest majority of manuscripts date to the second half of the first century BCE. This may mean that statically speaking this was when the site was at its most active for scroll copying. Phillip Alexander suggested a burst of copying at Qumran in this period. Alexander, "Literacy Among Jews in Second Temple Palestine," 6.

manuscripts were found in more than one cave, indicate that these scribes were likely working at Qumran. Fourth, the sectarian content of certain manuscripts—e.g., the *pesharim*—render them more likely to be copied at Qumran. While any of the above factors taken alone would not be proof of GQS001's association with Khirbet Qumran, I find that when taken as a whole, and on the balance of probabilities, the evidence stacks up in favour of GQS001 writing and copying the eight manuscripts now ascribed to him at the site of Qumran.

That GQS001 copied manuscripts categorised as sectarian at Qumran, and was likely part of a community or movement there, what does this scribe then mean for conceptions of "sectarian scholar scribes"? Most obviously one learns that the scope of the literature of scholar scribes at Qumran was vast, and not limited to a particular subject area. Even before the identification of GQS001, one could assume that the group who authored, copied, read, studied and compiled these texts were not only interested in sectarian matters. The existence of such a wide range of scrolls in the caves attested to that. Now, however, it is possible to factually observe this with an individual scribe. The detailed literary analysis in Chapter Five of the texts copied by GQS001 demonstrated the depth, breadth and scope of the content of the manuscripts copied by him. Furthermore, if one carries assumptions that there is a hierarchy of texts with nonsectarian and Aramaic texts as less important than biblical or sectarian texts, the identification of GQS001 and the literary analysis of his texts in Chapter Five goes some way to moderating such hierarchies. GQS001 demonstrates a scribe who was not just interested in sectarian matters, and a scribe that did not have a hierarchy of texts, which parallel modern perspectives of the importance of biblical and sectarian over nonbiblical and nonsectarian. What about though what the scribe was interested in?

-

⁷³⁶ Crawford, *Scribes and Scrolls*, 161; Dimant, "Qumran Manuscripts," 35; Ulrich, "Identification of a Scribe Active at Qumran," 208–210.

To explore what GQS001 was interested in—and what he contributes to conceptions of the scholar scribes at Qumran—I find two approaches of contemporary scholars to two discrete collections of ancient Jewish writings particularly enlightening. First, from Daniel Boyarin's intertextual approach to the midrash. Second, from García Martínez and Tigchelaar's web of relationships approach to the DSS. Second approach to the DSS. Second approach to the midrash and its authors, preserving the old wine by pouring it into new bottles. Second and Tigchelaar maintain the DSS represent a web of relationships between texts. Furthermore, in recognising these relationships we can come to further understandings of the texts and the people behind them than strict taxonomic categories allow. The two approaches to the two different collections share much in common, and contribute to a nuanced understanding of the work that engaged GQS001.

Boyarin explains that in the midrash "meaning is created in the (nearly) infinite dialogical relations of text to text."⁷⁴¹ This image of the relationships between texts as infinite dialogue is the image that philosophers of intertextuality encourage readers towards.⁷⁴² Lautaro Roig Lanzillotta explains

⁻

⁷³⁷ Daniel Boyarin, "Old Wine in New Bottles: Intertextuality and Midrash," *Poetics Today* 8 (1987): 539–56; idem, *Intertextuality and the Reading of Midrash* (Indiana: Indiana University Press, 1994); idem, "Inner Biblical Ambiguity, Intertextuality and the Dialectic of Midrash: The Waters of Marah," *Prooftexts* (1990), 29–48; idem, "The Sea Resists: Midrash and the (Psycho) Dynamics of Intertextuality," *Poetics Today* 10 (1989): 661–77.

⁷³⁸ García Martinez "Beyond the Sectarian Divide: The Voice of the Teacher as an Authority-Conferring Strategy," 227-244. Eibert Tigchelaar, "Classifications of the Collection of Dead Sea Scrolls and the Case of Apocryphon of Jeremiah C," *JSJ* 43 (2012): 520–50.

⁷³⁹ Boyarin, "Old Wine in New Bottles," 555.

⁷⁴⁰ García Martinez "Beyond the Sectarian Divide," 229–30. Tigchelaar, "Classifications of the Collection of Dead Sea Scrolls," 525–26, 550, passim.

⁷⁴¹ Boyarin, "Old Wine in New Bottles," 547.

⁷⁴² Michail M. Bahktin formed the idea that texts are in an ongoing dialogue with one another (1857–1913); however, the term intertextuality to describe this dialogue comes from Julia Kristeva. Kristeva described texts as a "mosaic of quotations," with any text being the absorption and transformation of another. Julia Kristeva, "Word, Dialogue and Novel," in *Desire in Language: A Semiotic Approach to Literature and Art*, ed. Leon S. Roudiez, translated by Thomas Gora, Alice Jardine and Leon S. Roudiez (Oxford: Basil Blackwell, 1980), 64–91 at 66. Graham Allen provides a

that this, "dialogue is not unidirectional, and extends both into the past and into the future; modern texts may in fact affect and alter the meaning of past ones in the same way that works from the past affect modern ones."⁷⁴³

When I conceptualise the work of GQS001—even as him as copier, and not author of text—it is him participating in this infinite, multidirectional textual dialogue. Perhaps, when one conceptualises sectarian scholar scribes, conceptualising them as participating in intertextual dialogue is illuminating. The manuscripts that GQS001 copied are drawn together not by category, but by the relationship they share with each other via the relationships they share with other texts. For example, 4Q161, 4Q171 and 11Q18 are brought together through their connection to the War Scroll; 4Q166, 4Q215 and 4Q474 through their relationship to Jubilees. These connection points evidence ways in which the scribes and their audiences "reread" texts. Not in a way that established a hierarchy between the source text and the new text, but in a way that demonstrated a conversation between them that deepened their meaning.⁷⁴⁴ For example, as I discussed in Chapter Five, 4Q171 interacts contexts from the War Scroll with the contexts of the battle of the Congregation of the Chosen vs. the Ruthless of the Covenant. 745 Here one finds a possible example of what Roig Lanzillotta sees as the "continuous re-reading and rewriting of texts in order to create new meanings or to adjust old ones to their new, always changing

further helpful explanation of this dialogic relation of texts, saying "Dialogic refers to the idea that all utterances respond to previous utterances and are always addressed to other potential speakers, rather than occurring independently or in isolation... Bakhtin's dialogism undermines any argument for final and unquestionable positions, since every position within language is a space of dialogic forces rather than monologic truth." Graham Allen, *Intertextuality*, The New Critical Idiom (London: Routledge 2000), 211.

⁷⁴³ Lautaro Roig Lanzillotta, "Ancient Religious Texts and Intertextuality: Plato's and Plutarch's Myths of the Afterlife," in *Religion as Relation: Studying Religion in Context*, eds. Peter Berger, Marjo Buitelaar, and Kim Knibbe, The Study of Religion in a Global Context (Sheffield: Equinox, 2021), 134–45 at 135.

⁷⁴⁴ Roig Lanzillotta, "Ancient Religious Texts," 136.

⁷⁴⁵ This is a possible example of the dual signs that Boyarin speaks of in texts, which suggest to a reader a second context. These dual signs then become key to encountering other meanings in the text being read. Boyarin, "Inner Biblical Ambiguity," 30.

contexts."⁷⁴⁶ Also, as discussed in Chapter Five, 4Q215 rereads and rewrites the story of Bilhah, Zilpah, Naptali and Dan from Genesis to align it better with Jubilees. This rereading and rewriting clearly had something to do with shifting the power imbalance between Jacob's wives and their children.⁷⁴⁷ The story in Genesis, which left Bilhah, Zilpah and their children in compromised positions was changed so as to give them proper genealogy and in turn proper status.⁷⁴⁸

García Martínez coined the term "web of relationships," for the relationships between the *Yahad* and the *Mahanot* of the *Serekh* and Damascus Document, respectively. The term was for describing the relationships between the different groups of the texts, which is not precisely intertextuality. However, Tigchelaar appropriated the term "web of relationships" when speaking of the interactions between a text and further texts that shaped it. He says, "Any specific interpretation of the text must be based on detailed comparisons with other texts. It is exactly for that reason that García Martínez criticized categorisation and classification. He referred to 'a web of relationships' among groups that were interconnected but not identical. I would prefer to focus on the web of relationships between texts." This quote demonstrates that both Tigchelaar and García Martínez recognised that meaning is given to a text by its connection points to other texts, and that this meaning is deeper than any one taxonomic category allows.

When thinking about the Dead Sea Scrolls and the work of the scribes who created and conserved them, one may desire as I do to dive into the philosophically deep waters of intertextuality with all its layers of meanings;⁷⁵¹ or

⁷⁴⁶ Roig Lanzillotta, "Ancient Religious Texts," 137.

⁷⁴⁷ White Crawford, "There is Much Wisdom in Her," 133-51.

⁷⁴⁸ Such a scenario demonstrates Boyarin's sense that intertextuality is, "the way that history, understood as cultural and ideological change and conflict, records itself within textual." Boyarin, "The Sea Resists," 662.

⁷⁴⁹ García Martinez "Beyond the Sectarian Divide," 229.

⁷⁵⁰ Tigchelaar, "Classifications of the Collection," 550.

⁷⁵¹ Boyarin's vision enabled me to see how intertextuality served the needs of the rabbis. He says, "The midrash realizes its goal via a hermeneutic of recombining pieces of the canonized exemplar into a new discourse. We thus see how its intertextuality served both the revolutionary and

one may just wish to observe the web of relationships of one text with another and with another and so on and so on. None of this means that strict taxonomic categories serve no purpose. It just means that conceptions of (sectarian?) scholar scribes at Qumran—who authored, copied, compiled, studied and disseminated texts—need to transcend any boundaries that type cast them solely with sectarian texts and the matters therein. GQS001, who copied sectarian, nonsectarian and Aramaic texts surely observed—and thought more about—the intertextual nature of the manuscripts he copied, and of the web of relationships between them, than to the category the manuscripts belonged.

conservative needs of the midrash and its authors, preserving the old wine by pouring it into new bottles." Boyarin, "Old Wine, New Bottles," 555.

As I bring this book to close, I will continue to ponder how the intertextual process served the revolutionary and conservative needs of the scribes of the scrolls.

Bibliography

- Abegg, Martin. "Qumran Scribal Practice: Won Moor Thyme." Pages 175-204 in Scribal Practice, Text and Canon in the Dead Sea Scrolls. Edited by John J Collins and Geyser-Fouché Ananda. STDJ 130. Leiden: Brill, 2019.
- Abegg, Martin. "Scribal Practice and the Pony in the Manure Pile," Pages 65–88 in *Reading the Bible in Ancient Traditions and Modern Editions:*Studies in Memory of Peter W. Flint. Edited by Andrew B Perrin, Kyung S Baek, and Daniel K Falk. EJL 47. Atlanta: SBL Press, 2017.
- Adamczewsk, Bartosz. "Are the Dead Sea Scrolls Pharasaic?" Pages 69–92 in Sacred Texts and Disparate Interpretations: Qumran Manuscripts Seventy Years Later: Proceedings from the International Conference held at the John Paul II Catholic University of Lublin, 2017. Edited by Henryk Drawnel. STDJ 113. Leiden: Brill, 2020.
- Adler, Yonatan. "The Distribution of Tefillin Finds among the Judean Desert Caves." Pages 161-73 in *The Caves of Qumran: Proceedings of the International Conference, Lugano 2014*. Edited by Marcello Fidanzio. STDJ 118. Leiden: Brill, 2016.
- Aksu, Ayhan. "A Palaeographic and Codicological (Re)assessment of the Opisthographs 4Q433a/4Q255." DSD 26 (2019): 170-88.
- Albright, William F. "The Dead Sea Scrolls," *The American Scholar* 2 (1952): 77–85.
- Albright, William F. "A Biblical Fragment from the Maccabaean Age: The Nash Papyrus," *JBL* 56 (1937): 145-176.
- Alexander, Philip. "Literacy Among Jews in Second Temple Palestine:

 Reflections on the Evidence from Qumran." Pages 3-24 in Hamlet on a

 Hill: Semitic and Greek Studies Presented to Professor T. Muraoka on the

 Occasion of His Sixty-fifth Birthday. Edited by Martin F. J. Baasten and

 Wido T. van Peursen. OLA 118. Leuven: Peeters, 2003.
- Alexander, Philip, and Géza Vermes. *Qumran Cave 4.XIX: 4QSerekh Ha-Yaḥad*. DJD 26. Oxford: Clarendon, 1998.

- Allegro, John M. *Qumran Cave 4.I, 4Q158–4Q186.* DJD 5. Oxford: Clarendon, 1968.
- Allegro, John M. *The Dead Sea Scrolls: A Reappraisal*. London: Penguin Books, 1964.
- Allen, Graham. Intertextuality, The New Critical Idiom. London: Routledge, 2000.
- Almeida, M., R.D. Lins, R. Bernardino, D. Jesus, and B. Lima. "A New Binarization Algorithm for Historical Documents," *Journal of Imaging*, 4/2 (2018).
- Amusin, Joseph D. "The Reflection of Historical Events of the First Century BC in Qumran Commentaries (4Q161, 4Q169 4Q166)," HUCA 48 (1977): 123–152.
- Antonissen, Hugo. "Architectural Representation Technique in New Jerusalem,
 Ezekiel and the Temple Scroll." Pages 485–513 in *Aramaica Qumranica:*Proceedings of the Conference on the Aramaic Texts from Qumran at AixEn-Provence (June 30 July 2, 2008). Edited by Katell Berthelot, Daniel
 Stökl Ben Ezra, STDJ. Leiden: Brill, 2010.
- Atkinson, Kenneth, and Jodi Magness. "Josephus's Essenes and the Qumran Community," in *JBL* 129 (2010), 317-342.
- Aussems, Mark. Christine de Pizan and the Scribal fingerprint; A Quantitative Approach to Manuscript Studies. MA Thesis (2006).
- Avigad, Nahman. "The Palaeography of the Dead Sea Scrolls and Related Documents." *ScrHier* 4 (1958): 56-87.
- Baillet, Maurice. *Qumrân grotte 4.III (4Q482-4Q520)*. DJD 7. Oxford: Clarendon, 1982. Barthélemy, Dominique, and Józef T. Milik. *Qumran Cave 1*. DJD 1. Oxford: Clarendon, 1955.
- Baumgarten, Albert. "Who Cares and Why Does it Matter? Qumran and the Essenes, Once Again!" DSD 11 (2004).
- Baumgarten, Joseph M. Qumran Cave 4 XIII The Damascus Document (4Q266-273). DJD 18. Oxford: Clarendon, 1996.
- Bernstein, Moshe J. "Walking in the Festivals of the Gentiles. 4QpHosea^a and Jubilees 6.34–38" Pages 674–685 in *Reading and Re-Reading Scripture at Qumran* (2 vol. Set). STDJ 107. Leiden, Brill 2013.

- Beit-Arié, Malachi. "Transmission of Texts by Scribes and Copyists: Unconscious and Critical Interferences." *BJRL* 75/3 (1993): 33-51.
- Ben-Dov, Jonathan. "Hebrew and Aramaic Writing in the Pseudepigrapha and the Dead Sea Scrolls: The Ancient Near Eastern Background and the Quest for a Written Authority," Tarbiz 78 (2008–2009): 27–60;
- Ben-Dov, Jonathan. "The Elohistic Psalter and the Writing of the Divine Names."

 Pages 79–104 in *The Dead Sea Scrolls and Contemporary Culture:*Proceedings of the International Conference held at the Israel Museum,

 Jerusalem (July 6–8, 2008). Edited by Adolfo D. Roitman, Lawrence H.

 Shiffman and Shani Tzoref. STDJ 93. Leiden, Brill, 2011.
- Birnbaum, Solomon. *The Hebrew Scripts: Part 1, The Text / Part 2, The Plates.* Leiden: Brill, 1971.
- Birnbaum, Solomon "How Old are the Cave Manuscripts?." VT 1 (1951): 91–109;
- Brink, A.A and R. M. J. Niels, R. A. Van Batenburg, C. E. Van den Heuvel, and
 L. Schomaker, "Towards Robust Writer Verification by Correcting
 Unnatural Slant," in *Pattern Recognition Letters*, 32/3 (2011): 449–457.
- Brown, Julian. *A Palaeographers View: The Selected Writings of Julian Brown*. Edited by Janet Bately, Michelle P. Brown and Jane Roberts. London: Harvey Miller, 1993.
- Brown Michelle P. *A Guide to Western Historical Scripts from Antiquity to 1600*. London: The British Library, 1990.
- Boyarin, Daniel. *Intertextuality and the Reading of Midrash*. Indiana: Indiana University, 1994.
- Boyarin, Daniel. "Inner Biblical Ambiguity, Intertextuality and the Dialectic of Midrash: The Waters of Marah." *Prooftexts* (1990), 29–48.
- Boyarin, Daniel. "The Sea Resists: Midrash and the (Psycho) Dynamics of Intertextuality." *Poetics Today* 10 (1989): 661–77.
- Boyarin, Daniel. "Old Wine in New Bottles: Intertextuality and Midrash," Poetics Today 8 (1987): 539–56;
- Brooke, George J. "Text, Timing and Terror: Thematic Thoughts on the War Scroll in Conversation with the Writings of Martin G. Abegg, Jr." Pages 49–66 in *The War Scroll, Violence, War and Peace in the Dead Sea Scrolls* and Related Literature: Essays in Honour of Martin G. Abegg on the

- Occasion of His 65th Birthday. Edited by Kipp Davis, Kyung Baek, Peter Flint, Dorothy Peters STDJ 115. Leiden: Brill, 2015.
- Brooke, George J. "Scripture and Scriptural Tradition in Transmission: Light from the Dead Sea Scrolls" Pages 1–17 in *The Scrolls and Biblical Traditions:*Proceedings from the Seventh IQOS in Helsinki. STDJ 103. Leiden: Brill, 2012.
- Brooke, George J. "Between Authority and Canon: The Significance of Reworking the Bible for Understanding the Canonical Process." Pages 85—104 in *Reworking the Bible: Apocryphal and Related Texts at Qumran*. Edited by Esther Chazon, Devorah Dimant and Ruth Clements. STDJ 54. Brill, 2005.
- Brooke, George J. "The Bisection of Isaiah in The Scrolls from Qumran," JSSSup 16 (2005): 73–94.
- Brooke, George J. "The Kittim in the Qumran Pesharim." Pages 135–59 in *Images of Empire*. Edited by Alexander Loveday. JSOTSup 122. Sheffield: JSOT Press, 1991.
- Bulacu, Marius and Lambert Schomaker. "Text-independent Writer Identification and Verification Using Textural and Allographic Features," *IEEE Transactions on Pattern Analysis and Machine Intelligence*. (2007): 701–717
- Bulacu, Marius, Lambert Schomaker and Louis Vuurpijl. 'Writer identification using Edge-based Directional Features. Pages 937–941 in *Proceedings of the Seventh International Conference on Document Analysis and Recognition, August 3 to 6, 2003, Edinburgh, Scotland*. Los Alamitos, CA: IEEE Computer Society, 2003.
- Burgers, Jan W. J. *De palaeografie van de Documentaire Bronnen in Holland and Zeeland in the Dertiende Eeuw.* Louvain: Peeters, 1995.
- Collins, John J. "4QMMT and History." Pages 161–79 in *Miqṣat Maʿase ha-Torah*.

 Edited by Reinhard G. Kratz. SAPERE 37 (Tübingen: Mohr Siebeck, 2020.
- Collins, John J. "Tradition and Innovation in The Dead Sea Scrolls." Pages 1–23 in *The Dead Sea Scrolls: Transmission of Traditions and Production of Texts*. Edited by Sarianna Metso, Hindy Najman, and Eileen Schuller. STDJ 92. Leiden and Boston: Brill, 2010.

- Collins, John J. *The Dead Sea Scrolls: A Biography*. Princeton: Princeton University Press, 2012.
- Collins, John J, and Jonathan Klawans, "The Dead Sea Scrolls, the Essenes, and the Study of Religious Belief: Determinism and Freedom of Choice."

 Pages 264–83 in *Rediscovering the Dead Sea Scrolls: An Assessment of the Old and New Approaches and Methods.* Edited by Maxine L.

 Grossman. Michigan: Eerdemans, 2010.
- Collins, John J. "Prophecy and History in the Pesharim." Pages 209–226 in Authoritative Scriptures in Ancient Judaism. Edited by Mladen Popović. JSJSup 41. Leiden: Brill, 2010.
- Collins, John J. Beyond the Qumran Community: The Sectarian Movement of the Dead Sea Scrolls. Grand Rapids: Eerdmans, 2010.
- Charlesworth, James. *The Pesharim and Qumran History. Chaos or Consensus*. Grand Rapids, Michigan: Eerdmans, 2002.
- Chazon, Esther G. "Is *Divrei Ha-me'orot* a Sectarian Prayer?" Pages 3-17 in *The Dead Sea Scrolls: Forty Years of Research*. Edited by Devorah Dimant and Uriel Rappaport. STDJ 10. Leiden: Brill, 1992.
- Cross, Frank M. "Alphabets and Pots: Reflections on Typological Method in the Dating of Human Artifacts," in *Epic to Canon: History and Literature in Ancient Israel*. Baltimore: Johns Hopkins University Press, 1998.

 Cross, Frank M. "The Palaeography of the Dead Sea Scrolls." Pages 379–402 in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment, Vol. 1*. Edited by Peter W. Flint and James C. Vanderkam. Leiden: Brill 1998.
- Cross, Frank M. "Some Notes on a Generation of Qumran Studies" Pages 1–11 in *The Madrid Qumran Congress: Proceedings of the International Congress on the Dead Sea Scrolls*. Edited by Julio Trebolle Barrera and Luis Vegas Montaner. STDJ 11. Leiden: Brill, 1992.
- Cross, Frank M. "The Development of the Jewish Scripts." Pages 3-43 in *The*Bible and the Ancient Near East: Essays in honor of William Foxwell

 Albright. Edited by George E. Wright. Garden City, NY: Doubleday, 1961,
 133-202. Reprinted with some revisions in Leaves from an Epigrapher's

- Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy. HSS 51. Winona Lake: Eisenbrauns, 2003.
- Cross, Frank M. *The Ancient Library of Qumrân and Modern Biblical Studies*. London: Duckworth, 1958.
- Cross, Frank M. and John C. Trever, Scrolls from Qumran Cave I: The Great Isaiah Scroll, The Order of the Community and The Pesher Habakkuk.

 Jerusalem: The Albright Institute of Archaeological Research and The Shrine of the Book, 1972.
- Ciula, Arianna. "Digital Palaeography: What is the Digital about?" *Digital Scholarship in the Humanities*. ADHO 32 (2017): ii89–ii105.
- Ciula, Arianna. "Digital Palaeography: Using the Digital Representation of Medieval Script to Support Palaeographic Analysis," *DM* 1 (2005).
- Davies, Philip R. "Sects from Texts: On the Problems of Doing a Sociology of the Qumran Literature." Pages 69-82 in *New Directions in Qumran Studies*. Edited by Jonathan G. Campbell, William J. Lyons, and Lloyd K. Pietersen. LSTS 52. London: T&T Clark, 2005.
- Davila, James R. "4Q6 and 4Q7." *Qumran Cave 4.VIi: Genesis to Numbers*. DJD 12. Oxford: Clarendon, 1996.
- Davis, Tom. "The Practice of Handwriting Identification." Pages 251–76 in The Library: The Transactions of the Biblical of the Bibliographical Society. Oxford: Oxford University, 2007.
- De Looijer, Gwynedd. *The Qumran Paradigm: A Critical Examination of some of the Foundational Hypotheses of in the Construction of the Qumran Sect.*Williston: SBL. 2015.
- De Vaux, Roland. *Archaelogy and the Dead Sea Scrolls.* Oxford: Oxford University Press, 1959.
- Dhali, Maruf A. et al. "Feature-extraction Methods for Historical Manuscript

 Dating Based on Writing Style Development." *Pattern Recognition Letters*131 (2020): 413-420.

- Dhali, Maruf A., Jan Willem de Wit and Lambert Schomaker, "BiNet: Degraded-manuscript Binarization in Diverse Document Textures and Layouts Using Deep Encoder-decoder Networks." arXiv preprint arXiv:1911.07930. 2019.
- Dhali, Maruf A. et al. "A Digital Palaeographic Approach towards Writer Identification in the Dead Sea Scrolls." In *Proceedings of the 6th International Conference on Pattern Recognition Applications and Methods Volume 1: ICPRAM, 693-702, 2017*. Porto. 2017.
- Dimant, Devorah. "Introductory Essay: The Study of the Dead Sea Scrolls –
 Past and Present." Pages 1-24 in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls: Collected Studies*. FAT 90.
 Tübingen: Mohr Siebeck, 2014.
- Dimant, Devorah. "The Qumran Manuscripts: Contents and Significance."

 Pages 27-56 in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls: Collected Studies*. FAT 90. Tübingen: Mohr Siebeck, 2014.
- Dimant, Devorah. "The Vocabulary of the Qumran Sectarian Texts." Pages 57-100 in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls: Collected Studies*. FAT 90. Tübingen: Mohr Siebeck, 2014.
- Dimant, Devorah. Apocrypha and Pseudepigrapha at Qumran." Pages 153–170 in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls.*Tübingen: Mohr Siebeck, 2014.
- Dimant, Devorah. "Between Sectarian and Non-Sectarian. The Case of the Joshua Apocrypon," Pages 101–111 in *History, Ideology and Bible Interpretation in the Dead Sea Scrolls: Collected Studies*. FAT 90. Tübingen: Mohr Siebeck, 2014.
- Dimant, Devorah. "Sectarian and Nonsectarian Texts from Qumran: The

 Pertinance and Usage of a Taxonomy." Pages 101–11 in *History, Ideology*and Bible Interpretation in the Dead Sea Scrolls. Collected Studies. FAT

 90. Tübingen: Mohr Siebeck, 2014.

- Dimant, Devorah. "The Qumran Aramaic Texts and the Qumran Community."

 Pages 197-205 in Flores Florentino. Dead Sea Scrolls and Other Early

 Jewish Studies in Honour of Florentino García Martínez. Edited by

 Anthony Hilhorst, Émile Puech, and Eibert Tigchelaar. Leiden: Brill, 2007.
- Dimant, Devorah. *Qumran Cave 4 XXI. Parabiblical Texts, Part 4. Pseudo-Prophetic Texts.* DJD 30. Oxford: Clarendon, 2001.
- Ditommaso, Lorenzo. *The Dead Sea New Jerusalem Text: Contents and Context*, TSAJ 110 (Tübingen: Mohr Siebeck, 2005).
- Doudna, Greg. *4QpNahum: A Critical Edition*. JSPSup 35 (2001).

 Driver, Godfrey R. *Aramaic Documents of the Fifth Century*. 2nd ed.
 Oxford: Clarendon, 1957.
- Dupont-Sommer, André. *The Essene Writings from Qumran*. B. Blackwell, 1961.
- Edna Engel, "The Analysis of the Letter: A New Palaeographical Method,"

 Pages 43–50 in *Methoden der* Schriftbeschreibung. Edited by Peter Rück.

 Historische Hilfswissenschaften 4. Stuttgart: Thorbecke, 1999.
- Elledge, Casey D. "Rewriting the Sacred: Some Problems of Textual
 Authority in Light of Rewritten Scripture from Qumran." Pages 87–112 in
 Jewish and Christian Scriptures: The Function of Canonical and NonCanonical Religious Texts. Edited by James H.
 Charlesworth and Lee Martin McDonald. JCTC 7. London: T&T Clarke,
 2010.
- Eshel, Esther. "Paleography of the Semitic Judean Desert Scrolls." Pages 334–51 in *An Eye for Form: Epigraphic Essays in Honor of Frank Moore Cross*. Edited by Jo Ann Hackett and Walter E. Aufrecht. Winona Lake, IN: Eisenbrauns, 2014.
- Eshel, Hanan. "The Kittim in the War Scroll and in the Pesharim." Pages 29–44 in Historical Perspectives: From the Hasmoneans to Bar Kokhba in Light of the Dead Sea Scrolls. Edited by David Goodblatt, Avital Pinnick, and Daniel R. Schwartz. STDJ 37. Leiden: Brill, 2001.

- Falk, Daniel K. "Material Aspects of Prayer Manuscripts at Qumran." Pages 33-88 in *Literature or Liturgy? Early Christian Hymns and Prayers in their Literary and Liturgical Context in Antiquity*. Edited by Clemens Leonhard and Hermut Löhr. WUNT 363. Tübingen: Mohr Siebeck, 2014.
- Falk, Daniel K. *The Parabiblical Texts, Strategies for Extending the Scriptures* among the Dead Sea Scrolls. LSTS 63. London: T&T Clark International, 2007.
- Falk, Daniel K. "Works of God and Communal Confession." Pages 23-61 in Qumran Cave 4 XX. Poetical and Liturgical Texts, Part 2. Edited by Esther Chazon, Torleif Elgvin, Esther Eshel, Daniel Falk, Bilhah Nitzan, Elisha Qimron, Eileen Schuller, David Seely, Eibert Tigchelaar, and Moshe Weinfeld. DJD 29. Oxford: Clarendon, 1999.
- Falk, Daniel K. "Liturgical Texts." Pages in 423-34 in *T&T Clark Companion to the Dead Sea Scrolls*. Edited by George J. Brooke and Charlotte Hempel. London: T&T Clark, 2019.
- Fraade, Stephen. Legal Fictions: Studies of Law and Narrative in the Discursive Worlds of Ancient Jewish Sectarians and Sages. JSJ 147 (2011).
- García Martínez, Florentino. "Beyond the Sectarian Divide: The 'Voice of the Teacher' as an Authority-Conferring Strategy in Some Qumran Texts."

 Pages 227-44 in *The Dead Sea Scrolls: Transmissions of Traditions and Production of Texts*. Edited by Sarianna Metso, Hindy Najman and Eileen Schuller. STDJ 92. Leiden: Brill, 2010.
- García Martínez, Florentino. "Aramaica Qumranica Apocalyptica?" Pages 435-50 in Aramaica Qumranica. Edited by Katell Berthelot and Daniel Stökl Ben Ezra. Leiden: Brill, 2010.
- García Martínez, Florentino. "New Jerusalem at Qumran and the New Testament." Pages 277–89 in *The Land of Israel in Bible, History, and Theology: Studies in Honour of Ed Noort*. Edited by Noort, E., Vos, J. C. de, Ruiten, J. van. VTSup 124. 2009.

- García Martínez, Florentino. "Scribal Practices in the Aramaic Literary Texts from Qumran." Pages 329-41 in Myths, Martyrs, and Modernity. Studies in the History of Religions in Honour of Jan N. Bremmer. Edited by Jitse Dijkstra, Justin Kroesen, and Yme Kuiper. Leiden: Brill, 2010.
- García Martínez, Florentino. "Qumran Origins and Early History." Pages 1–30 in *Qumranica Minora I, Qumran Origins and Apocalypticism*. Edited by Eibert Tigchelaar, STDJ 63. Leiden: Brill, 2007.
- García Martínez, Florentino, and Eibert J.C. Tigchelaar. *The Dead Sea Scrolls Study Edition*. Leiden: Brill, 2000.
- García Martínez, Florentino, Eibert Tigchelaar and Adam S. van der Woude. *Qumran Cave 11 II 11Q2-18, 11Q20-31*. DJD 23. Oxford: Clarendon, 1998.
- García Martínez, Florentino and Adam S. van der Woude, "A 'Groningen'
 Hypothesis of Qumran Origins and Early History." The Texts of Qumran
 and the History of the Community: Proceedings of the Groningen Congress on
 the Dead Sea Scrolls, 20-23 August 1989. RevQ 14 (1990): 521–41.
- Golb, Norman. Who Wrote the Dead Sea Scrolls: The Search for the Secret of Qumran (New York: Scribner, 1995.
- Goranson, Stephen. "Further Qumran Archaeology: Publications in Progress." *BA* 54 (1991): 110-111.
- Greenfield, Jonas C., Michael E. Stone and Esther Eshel. *The Aramaic Levi Document. Edition, Translation, Commentary.* Leiden: Brill, 2004.
- Hassner, Tal., Robert Sablatnig, Dominique Stutzmann and Ségolene Tarte Digital Palaeography: New machines and old texts, DROPS 4 (2014).
- Hartog, Pieter B. *Pesher and Hypomnema. A Comparison of Two Commentary Traditions from the Hellenistic-Roman Period*. Leiden: Brill, 2017.
- Hartog, Pieter B. "The Final Priests of Jerusalem and the Mouth of the Priest: Eschatology and Literary History in Pesher Habakkuk," in *DSD* 24 (2017): 59–80 at 79
- Hartog, Pieter B. "Interlinear Additions and Literary Development in 4Q163/Pesher Isaiah C, 4Q169/Pesher Nahum, and 4Q171/Pesher Psalms A," in *RevQ* 28 (2016): 267–77.

- Hempel, Charlotte. "Reflections on Literacy, Textuality, and Community in the Qumran Dead Sea Scrolls." Pages 69-82 in *Is There a Text in This Cave? Studies in the Textuality of the Dead Sea Scrolls in Honour of George J. Brooke*. Edited by Ariel Feldman, Maria Cioată, and Charlotte Hempel. STDJ 119. Leiden: Brill, 2017.
- Hempel, Charlotte. "Community Structures and Organization," Pages 25–45 in The Qumran Rule Texts in Context: Collected Studies. TSAJ 154. Tübingen: Mohr Siebeck, 2013.
- Hempel, Charlotte. "Emerging Communities in the Serekh." Pages. 79–96 in *The Qumran Rule Texts in Context, Collected Studies,* TSAJ 154. Tübingen: Mohr Siebeck, 2013.
- Hempel, Charlotte. "The Context of MMT and Comfortable Theories."

 Pages 275–92 in *The Dead Sea Scrolls, Texts and Contexts*, ed. Charlotte
 Hempel, STDJ 90. Leiden: Brill, 2010.
- Hempel, Charlotte. "Pluralism and Authoritativeness: The Case of The S

 Tradition." Pages 193-208 in *Authoritative Scriptures in Ancient Judaism*.

 Edited by Mladen Popović. JSJSup 141. Leiden: Brill, 2010.
- Hempel, Charlotte. "The Laws of the Damascus Document and 4QMMT."

 Pages 69–84 in *The Damascus Document: A Centennial of Discovery. Proceedings of the Third International Symposium of the Orion Center, 4–8 February 1998.* Edited by Joseph Baumgarten, Esther Chazon and Avital Pinnick. STDJ 34. Leiden: Brill, 2000.
- Hillel, Vered. "Why not Naphtali?" in *Things Revealed: Studies in Early Jewish and Christian Literature in Honor of Michael E. Stone*, eds. Esther Chazon, David Satran and Ruth Clements. *JSJ* 89 (2004): 279–289.
- Hirschfeld, Yizhar. *Qumran in Context: Reassessing the Archaeological Evidence*. Massachusetts: Hendrickson, 2004.
- Ilan, Tal. "Shelamzion in Qumran: New Insights" Pages 57–68 in Historical Perspectives: From the Hasmoneans to Bar Kokhba in Light of the Dead Sea Scrolls: Proceedings of the Fourth International Symposium of the Orion Center for the Study of the Dead Sea Scrolls and Associated Literature, 27-31 January, 1999. Edited by

- David M. Goodblatt, Avital Pinnick, Daniel R. Schwartz. STDJ 37. Leiden: Brill, 2001.
- Jassen, Alex. "Re-reading 4QPesher Isaiah A (4Q161) Forty Years After DJD V."

 Pages 57–90 in *The Mermaid and the Partridge: essays from the*Copenhagen Conference on revising the Texts from Cave 4. Edited by

 George Brooke and Jesper Høgenhaven, STDJ 96. Leiden: Brill 2011.
- Johnson, Edward. *Formal Penmanship and other Papers*. Edited by Heather Child. London: Lund Humphries, 1971.
- Johnson, William A. *Bookrolls and Scribes in Oxyrhynchus*. Toronto: University of Toronto Press, 2004.
- Johnson, William A. Readers and Reading Culture in the High Roman Empire: A Study of Elite Communities. New York: Oxford University Press, 2010.
- Joseph, Simon J. *Jesus, the Essenes, and Christian Origins: New Light on Ancient Texts and Communities* (Waco, TX: Baylor University Press, 2018).
- Jokiranta, Jutta. "Essene Monastic Sect 70 Years After: Social-Scientific Notes on Scrolls Labelling," *Henoch* 19 (2017): 56–72.
- Jokiranta, Jutta, and Hanna Vanonen. "Multiple Copies of Rule Texts or Multiple Rule Texts? Boundaries of the S and M Documents." Pages 11-60 in Crossing Imaginary Boundaries: The Dead Sea Scrolls in the Context of Second Temple Judaism. Edited by Mika S. Pajunen and Hanna Tervanotko. PFES 108. Helsinki: The Finnish Exegetical Society, 2015.
- Jokiranta, Jutta. *Social Identity and Sectarianism in the Qumran Movement*. STDJ 105. Leiden: Brill, 2013.
- Jokiranta, Jutta. "Sociological Approaches to Qumran Sectarianism." Pages 201–27 in *Oxford Handbook of the Dead Sea Scrolls*, eds. John J. Collins and Timothy H. Lim (Oxford: Oxford Press 2010), 201–27.
- Jones, Robert E. "Priesthood, Cult, and Temple in the Aramaic Scrolls from Qumran." PhD Diss., McMaster University, 2020.
- Justnes, Årstein. "The Hand of the Corrector in 1QIsa^a XXXIII 7 (Isa 40, 7–8): Some Observations," *Semitica* 57 (2015): 205–210;
- Justnes, Årnstein. "On Being a Librarian: Labels, Categories and Classifications."

 Pages 15–30 in *The Dead Sea Scrolls at Qumran and the Concept of a*

- *Library*. Edited by Sidnie White Crawford and Cecilia Wassen. STDJ 116. Leiden: Brill, 2016).
- Knibb, Michael. "Reflections on the Status of the Early Enochic Writings, in Authoritative Scriptures in Ancient Judaism. Edited by Mladen Popović. JSJ 141 (2010): 143–55;
- Kristeva, Julia "Word, Dialogue and Novel." Pages 64–91 in *Desire in Language: A Semiotic Approach to Literature and Art*. Edited by Leon S. Roudiez. Translated by Thomas Gora, Alice Jardine and Leon S. Roudiez. Oxford: Basil Blackwell, 1980.
- Kugler, Robert. "The War Rule Text and a New Theory of the People of the Dead Sea Scrolls: A Thought Experiment." Pages 163–72 in *The War Scroll, Violence, War and Peace in the Dead Sea Scrolls and Related Literature: Essays in Honour of Martin G. Abegg on the Occasion of His 65th Birthday*. Edited by Martin Abegg, Kipp Davis, Kyung Baek, Peter Flint, and Dorothy Peters. STDJ 115. Leiden: Brill, 2015.
- Kugel, James L. "Testaments of the Twelve Patriarchs." Pages 1697-1855 in Outside the Bible. Ancient Jewish Writings Related to Scripture. Edited by Louis H. Feldman, James L. Kugel, and Lawrence H. Schiffman. Philadelphia: The Jewish Publication Society, 2013.
- Kutscher, E.Y. *The Language and Linguistic Background of the Isaiah Scroll:* 1QIsa^a. Leiden: Brill, 1974.
- Lallican, P.M., C. Viard-Gaudi and S. Knerr, "From off-line to on-line Handwriting Recognition." Pages 303–312 in *Proceedings of the Seventh International Workshop on Frontiers in Handwriting Recognition, September 11–13 2000, Amsterdam,*. Edited by L. Schomaker and L. G. Vuurpijl. Nijmegen: International Unipen Foundation, 2000.
- Lange, Armin. "The Question of the So-Called Qumran Orthography, the Severus Scroll, and the Masoretic Text" *HeBAI* 3 (2014): 424–75.
- Lange, Armin. "The Qumran Dead Sea Scrolls. Library or Manuscript Corpus?"

 Pages 177-93 in From 4QMMT to Resurrection. Mélanges gumraniens en

- hommage à Émile Puech. Edited by Florentino García Martínez, Annette Steudel, and Eibert Tigchelaar. Leiden: Brill, 2006.
- Langlois, Michael. "New Jerusalem." Pages 332–34 in *T&T Clarke Companion Volume to the Dead Sea Scrolls*. Edited by Charlotte Hempel and George Brooke. Great Britain: T&T Clarke, 2019. Llewelyn, Stephen, Stephanie Ng, Gareth Wearne and Alexandra Wrathall. "A Case for Two Vorlagen Behind the Habakkuk Commentary (1QpHab)." Pages 123-150 in *Keter Shem Tov: Essays on the Dead Sea Scrolls in Memory of Alan Crown*. Edited by Shani Tzoref and Ian Young PHCS 20. Piscataway, NJ; Gorgias Press, 2013.
- Longacre, Drew G. "Comparative Hellenistic and Roman Manuscript Studies (CHRoMS): Script Interactions and Hebrew/Aramaic Writing Culture." COMSt Bulletin 7 (2021): 7-50.
- Longacre, Drew G. "Paleographic Style and the Forms and Functions of the Dead Sea Psalm Scrolls: A Hand Fitting for the Occasion?" VT (published online ahead of print 2021): 1-26. https://doi.org/10.1163/15685330-bja10019.
- Longacre, Drew G. "Disambiguating the Concept of Formality in Palaeographic Descriptions: Stylistic Classification and the Ancient Jewish Hebrew/Aramaic Scripts." COMSt Bulletin 5 (2019): 101-28.
- Longacre, Drew G. "Reconsidering the Date of the En-Gedi Leviticus Scroll (EGLev): Exploring the Limitations of the Comparative-Typological Paleographic Method." *Textus* 27 (2018): 44-84.
- Longacre, Drew G., and Eibert J.C. Tigchelaar. "4.1.3.2.1 Hebrew and Aramaic Palaeography (Ancient)." In *Textual History of the Bible*. General Editor Armin Lange. Leiden: Brill, 2017. http://dx.doi.org/10.1163/2452-4107_thb_COM_225895.
- Longacre, Drew G. "Developmental Stage, Scribal Lapse, or Physical Defect?

 1QIsaa's Damaged Exemplar for Isaiah Chapters 34–66."

 DSD 20 (2013): 17–50.

- Machiela, Daniel A. "The Aramaic Dead Sea Scrolls: Coherence and Context in the Library of Qumran." Pages 244-58 in The Dead Sea Scrolls at Qumran and the Concept of a Library. Edited by Sidnie White Crawford and Cecilia Wassen. Leiden: Brill, 2016.
- Machiela, Daniel A. "Situating the Aramaic Texts from Qumran: Reconsidering Their Language and Socio-Historical Settings." Pages 88-109 in Apocalyptic Thinking in Early Judaism. Engaging with John Collins' The Apocalyptic Imagination. Edited by Sidnie White Crawford and Cecilia Wassen. Leiden: Brill, 2018.
- Machiela, Daniel A., and Andrew B. Perrin, "Tobit and the Genesis Apocryphon: Toward a Family Portrait." *JBL* 133 (2014): 111-32.
- Machiela, Daniel A. "Is the Testament of Qahat Part of the Visions of Amram? Material and Literary Considerations of 4Q542 and 4Q547." JSJ 52 (2021): 27-38.
- Magness, Jodi. "The Chronology of the Settlement at Qumran in the Herodian Period." *Debating Qumran: Collected Essays on its Archaeology*, ISACR 4. Leuven: Peeters, 2004.
- Magness, Jodi. *The Archaeology of Qumran and the Dead Sea Scrolls*. Grand Rapids: Eerdmans, 2002.

 Malachi Martin, *The Scribal Character of the Dead Sea Scrolls*. Leuven: Publications Universitaries. 1958.
- Mason, Steve N. "The Historical Problem of the Essenes." Pages 201-51 in

 Celebrating the Dead Sea Scrolls: A Canadian Collection. Edited by Peter
 Flint and Jean Duhaime. EJL 30. Atlanta: SBL 2011.
- Meir, John P. "Is There Halakha (The Noun) at Qumran?" *JBL* 122 (2003): 150—155.
- Metso, Sarianna. "Challenging the Dichotomy between Halakhah and Community Legislation." DSD 11 (2004): 61–69.
- Metso, Sarianna. "Constitutional Rules at Qumran." Pages 186–210 in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment*. Edited by Peter W. Flint and James C. VanderKam. Leiden: Brill, 1998.
- Metso, Sarianna. *The Textual Development of the Qumran Community Rule.* STDJ 21. Leiden: Brill, 1997.

- Milik, Józef T. *Ten Years of Discovery in the Wilderness of Judaea*. Translated by John Strugnell. London: SCM, 1959.
- Milik, Józef T. *The Books of Enoch: Aramaic Fragments of Qumrân Cave 4*. Oxford: Oxford University Press, 1976.
- Milik, Józef T. "Milkî-reša dans les anciens écrits juifs et chrétiens," *JJS* 23 (1972): 95–144.
- Milik, Józef T and D. Barthélemy, Qumran Cave 1. DJD 1.Oxford: Clarendon, 1955.
- Mizrahi, Noam. "The Language of the MMT." Pages 67–84 in *Miqṣat Maʿase ha Torah*. Edited by Reinhard G. Kratz. SAPERE. Tübingen: Mohr Siebeck, 2020.
- Mizzi, Dennis and Jodi Magness, "Was Qumran Abandoned at the End of the First Century BCE?" *JBL* 135 (2016): 301–20
- Najman, Hindy and Eibert Tigchelaar in "A Preparatory Study of the Nomenclature and Text." *RevQ* 26 (2014): 305–325 at 315.
- Naudé, Jacobus A. "The Transitions of Biblical Hebrew in the Perspective of Language Change and Diffusion." Pages 189–214 in *Biblical Hebrew: Studies in Chronology and Typology*. Edited Ian Young. JSOTSup 369. London: T & T Clark International, 2003.
- Naveh, Joseph, and Shaul Shaked. *Aramaic Documents from Ancient Bactria* (Fourth Century BCE): From the Khalili Collections. London: The Khalili Family Trust, 2012.
- Naveh, Joseph. *The Development of the Aramaic Script*. PIASH 5. Jerusalem: Israel Academy of Sciences and Humanities, 1970.
- Newsom, Carol A. "'Sectually Explicit' Literature from Qumran." Pages 167-87 in Rhetoric and Hermeneutics: Approaches to Text, Tradition and Social Construction in Biblical and Second Temple Literature. Edited by William H. Propp et al. FAT 130. Winona Lake: Eisenbrauns, 1990.

Parkes, Malcolm B. *Their Hands before our Eyes*. Oxford: Ashgate Publishing, 2008.

- Parkes, Malcolm B. Scribes, Scripts and Readers: Studies in the Communication,
 Presentation and Dissemination of Medieval Texts. London: Hambledon
 Press, 1991.
- Perrin, Andrew B. *The Dynamics of Dream-Vision Revelation in the Aramaic Dead Sea Scrolls*. Göttingen: Vandenhoeck & Ruprecht, 2015.
- Perrin, Andrew B. "The Aramaic Imagination: Incubating Apocalyptic Thought and Genre in Dream-Visions among the Qumran Aramaic Texts." Pages 110-40 in *Apocalyptic Thinking in Early Judaism. Engaging with John Collins' The Apocalyptic Imagination*. Edited by Sidnie White Crawford and Cecilia Wassen. Leiden: Brill, 2018.
- Plicht, Johannes van der. "Radiocarbon Dating and the Dead Sea Scrolls: A Comment on "Redating"." *DSD* 14 (2007): 77-89.
- Ploeg, Johannes van der. "Une halakha inédite de Qumrân." In *Qumrân: Sa piété,* sa théologie et son milieu. Edited by M. Delcor. Paris: Duculot, 1978.
- Ploeg, Johannes van der. "L'édition des manuscrits de la Grotte XI de Qumrân par L'académie royale des sciences des Pays-Bas." Pages 43–45 in *Acta Orientalia Neerlandica: Proceedings of the Congress of the Dutch Oriental Society*. Edited by P.W. Pestman. Leiden: Brill, 1971.
- Popović, Mladen. "Book Production and Circulation as Evidenced by Writing Quality and Skills in the Dead Sea Scrolls Isaiah and Serekh Manuscripts." Forthcoming.
- Popović, Mladen. "Reading, Writing, and Memorizing Together: Reading Culture in Ancient Judaism and the Dead Sea Scrolls in a Mediterranean Context." DSD 24 (2017): 447-70.
- Popović, Mladen, Maruf A. Dhali, and Lambert Schomaker. "Artificial Intelligence Based Writer Identification Generates New Evidence for the Unknown Scribes of the Dead Sea Scrolls Exemplified by the Great Isaiah Scroll (1QIsaa)." PLoS ONE 16 (2021). https://doi.org/10.1371/journal.pone.0249769.
- Popović, Mladen. "Multilingualism, Multiscripturalism, and Knowledge Transfer in the Dead Sea Scrolls and Graeco-Roman Judaea." Pages in 46-71 in Sharing and Hiding Religious Knowledge in Early Judaism, Christianity,

- and Islam. Edited by Mladen Popović, Lautaro Roig Lanzillotta, and Clare Wilde. JCIT 10. Berlin: de Gruyter, 2018.
- Popović, Mladen. "The Ancient 'Library' of Qumran between Urban and Rural Culture." Pages 155-67 in *The Dead Sea Scrolls at Qumran and the Concept of a Library*. Edited by Sidnie White Crawford and Cecilia Wassen. Leiden: Brill, 2016.
- Popović, Mladen. "Networks of Scholars. The Transmission of Astronomical and Astrological Learning between Babylonians, Greeks and Jews." Pages 153-93 in Ancient Jewish Sciences and the History of Knowledge in Second Temple Literature. Edited by Jonathan Ben-Dov and Seth Sanders. New York: New York University Press, 2014.
- Popović, Mladen. "Prophets, Books and Texts: Ezekiel, Pseudo-Ezekiel and the Authoritativeness of Ezekiel Traditions in Early Judaiam." Pages 227–51 in *Authoritative Scriptures in Ancient Judaism*. Edited by Mladen Popović, JSJSup 141. Leiden: Brill, 2010.
- Porten, Bezalel, and Ada Yardeni. *Textbook of Aramaic Documents from Ancient Egypt. Newly Copied, Edited and Translated into Hebrew and English.* 4 vols. Jerusalem: Hebrew University, 1989-99.
- Puech, Émile. *Qumrân Grotte 4 XXII Textes araméens première partie 4Q529-4Q549.* DJD 31. Oxford: Clarendon, 2001.
- Puech, Émile. *Qumrân Grotte 4 XVIII Textes hébreux (4Q521-4Q528, 4Q576-4Q579*). DJD 25. Oxford: Clarendon, 1998.
- Qimron, Elisha. "An Interpretation of an Enigmatic Scroll / פתרון טקסט סתום (2001): 627–30.
- Qimron, Elisha, and Florentino García Martínez, *The Temple Scroll: A Critical Edition with Extensive Reconstructions*, Judean Desert Studies. Beer Sheva: Ben-Gurion University of the Negev Press, 1996.
- Qimron, Elisha. "The Nature of DSS Hebrew and its Relation to BH and MH."

 Pages 232-44 in Diggers at the Well. Edited by T. Muraoka and J.F.

 Elwolde. Leiden: Brill, 2000.
- Qimron, Elisha, and John Strugnell. *Qumran Cave 4 V Miqṣat Ma'aśeh ha-Torah.*DJD 10. Oxford: Clarendon, 1994.

- Qimron, Elisha. "Observations on the History of Early Hebrew (1000 B.C.E.-200 C.E.) in the Light of the Dead Sea Documents." Pages 349-61 in The Dead Sea Scrolls. Forty Years of Research. Edited by Devorah Dimant and Uriel Rappaport. Leiden: Brill, 1992.
- Qimron, Elisha. The Hebrew of the Dead Sea Scrolls. HSS 29. Boston: Brill, 1986.
- Rasmussen, Kaare Lund et. al, "The Constituents of the Ink from a Qumran Inkwell: New Prospects for Provenancing the Ink on the Dead Sea Scrolls." *JAS* 39 (2012): 2956–2968.
- Rasmussen, Kaare Lund, Johannes van der Plicht, Gregory Doudna, Frederik Nielsen, Peter Højrup, Erling Halfdan Stenby, and Carl Th Pedersen. "The Effects of Possible Contamination on the Radiocarbon Dating of the Dead Sea Scrolls II: Empirical methods to Remove Castor Oil and Suggestions for Redating." *Radiocarbon* 51 (2009): 1005-22.
- Reed, Stephen A. and Marilyn J. Lundberg (Editors). *The Dead Sea Scrolls Catalogue. Documents, Photographs and Museums Inventory Numbers.*Atlanta, GA: Scholars Press, 1994.
- Reymond, Eric D. "The Scribe of 1QS, 1QSa, 1QSb, 4Q53 (4QSam^c) 4Q175 and Three Features of the Orthography and Phonology." *DSD* 25 (2018): 23–54.
- Reymond, Eric D. *Qumran Hebrew: An Overview of the Orthography, Phonology and Morphology.* Atlanta: SBL, 2014.
- Rendsburg, Gary A. "The Nature of Qumran Hebrew as Revealed through Pesher Habakkuk." Pages 132-159 in Hebrew of the Late Second Temple Period; Proceedings from the Sixth International Symposium on the Hebrew of the Dead Sea Scrolls and Ben Sira. Edited by Eibert Tigchelaar and Pierre van Hecke, STDJ 114. Leiden: Brill 2015.
- Rendsburg, "Qumran Hebrew (With a Trial Cut [1QS])." Pages 217–46 in *The Dead Sea Scrolls at 60: Scholarly Contributions of New York University Faculty and Alumni*. Edited by Lawrence H. Schiffman and Shani Tzoref. STDJ 89. Leiden: Brill, 2010).

- Roig Lanzillotta, Lautaro. "Ancient Religious Texts and Intertextuality:

 Plato's and Plutarch's Myths of the Afterlife." Pages 134–45 in *Religion as Relation: Studying Religion in Context*, eds. Peter Berger. Edited by Marjo Buitelaar, and Kim Knibbe. The Study of Religion in a Global Context. Sheffield: Equinox, 2021.
- Schiffman, Lawrence H. *The Courtyards of the House of the Lord*. STDJ 75. Leiden: Brill. 2008.
- Schiffman, Lawrence H. "Pharisaic and Sadducean Halakhah in Light of the Dead Sea Scrolls," in *DSD* 1 (Leiden: Brill, 1994): 285–99.
- Schofield, Alison. From Qumran to the Yaḥad: A New Paradigm of Textual Development for The Community Rule. STDJ 77. Leiden: Brill, 2009.
- Schofield, Alison. "Forms of Community." Pages 533-46 in *T&T Clark*Companion to the Dead Sea Scrolls. Edited by George J. Brooke and Charlotte Hempel. London: T&T Clark, 2019.
- Schomaker, Lambert, Katrin Franke and Marius Bulacu, "Using Codebooks of Fragmented Connected-component Contours in Forensic and Historic Writer Identification." *Pattern Recognition Letters*, 28/6 (2007): 719–727.
- Schoor, Hanneke van der. "The Assessment of Variation: The Case of the Aramaic Levi Document. DSD 28 (2021): 179-206.
- Schoor, Hanneke van der. "Qumran Scholarship Through the Lens of the Testament of Qahat (4Q542): An Assessment of the Models of Text and Community," PhD diss., Leuven University, 2022.
- Siegel, Jonathan P. "The Employment of Palaeo-Hebrew Characters for the Divine Names at Qumran in Light of the Tannaitic Sources," *HUCA* 42 (1971): 15972.
- Siegel, Jonathan P. The Scribes of Qumran. Studies in the Early History of Jewish Scribal Customs, with Special Reference to the Qumran Biblical Scrolls and to the Tannaitic Traditions of Massekheth Soferim. PhD diss.

 Brandeis University, 1972).
- Sirat, Colette. Writing as Handwork: A History of Handwriting in Mediterranean and Western Culture. Bibliologia 24. Brepols: Turnhout, 2006).

- Schniedewind, William M. "Qumran Hebrew as an Antilanguage." *JBL* 118 (1999): 235-52.
- Schniedewind, William M. "Language and Group Identity in the Dead Sea Scrolls:

 The Case for an 'Essene Hebrew'." Pages 280–91 in Hebrew Texts and

 Language of the Second Temple Period: Proceedings from the Eighth

 International Symposium of the Hebrew of the Dead Sea Scrolls and Ben

 Sira. Edited by Steven Fassberg. STDJ 134. Leiden: Brill, 2021.
- Stock, Brian. The Implications of Literacy: Written Language and Models of Interpretation in the Eleventh and Twelfth Centuries. Princeton:

 Princeton University Press, 1983.
- Stokes, Peter A. "Describing Handwriting, Part I," *DigiPal Project Blog* (2011), http://www.digipal.eu/blog/describing-handwriting-part-i/>.
- Stokes, Peter A. "Computer-Aided Palaeography." Pages 309–338 in Codicology and Palaeography in the Digital Age. Edited by Malte Rehbein, Patrick Sahle and Torsten SchaBan. Norderstedt: Books on Demand, 2009).
- Stökl Ben Ezra, Daniel. "Interdisciplinary Perspectives from Material and Computer Sciences on the Dead Sea Scrolls and Beyond," *Manuscripts Cultures* 7 (2014): 92–103.
- Stökl Ben Ezra, Daniel. "Messianic Figures in the Aramaic Texts from Qumran."

 Pages 515-44 in *Aramaica Qumranica*. Edited by Katell Berthelot and

 Daniel Stökl Ben Ezra. Leiden: Brill, 2010.
- Stökl Ben Ezra, Daniel. "Palaeographical Observations Regarding 1Q5—One or Several Scrolls?" Pages 259–57 in *Qumran Cave 1 Revisited*.

 Edited by Daniel Falk, Sarianno Metso, Daniel Parry and Eibert Tigchelaar, STDJ 91. Leiden: Brill, 2010.
- Stone, Michael E. "215. 4QTestament of Naphtali." Pages 73-82 in Qumran Cave 4 XVII. biblical Texts, Part 3. Edited by George Brooke, John Collins, Torleif Elgvin, Peter Flint, Jonas Greenfield, Erik Larson, Carol Newsom, Émile Puech, Lawrence H. Schiffman, Michael Stone, and Julio Trebolle Barrera. DJD 22. Oxford: Clarendon, 1996.
- Stone, Michael E. "The Genealogy of Bilhah," DSD 3.1 (1996): 20–36.

- Stone, Michael E. "The Dead Sea Scrolls and the Pseudepigrapha." *DSD* 3.3 (1996): 270–295.
- Stone, Michael E., and Jonas C. Greenfield. "A. Aramaic Levi Document."

 Pages 1-72 in *Qumran Cave 4 XVII. Parabiblical Texts, Part 3*. Edited by
 George Brooke, John Collins, Torleif Elgvin, Peter Flint, Jonas Greenfield,
 Erik Larson, Carol Newsom, Émile Puech, Lawrence H. Schiffman, Michael
 Stone, and Julio Trebolle Barrera. DJD 22. Oxford: Clarendon, 1996.
- Strugnell, John. "Notes en marge du volume V des 'Discoveries in the Judaean Desert of Jordan.'" *RevQ* 7 (1970): 163-276.
- Sussman, Yaakov. "The History of Halakha and the Dead Sea Scrolls." Pages 179–200 in *Qumran Cave 4: V: Miqṣat Maʿaśe Ha-Torah*. DJD 10. Oxford: Clarendon, 1994.
- Steudel, Annette. "Assembling and Reconstructing Manuscripts," in *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment, Vol. 1*, eds. Peter W. Flint and James C. Vanderkam (Leiden: Brill, 1998), 516–34 at 519.
- Steudel, Annette. "Dating Exegetical Texts from Qumran." Pages 39-53 in

 The Dynamics of Language and Exegesis at Qumran. Edited by Devorah

 Dimant and Reinhard G. Kratz FAT 2. Tübingen: Mohr Siebeck, 2009.
- Schwarz, Daniel R. "Law and Truth: On Qumran-Sadducean and Rabbinic Views of Law." Pages 229–40 in *The Dead Sea Scrolls: Forty Years of Research*. Edited by Devorah Dimant and Uriel Rappaport, STDJ 10 (Leiden, Brill, 1992),
- Tanzer, Sarah. "4Q424. 4QInstruction-like Composition B." *Qumran Cave*4.XXVI: Poetic Texts and Miscellanea, Part 1. Edited by Stephen J
 Pfann et al. DJD 36. Oxford: Clarendon, 2000.
- Taylor, Joan E. "The Classical Sources on the Essenes and the Scrolls

 Communities." *The Oxford Handbook of the Dead Sea Scrolls*.

 Edited by Timothy H. Lim, John J. Collins. Oxford: Oxford University, 2010.
- Tigchelaar, Eibert J. C. "Seventy Years of Palaeographic Dating of the Dead Sea Scrolls." Pages 258-78 in Sacred Texts and Disparate Interpretations: Qumran Manuscripts Seventy Years Later: Proceedings of the

- International Conference Held at the John Paul II Catholic University of Lublin, 24-26 October 2017. Edited by Henryk Drawnel. STDJ 133. Leiden: Brill, 2020.
- Tigchelaar, Eibert J.C "Sociolinguistics and the Misleading Use of the Concept of Anti-Language for Qumran Hebrew." Pages 195-206 in *The Dead Sea Scrolls and the Study of the Humanities*. Edited by Pieter B. Hartog, Alison Schofield, and Samuel I. Thomas. Leiden: Brill, 2018.

 Tigchelaar, Eibert J. C. *Beautiful Bookhands and Careless Characters: An Alternative Approach to the Dead Sea Scrolls*. Paper presented as the 8th Annual Rabbi Tann Memorial Lecture, University of Birmingham, 2018.
- Tigchelaar, Eibert J. C. "Scribal Practices as Attested in the Dead Sea Scrolls

 Manuscripts Written in a So-Called Rustic Semi-Formal Tradition." Paper presented at the International SBL. St. Andrews, 8 July 2013.
- Tigchelaar, Eibert J. C. "Classifications of the Collection of Dead Sea Scrolls and the Case of *Apocryphon of Jeremiah C." JSJ* 43 (2012): 519-50.
- Tigchelaar, Eibert J.C. "Aramaic Texts from Qumran and the Authoritativeness of Hebrew Scriptures: Preliminary Observations." Pages 155-71 in *Authoritative Scriptures in Ancient Judaism*. Edited by Mladen Popović. Leiden: Brill, 2010.
- Tigchelaar, Eibert J.C. 'Constructing, Deconstructing and Reconstructing Fragmentary Manuscripts: Illustrated by a Study of 4Q184 (4QWiles of the Wicked Woman)." Pages 26–47 in *Rediscovering the Dead Sea Scrolls: An Assessment of Old and New Approaches and Methods*. Michigan: Eerdemans, 2010.
- Tigchelaar, Eibert J.C. "Assessing Emanuel Tov's Qumran Scribal Practice." Pages 173–207 in *The Dead Sea Scrolls, Transmission of Tradition and Production of Text*. Edited by Sarianna Metso, Hindy Najman and Eileen Schuller. STDJ 92. Leiden: Brill, 2010.
- Tigchelaar, Eibert J.C. "The Character of the City and the Temple in Aramaic New Jerusalem." Other Worlds and Their Relation to This World: Early Jewish and Ancient Christian Traditions. Edited by T. Nicklas, JSJ 143 (2010): 117–131.

- Tigchelaar, Eibert J.C. "Notes on 4Q206/206a, 4Q203-4Q204, and Two Unpublished Fragments (4Q59?)." *Meghillot* 5-6 (2008): 187-99.
- Tigchelaar, Eibert J.C. "The Imaginal Context and the Visionary of the Aramaic New Jerusalem." Pages 258-70 in *Flores Florentino. Dead Sea Scrolls and Other Early Jewish Studies in Honour of Florentino García Martínez*.

 Edited by Anthony Hilhorst, Émile Puech, and Eibert Tigchelaar. Leiden: Brill, 2007.
- Tigchelaar, Eibert J. C. "In Search of the Scribe of 1QS." Pages 439-52 in *Emanuel:*Studies in Hebrew Bible, Septuagint, and Dead Sea Scrolls in Honor of

 Emanuel Tov. Edited by Shalom M. Paul et al. VTSup 94. Leiden: Brill,
 2003.
- Tigchelaar, Eibert J.C. "More Identifications of Scraps and Overlaps," *RevQ* 19 (1999): 61–68.
- Trever, John C. "A Palaeographic Study of the Jerusalem Scrolls." *BASOR* 113 (1949): 6-23.
- Turner, E.G. *Greek Manuscripts of the Ancient* World. Oxford: Clarendon Press, 1971.
- Tov, Emanuel. "The Tefillin from the Judean Desert and the Textual Criticism of the Hebrew Bible." Pages 277-92 in *Is There a Text in This Cave? Studies in the Textuality of the Dead Sea Scrolls in Honour of George J. Brooke*. Edited by Ariel Feldman, Maria Cioată, and Charlotte Hempel. STDJ 119. Leiden: Brill, 2017.
- Tov, Emanuel. "Some Reflections on Consistency in the Activity of Scribes and Translators." *Textual Criticism of the Hebrew Bible, Qumran, Septuagint. Collected Essays Volume 3,* Edited by Emanuel Tov. VTSup 167. Leiden: Brill, 2015.
- Tov, Emanuel. "Scribal Practices and Approaches Revisited" *HeBAI* 3 (2014): 355—67.
- Tov, Emanuel. "Scribal Features of Two Qumran Scrolls." Pages 241–258 in Hebrew in the Second Temple Period: The Hebrew of the Dead Sea Scrolls and of Other Contemporary Sources. Edited by Steven E. Fassberg, STDJ 108 (Leiden: Brill, 2013).

- Tov, Emanuel. Scribal Practices and Approaches Reflected in the Texts Found in the Judean Desert. STDJ 54. Leiden: Brill, 2004.
- Tov, Emanuel. "Categorized List of the 'Biblical Texts'." Pages 165-83 in The Texts from the Judaean Desert: Indices and an Introduction to the Discoveries in the Judaean Desert Series. DJD 39. Oxford: Clarendon, 2002.
- Tov, Emanuel. "Correction Procedures in the Texts from the Judean Desert."

 Pages 232-63 in *The Provo International Conference on the Dead Sea Scrolls: Technological Innovations, New Texts and Reformulated Issues*.

 Edited by Donald W. Parry and Eugene C. Ulrich. STDJ 30. Leiden:

 Brill, 1999.
- Tov, Emanuel. "Further Evidence for the Existence of a Scribal School."

 Pages 199–217 in *The Dead Sea Scrolls, Fifty Years After their Discovery*. Edited by Lawrence Schiffman, Emanuel Tov and James VanderKam. Jerusalem: Israel Exploration Society, 1997.
- Tov, Emanuel. "The Orthography and Language of the Hebrew Scrolls Found at Qumran and the Origin of these Scrolls," *Textus* 13 (1986): 31–57.
- Ulrich, Eugene C., and Frank Moore Cross. *Qumran Cave 4.VII: Genesis to Numbers*. DJD 12. Oxford: Clarendon, 1994.
- Ulrich, Eugene C. "4QSam^c: A Fragmentary Manuscript of 2 Samuel 14-15 from the Scribe of the Serek Hay-yaḥad (1QS)," *BASOR* 235 (1979).
- Ulrich, Eugene C. "Identification of a Scribe Active at Qumran 1QPsb-4QIsac-11QM." Pages 201–210 in *Meghillot; Studies in the Dead Sea Scrolls V-VI:*A Festschrift for Devorah Dimant. Edited by Moshe Bar-Asher and Emanuel Tov. Jerusalem: Bialik Institute, 2007.
- Vielhauer, Roman. "Reading Hosea at Qumran," Pages 91–108 in *The*Mermaid and the Partridge: Essays from the Copenhagen Conference on revising the texts from Cave 4. Edited by George J. Brooke and Jesper Høgenhaven. Leiden: Brill 2011.
- Weinberg, Werner. *The History of Hebrew Plene Spelling*. Cincinnati: Hebrew Union College, 1985.

- Weissenberg, Hanne von and Elisa Uusimäki, "Are there Sacred Texts in Qumran?

 The Concept of Sacred Text in Light of the Qumran Collection." Pages 21—
 41 in *Is there a Text in this Cave? Studies in Textuality of the Dead Sea Scrolls in Honour of George Brooke*. Edited by Ariel Freedman, Maria Cioata and Charlotte Hempel, STDJ 119. Leiden, Brill, 2017.
- Weissenberg, Hanne von. *4QMMT: Reevaluating the Text, the Function and the Meaning of the Epilogue*. STDJ 82.Leiden: Brill 2009.
- Wearne, Gareth. "4QMMT: A Letter to (not from) the Yaḥad." Pages 99-126 in Law, Literature, and Society in Legal Texts from Qumran: Papers from the Ninth Meeting of the International Organisation for Qumran Studies, Leuven 2016. Edited by Jutta Jokiranta and Molly Zahn, STDJ 128. Leiden: Brill, 2019.
- White Crawford, Sidnie. *Scribes and Scrolls at Qumran*. Grand Rapids: Eerdmans, 2019.
- White Crawford, Sidnie. "The Qumran Collections as a Scribal Library."

 Pages 109–131 in *The Dead Sea Scrolls at Qumran and the Concept of a Library*. Edited by Sidnie White Crawford and Cecilia Wassen STDJ 116. Leiden: Brill, 2016.
- White Crawford, Sidnie. "Scribe Links Qumran and Masada," *Biblical Archaeology Society* (2014): 15–20.
- White Crawford, Sidnie. "There is Much Wisdom in Her." Pages 133–51 in Celebrate Her for the Fruits of Her Hands: Essays in Honor of Carol L. Myers. Edited by Susan Ackerman Charles E. Carter and Beth Alpert Nakhai. Winona Lake: Eisenbrauns, 2014.
- White Crawford, Sidnie. *Rewriting Scripture in Second Temple Times*. SDSSRL. Michigan: William B Eerdmans, 2008.
- Williamson, Hugh G.M. "Scribe and Scroll: Revisiting the Great Isaiah Scroll from Qumran." Pages 329–342 in *Making a Difference: Essays on the Bible and Judaism in Honor of Tamara Cohn Eskenazi*. Edited by David J. A. Clines, Kent H. Richards and Jacob L. Wright. HBM 49. Sheffield: Sheffield Phoenix, 2012.

- Wise, Michael O. "Accidents and Accidence: A Scribal View of Linguistic

 Dating of the Aramaic Scrolls from Qumran." Pages in 103-51. Thunder in

 Gemini: And Other Essays on the History, Language and Literature of

 Second Temple Palestine. JSPSup 15. Sheffield: JSOT, 1994.
- Wise, Michael O. Language and Literacy in Roman Judaea: A Study of the Bar Kokhba Documents. New Haven: Yale University Press, 2015.
- Wolf, L., N. Dershowitz, L. Potikha, T. German, R. Shweka, and Y. Choueka, "Automatic Palaeographic Exploration of Genizah Manuscripts."
 Pages 157–179 in Kodikologie und Paläographie im digitalen Zeitalter 2 / Codicology and Palaeography in the Digital Age 2.
 Edited by F. Fischer, C. Fritze, and G. Vogeler, IDE Schriftenreihe, 3.
 Norderstedt: Books on Demand, 2010.
- Yardeni, Ada. *Understanding the Alphabet of Dead Sea Scrolls: Development, Chronology, Dating.* Jerusalem: Carta, 2014.
- Yardeni, Ada. *The Book of Hebrew Script: History, Palaeography, Script Styles, Calligraphy and Design*. London: The British Library, 2002.
- Yardeni, Ada. "A Note on a Qumran Scribe." Pages 281-92 in New Seals and Inscriptions, Hebrew, Idumean, and Cuneiform. Edited by Meir Lubetski. Sheffield: Sheffield Phoenix, 2007.
- Yardeni, Ada. *Textbook of Aramaic, Hebrew and Nabataean Documentary Texts*from the Judaean Desert and Related Material, vol. A: The Documents.

 Jerusalem: The Ben- Zion Dinur Center for Research in Jewish History,
 2000.
- Zahn, Molly. "Beyond "Qumran Scribal Practice": The Case of the Temple Scroll." *RevQ* 29 (2017): 185-203.
- Zahn, Molly. "Rewritten Scripture." Pages 323–36 in *The Oxford Handbook of the Dead Sea Scrolls*. Edited by Timothy Lim and John Collins. Oxford: Oxford University Press, 2010.

- Zhu, Yong., Tieniu Tan, Yunhong Wang, "Biometric Personal Identification Based on Handwriting." Pages 797–800 in *Proceedings 15th International Conference on Pattern Recognition, 3–7 Sept, 2000*, 2. Los Alamitos, CA: IEEE Computer Society, 2000.
- Zuckerman, Bruce E., and Lynn Swartz Dodd. "Pots and Alphabets: Refractions of Reflections on Typological Method." *Maarav* 10 (2003): 89-133.

Nederlandse Samenvatting

In dit proefschrift ligt de focus op het identificeren van schrijvers van de Dode Zeerollen die twee of meer manuscripten schreven. Zowel digitale als traditionele paleografische benaderingen worden toegepast. Daarnaast wordt de vraag gesteld wat deze oude schrijvers moderne lezers kunnen leren over de Dode Zee-rollen. Het bestuderen van deze schrijvers geeft de mogelijkheid om nader onderzoek te doen naar handschriftpraktijken, spellingspraktijken, codicologische kenmerken, de kwaliteit van de manuscripten en de literaire inhoud van de Qumran-rollen.

Het inleidende hoofdstuk bespreekt de vertakkingen van de te identificeren schrijvers, om zo de oorsprong van de rollen te begrijpen. Het hoofdstuk toont de uitdagingen die gepaard gaan met het identificeren van schrijvers, deels vanwege de variabiliteit die mogelijk is binnen het handschrift van één schrijver, en deels vanwege de mogelijke gelijkenissen tussen twee schrijvers die een vergelijkbaar handschrifttype en een vergelijkbare stijl hanteren. Het is deze uitdaging in handschriftidentificatie die di boek behandelt eerste helft van dit boek – hoofdstuk twee en drie.

Hoofdstuk twee bevat een verkenning van traditionele paleografische methoden met betrekking tot het identificeren van schrijvers. Het bespreekt waar handschriftidentificatie thuishoort binnen de bredere context van paleografisch onderzoek op het gebied van Qumran-studies. Daarnaast presenteert het hoofdstuk een overzicht van paleografische beoordelingen van zeventien eerder geïdentificeerde Qumran-manuscriptschrijvers, op basis van een door mij ontwikkelde benadering gebaseerd op traditionele paleografische methoden. Ik stel voor – en demonstreer door deze benadering toe te passen – dat het handschrift van individuele schrijvers moet worden beoordeeld binnen, en vervolgens moeten worden onderscheiden van, het handschrifttype en de stijl waartoe zij behoren.

Waar het doel van hoofdstuk twee is om traditionele paleografie te verkennen, is het doel van hoofdstuk drie om de toepassing van digitale paleografie te verkennen. Deze studie is de eerste in zijn soort die automatische

handschriftherkenningstechnieken toepast op de Qumran-rollen. Specifiek wordt door middel van een digitaal paleografisch proces Ada Yardeni's bewering getest over een schrijver die 54 tot 90 manuscripten zou hebben geschreven. In een interdisciplinair team aan de Rijksuniversiteit Groningen hebben we een digitale paleografische methode ontwikkeld en toegepast om de schrijvers manuscripten te beoordelen. In hoofdstuk drie is deze methode besproken.

Hoofstuk vier behandelt de spellings en schrijfpraktijken van drie van de schrijvers die in hoofdstuk twee en drie zijn beoordeeld en geïdentificeerd. In het hoofdstuk worden de spellingspraktijken van deze schrijvers vergeleken en gecontrasteerd met perspectieven die de proliferatie van de *matres lectionis* in de Qumran-manuscripten verklaren. Het overkoepelende doel van hoofdstuk vier is om te onderzoeken wat het bewijs van de orthografische en morfologische praktijken van schrijvers suggereert over de schriftcultuur die verbonden is met de Qumran-manuscripten.

Hoofdstuk vijf toont een verzameling van gegevens over de codicologie en handschriftkwaliteit van de manuscripten die zijn gekopieerd door de in hoofdstuk drie, door digitale hulpmiddelen geïdentificeerde schrijver. Deze gegevens worden gecorreleerd met de literaire inhoud van de manuscripten. De codicologische kenmerken betreffen de lettergrootte, de marges, de spaties tussen de regels en de formaatgrootte. De kwaliteit van het schrijven omvat aspecten van vaardigheid, zorg en schoonheid die worden afgemeten aan aspecten van uniformiteit, consistentie en evenwicht. Hoofdstuk vijf besluit met een bespreking van wat de codicologische kenmerken, de kwaliteit van het handschrift en de inhoud onthullen over de functie van de manuscripten die door deze productieve Qumran-schrijver zijn gekopieerd.

Hoofdstuk zes is de conclusie van het boek. In dit hoofdstuk wordt de laatste vraag onderzocht met betrekking tot de schrijver die in dit onderzoek is geïdentificeerd: wat betekenen de schrijver (GQS001) en de door hem gekopieerde manuscripten voor academische opvattingen over sektarische schrijvers? Deze vraag is relevant, omdat de concepten 'sektarisme' en 'sektarische manuscripten' de Qumran-wetenschap domineren. De verbindingen

tussen de manuscripten die schrijver GQS001 kopieerde, tonen aan dat een schrijver deelneemt aan intertekstuele dialoog. Bij het conceptualiseren van sektarische geleerde schrijvers, kan de opvatting dat ze deelnemen aan een intertekstuele dialoog verhelderend zijn.