

Calendrical Variations in Second Temple Judaism

*New Perspectives on the 'Date of
the Last Supper' Debate*

STÉPHANE SAULNIER

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Calendrical Variations
in Second Temple Judaism

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By

Stéphane Saulnier



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The first seeds for the present undertaking were sown during the academic year 2000–2001, while participating in a seminar on the issue of the date of the Last Supper in John's Gospel, in the context of a second year BA Honours course on Johannine Literature, taken at Canterbury Christ Church University. It is during this particular seminar that I was first introduced to the work of the great scholar Annie Jaubert and her theory on the date of the Last Supper. I was intrigued. Two years later I embarked on a doctoral program with the intention of researching further the issue. Initially armed with firm resolve to solve the entire issue I quickly learnt that down sizing and focusing my research proposal was indeed the way to go if I intended to complete the project in a timely manner. Of the three main areas covered by Jaubert's novel thesis I decided to tackle first that which to me seemed the most central, that is the various calendrical traditions exemplified in the extant textual sources of the second Temple period.

The present undertaking is a somewhat revised version of the Doctoral thesis. Some of the arguments therein were presented at various academic conferences (First Graduate Henoah Seminar 2006; SBL San Diego 2007; Fourth Henoah Seminar 2007; SBL New Orleans 2009) and have benefited from the comments and criticisms received along the way. At this stage I would like to take this opportunity, as is proper, to acknowledge and thank the faculty and staff of both the Department of Theology and Religious Studies and the Graduate School at Canterbury Christ Church University (UK) for their support throughout this project. Special mention must go to Dr. Brian Capper and Dr. Christine Pilkington, my first and second supervisors throughout this project. Their unconditional support has been much appreciated. As my teachers they have been worthy examples. I would also like to extend my gratitude to Canterbury Christ Church University for providing financial support in the form of a Research Studentship in the early stages of this project.

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LIST OF ABBREVIATIONS AND BIBLIOGRAPHICAL NOTES

List of Abbreviations

364DCT	364-day Calendar Tradition
364DY	364-day Year
AB	Anchor Bible
AB	<i>Astronomical Book</i> , 1 Enoch 72–82
ABD	<i>Anchor Bible Dictionary</i>
ABRL	Anchor Bible Reference Library
AfO	<i>Archiv für Orientforschung</i>
AfOB	Archiv für Orientforschung: Beiheft
AJEC	Ancient Judaism and Early Christianity
ALD	<i>Aramaic Levi Document</i>
Ang	<i>Angelicum</i>
Bib	<i>Biblica</i>
BASOR	<i>Bulletin of the American School of Oriental Research</i>
BNTC	Black's New Testament Commentaries
CahRB	Cahiers de la revue biblique
BSac	<i>Bibliotheca Sacra</i>
BZNW	Beihefte zur Zeitschrift für die neutestamentliche
CBQ	<i>Catholic Biblical Quarterly</i>
CBQMS	Catholic Biblical Quarterly Monograph Series
CBR	<i>Currents in Biblical Research</i>
CQR	<i>Church Quarterly Review</i>
CRINT	Compendia rerum iudaicarum ad Novum Testamentum
CSCO	Corpus scriptorum christianorum orientalium. Edited by I.B. Chabot et al. Paris 1903–
CSEL	Corpus scriptorum ecclesiasticorum latinorum
DJD	Discoveries in the Judaean Desert
DSD	<i>Dead Sea Discoveries</i>
DSSR	<i>The Dead Sea Scrolls Reader</i> , edited by D.W. Parry and E. Tov (Leiden: Brill, 2004–05)
EBib	Études bibliques
EDSS	Encyclopedia of the Dead Sea Scrolls
ErIsr	<i>Eretz-Israel</i>
ETR	<i>Études théologiques et religieuses</i>

<i>EvQ</i>	<i>Evangelical Quarterly</i>
<i>ExeTh</i>	<i>Exégèse et théologie</i>
<i>ExpTim</i>	<i>Expository Time</i>
GAP	Guides to the Apocrypha and Pseudepigrapha
<i>Hen</i>	<i>Henoch</i>
HO	Handbuch der Orientalistik
<i>Hok</i>	<i>Hokhma</i>
HSM	Harvard Semitic Monographs
HSS	Harvard Semitic Studies
<i>HT</i>	<i>History Today</i>
<i>HUCA</i>	<i>Hebrew Union College Annual</i>
<i>IEJ</i>	<i>Israel Exploration Journal</i>
<i>IJSCC</i>	<i>International Journal for the Study of the Christian Church</i>
<i>ITQ</i>	<i>Irish Theological Quarterly</i>
<i>JANES</i>	<i>Journal of the Ancient Near Eastern Societies</i>
<i>JAOS</i>	<i>Journal of the American Oriental Society</i>
<i>JBL</i>	<i>Journal of Biblical Literature</i>
<i>CS</i>	<i>Journal of Cuneiform Studies</i>
<i>JHS</i>	<i>Journal of Hebrew Scriptures</i>
<i>JJS</i>	<i>Journal of Jewish Studies</i>
<i>JNES</i>	<i>Journal of Near Eastern Studies</i>
<i>JQR</i>	<i>Jewish Quarterly Review</i>
<i>JSHRZ</i>	<i>Jüdische Schriften aus hellenistisch-römischer Zeit</i>
<i>JSJ</i>	<i>Journal for the Study of Judaism in the Persian, Hellenistic, and Roman Periods</i>
<i>JSJSup</i>	Journal for the Study of Judaism: Supplement Series
<i>JSOTSup</i>	Journal for the Study of the Old Testament: Supplement Series
<i>JSP</i>	<i>Journal for the Study of the Pseudepigrapha</i>
<i>JSPSup</i>	Journal for the Study of the Pseudepigrapha: Supplement Series
<i>JSS</i>	<i>Journal of Semitic Studies</i>
<i>JTS</i>	<i>Journal of Theological Studies</i>
LAPO	Littératures anciennes du Proche-Orient
LCL	Loeb Classical Library
LD	Lectio divina
MAIS	Mémoires de l'Académie Impériale des Sciences
<i>Mus</i>	<i>Le Muséon: revue d'études orientales</i>
<i>NABU</i>	<i>Nouvelles assyriologiques brèves et utilitaires</i>
NTL	New Testament Library
NTOA	Novum Testamentum et Orbis Antiquus
<i>NTS</i>	<i>New Testament Studies</i>

<i>NovT</i>	<i>Novum Testamentum</i>
<i>Numen</i>	<i>Numen: International Review for the History of Religions</i>
<i>OC</i>	<i>Oriens Christianus</i>
<i>OJC</i>	Orientalia Judaica Christiana
<i>Or</i>	<i>Orientalia</i>
<i>OrChr</i>	<i>Oriens Christianus</i>
<i>OTL</i>	Old Testament Library
<i>OTP</i>	<i>Old Testament Pseudepigrapha</i> . Edited by J.H. Charlesworth. 2 vols. New York, 1983, 1985
<i>RB</i>	<i>Revue biblique</i>
<i>REJ</i>	<i>Revue des études juives</i>
<i>RHE</i>	<i>Revue d'histoire ecclésiastique</i>
<i>RHR</i>	<i>Revue de l'histoire des religions</i>
<i>RevQ</i>	<i>Revue de Qumrân</i>
<i>RSR</i>	<i>Recherche de science religieuse</i>
<i>SAOC</i>	Studies in Ancient Oriental Civilizations
<i>SB</i>	Sources bibliques
<i>SBEC</i>	Studies in the Bible and Early Christianity
<i>SBLSP</i>	Society of Biblical Literature Seminar Papers
<i>SBT</i>	Studies in Biblical Theology
<i>ScrHier</i>	Scripta Hierosolymitana
<i>SHCANE</i>	Studies in the History and Culture of the Ancient Near East
<i>SHR</i>	Studies in the History of Religion
<i>SJ</i>	Studia judaica
<i>SJLA</i>	Studies in Judaism in Late Antiquity
<i>SJSOT</i>	<i>Scandinavian Journal for the Study of the Old Testament</i>
<i>SJT</i>	<i>Scottish Journal of Theology</i>
<i>SNEAC</i>	Studies in Near Eastern Archeology and Civilization
<i>SNTSMS</i>	Society for New Testament Studies Monograph Series
<i>STDJ</i>	Studies on the Texts of the Desert of Judah
<i>TSAJ</i>	Texte und Studien zum Antiken Judentum
<i>TU</i>	Texte und Untersuchungen
<i>TynBul</i>	<i>Tyndale Bulletin</i>
<i>VE</i>	<i>Vox Evangelica</i>
<i>VT</i>	<i>Vetus Testamentum</i>
<i>VTSup</i>	Supplements to <i>Vetus Testamentum</i>
<i>WBC</i>	World Biblical Commentaries
<i>WMANT</i>	Wissenschaftliche Monographien zum Alten und Neuen Testament
<i>WTJ</i>	<i>Westminster Theological Journal</i>

ZA	<i>Zeitschrift für Assyriologie</i>
ZABR	<i>Zeitschrift für altorientalische und biblische Rechtsgeschichte</i>
ZAW	<i>Zeitschrift für die alttestamentliche Wissenschaft</i>
ZDPV	<i>Zeitschrift des deutschen Palästina-Vereins</i>
ZNW	<i>Zeitschrift für die neutestamentliche Wissenschaft</i>
ZPE	<i>Zeitschrift für Papyrologie und Epigraphik</i>

Bibliographical notes

Bible

Unless otherwise stated, quotations from the Bible follow the RSV Second (Catholic Edition).

Qumran documents

Unless otherwise stated, quotations and translations of the Qumran material follow DJD (Oxford: Clarendon).

Pseudepigrapha

Translations of the *Book of Jubilees* follow J.C. VanderKam, *The Book of Jubilees* (CSCO 511; Leuven: Peeters, 1989).

INTRODUCTION

SCOPE AND LIMITS OF THE PRESENT ENQUIRY

The events surrounding the last days of Jesus' life have regularly drawn the attention of scholars, notably in the field of New Testament studies. Among these events, those portrayed by the Passion Narratives have held a special place. On first reading, all the Gospel accounts of the Passion of Jesus agree in suggesting that Jesus was crucified on a Friday, "day of preparation" (Mark 15:42; Matt 27:62; Luke 23:54; John 19:31, 42). These accounts also suggest that this particular Friday, beginning according to Jewish reckoning on Thursday evening after sunset, was the day on which took place all the events which form the Passion of Christ: the Last Supper, the short stay at Gethsemane and the subsequent arrest, the trial, crucifixion and burial of Jesus (Mark 14:17–15:47; Matt 26:20–27:61; Luke 22:14–23:56a; John 13:2–19:42).¹ This is perhaps the extent to which the Passion Narratives appear to be in agreement. A close examination of the accounts, however, soon reveals discrepancies between the portrayals. Not all Gospel accounts of the Passion of Jesus relate exactly the same events. The key issue, as identified by most scholars, is the apparent disagreement between the Synoptic Gospels (Matthew, Mark, Luke) and the Gospel of John about the exact character of the last meal Jesus took with his disciples. In particular, scholars are in disagreement about what are often termed the *Passover characteristics* of the meal.² This difficulty is often perceived to be a direct consequence of the divergent chronologies adopted by the Gospels.³ It is useful at this stage to present briefly the

¹ Following J. Jeremias, *Die Abendmahlworte Jesus* (Göttingen: Vandenhoeck and Ruprecht, 1960), English translation *The Eucharistic Words of Jesus* (Translated by N. Perrin; London: SCM, 1966), the position is here taken that at the time of Jesus the reckoning of the day was widely held to be from sunset to sunset, i.e., with the first sighting of the stars after sunset (*b. Ber. 2a, b. Bar*). As suggested by Jeremias, a clear indication of this is given in the fact that in Rabbinic Judaism, the sabbath was sanctified after sunset with the *qidduš*, a blessing pronounced at the beginning of each sabbath (or feast day) to mark the separation between profane and holy in the following manner: "R. Eleazar b. Zadok said: My father . . . used to say over the cup, '(blessed be) he who has sanctified the sabbath day'. He did not add a closing benediction." The sabbath and feast days were dismissed by the *habdalah*, "separation blessing," to mark re-entry into profane time: Jeremias, *Eucharistic Words*, 15–6, 26.

² Jeremias, *Eucharistic Words*.

³ The Synoptic Gospels are Matthew, Mark and Luke.

issues, and to review the three classical approaches scholars have traditionally rehearsed when tackling these issues.

1. *Discrepancies in the Gospels' Passion Narratives*

The problem may be stated as follows. The Synoptic Gospels present the Last Supper as a Passover meal. Mark 14:12 states: "And on the first day of Unleavened Bread, when they sacrificed the Passover lamb, his disciples said to him, 'Where will you have us go and prepare for you to eat the Passover?'" The time reference in this verse clearly implies the day when the Passover lambs were slaughtered, i.e., Nisan 14 in the afternoon.⁴ Mark is unambiguous in suggesting that the preparation of the room, in which Jesus was to eat the Passover with his disciples, took place on Nisan 14. This was immediately followed, in portrayal, by the Last Supper, in the evening that marked the start of Nisan 15 (Mark 14:17). The Passover character of the Last Supper is also suggested by Luke 22:15 "I have earnestly desired to eat this Passover with you before I suffer," a passage considered by some to be an early independent tradition.⁵

The picture described in the fourth Gospel is somewhat different and contradicts to a certain degree the depiction found in the Synoptic Gospels. The fourth evangelist agrees with the Synoptic Gospels that Jesus was crucified on the Friday of the week when (the first day of) Passover occurred. In John 18:28, however, the dating of this particular Friday differs, it appears, significantly from the one recorded in the Synoptic Gospels:

Then they led Jesus from the house of Cai'aphas to the praetorium. It was early. They themselves did not enter the praetorium, so that they might not be defiled, but might eat the Passover. (John 18:28)

This suggests *prima facie* that the Passover lambs had *not yet* been slaughtered in the temple. Jesus was crucified on Friday Nisan 14, "day of

⁴ Jeremias, *Eucharistic Words*, 17–8, has noted the contradiction contained in the time reference: the day when the Passover lambs were slaughtered was rarely reckoned to be the first day of the feast of Unleavened Bread, which was Nisan 15. Jeremias shows that in this verse the second part of the time reference, i.e., "when they sacrificed the Passover lamb," is meant to clarify the first part of the clause, "And on the first day of Unleavened Bread," and concludes that Mark 14:12 must be read to mean "the day when the Passover lamb was slaughtered, Nisan 14" (Cf. the many examples adduced by Jeremias where the same dynamic applies in Mark, e.g. 1:32, 35; 4:35; 13:24; 14:30, 43; 15:42; 16:2).

⁵ Jeremias, *Eucharistic Words*, 18–9, considers Mark 14:12–16 to be an extension of the original Passion Narrative, and stresses the importance of finding early witnesses of the Passover character of the Last Supper in the Synoptics. Cf. Jeremias, *Eucharistic Words*, 92 ff.

preparation of the Passover” (John 19:14). The Passover meal had not yet taken place, and therefore Jesus’ last meal with his disciples could not have been a Passover meal.

Here is, in a very brief summary, the problem at hand: in the Synoptic Gospels Jesus’ Passion starts with the Last Supper, seemingly a Passover meal held on the official date of Nisan 15, a Friday (Thursday after sunset) the year Jesus died. His Passion culminated with his crucifixion on Friday afternoon, Nisan 15. In the fourth Gospel’s description of the events, however, Jesus takes his last meal on Friday (Thursday after sunset) Nisan 14, the “day of preparation of the Passover” (John 19:14). Jesus is then crucified the same Friday afternoon Nisan 14. According to the Synoptic Gospels the Last Supper was a Passover meal, according to the fourth Gospel it could not have been a Passover meal. From a historical critical perspective, which accounts are to be historically trusted? Scholars usually follow three lines of enquiry. Each, it seems, in an unsatisfactory manner. As we map out the terrain it will suffice to outline briefly those possibilities, and to mention in passing the main objections raised against each. We will then turn our attention to the attempt at reconciliation put forward by Jaubert.

2. *Classical Attempts for Reconciling the Gospel Accounts*

Assuming the Gospel accounts do have a historical value, there have been three lines of argumentation pursued in scholarship. The first tends to accept the Synoptic tradition(s) as historically reliable. The second line of argumentation favors the historical reliability of the Johannine chronology. The third line shies away from ascribing exclusive historical priority to either traditions, preferring to consider that both traditions actually retain key historical elements that are of pivotal significance to the exegete—whether one adopts a hermeneutic of history and faith or a hermeneutic of history and suspicion.

2.1. *The Chronology of the Synoptic Gospels is Correct*

The first logical option with which we are presented is to accept the Synoptic accounts of Jesus’ Passion as historical, and to interpret John in this light.⁶ The defenders of this position must account for the meaning of John 18:28 “that they might not be defiled, but might eat the Passover,” as

⁶ Such position has traditionally been that of the western (Latin) Church, which uses Unleavened Bread for communion.

the Synoptic accounts clearly suggest that the Last Supper was a Passover meal. The options are somewhat limited.⁷ The term Passover must in this context either be understood in the light of 2 Chr 30:22, where it is suggested that, in the first year of King Hezekiah (cf. 2 Chr 29:3), the people of Israel kept the festival of Unleavened Bread for seven days, and ate the food of the festival during that period (2 Chr 30:21–22).⁸ The alternative is to read John 18:28 in the light of such Talmudic sayings as “to eat the Passover sacrifices.” Billerbeck has shown that the sacrifices of this feast were occasionally called *pesach*, in line with Deut 16:2 and 2 Chr 35:7.⁹ However, “it is extremely questionable whether the Gentile Christians for whom the fourth evangelist wrote would be able to understand such linguistic subtlety.”¹⁰ Rather, their understanding is likely to have been literal, with the inference that the Passover lamb was eaten on the evening following Jesus’ death. On this basis, one cannot accept the possibility that the Synoptic accounts are right and John wrong.¹¹

B.D. Smith has argued in favor of a reconciliation of the Gospel accounts on the basis of an assimilation of the Johannine chronology to that of the Synoptic.¹² The Synoptic Gospels are clear that the Last Supper was a Passover meal, eaten on the evening of Nisan 15.¹³ Further, there are indications in the fourth Gospel that the Last Supper was a Passover meal.¹⁴ For Smith, the data from John’s Gospel, usually used to argue that Jesus’ Last Supper was not a Passover meal (i.e., John 18:28; 19:31), have been

⁷ They have been conveniently summarized by Jeremias, *Eucharistic Words*, 20. For a suggestion that “to eat the Passover” refers to the whole feast, see C.C. Torrey, “In the Fourth Gospel the Last Supper Was the Paschal Meal,” *JQR* 42 (1951–52): 237–50. For an opposite view, see K. O’ Brien, *But the Gates Were Shut: Operation of Jerusalem’s Perimeter Gates Within New Evidence and a new Methodology for Dating and Locating the Last Supper and Identifying the Beloved Disciple in Jn 13: 25 Project*, vol. 1 (San Francisco: International Scholars Publication, 1996), 9.

⁸ On the passage in 2 Chronicles 30, see below Chapter 2.

⁹ Cf. H.L. Strack and P. Billerbeck, *Kommentar zum Neuen Testament aus Talmud und Midrasch. Vol. 2* (Munich, 1922–28), 837.

¹⁰ Jeremias, *Eucharistic Words*, 21.

¹¹ For scholars who defend the chronology of the Synoptic against John, see for example: C.K. Barrett, *The Gospel According to St. John* (2nd ed.; London: SPCK, 1978), 51; D.A. Carson, *The Gospel According to John* (Leicester: InterVarsity Press, 1991), 457–8.

¹² B.D. Smith, “The Chronology of the Last Supper,” *WTJ* 53 (1991): 29–45.

¹³ B.D. Smith rejects the interpretation of R.T. France, “Chronological Aspects of ‘Gospel Harmony,’” *VE* 16 (1986): 43–54, that crucifixion took place on Nisan 14 afternoon, with the Last Supper taking place on Nisan 14 (evening before).

¹⁴ The meal in Jerusalem; the journey to the valley of Kidron, within the ritual limit of the city; the reclining at table; the Levitical purity observed for the meal; the indication that the disciples thought Judas had gone to buy food for the poor. Cf. B.D. Smith, *op. cit.*, 31–2.

misunderstood “owing to an unfamiliarity with the use of Festival terminology in first century Palestine relating to the Passover and the Festival of Unleavened Bread.”¹⁵ Once it is seen that, firstly, John 18:28 φάγωσιν τὸ πάσχα refers to the festival offering required on Nisan 15, and that Jesus’ accusers did not enter the *praetorium* because the corpse uncleanness associated with Gentile houses would have defiled them, preventing them from partaking of the sacrifice of the Passover lamb or festival offerings, and, secondly, that παρασκευή (John 19:14) means “the day before the sabbath,” the two chronologies are brought in line. However, although Smith is right to point out the looseness of meaning concerning the festival(s) of Passover and Unleavened Bread, Jeremias’ objection mentioned in the above paragraph also holds in this case.

2.2. *The Chronology of the Fourth Gospel is Correct*

If the first option breaks down, the second logical view is to accept that the chronology of the Passion as expounded in the Gospel of John is historically reliable, and the Synoptic accounts must be interpreted in the light of the portrayal given by the fourth evangelist.¹⁶ Those who advocate this position must posit that Jesus—a Jew—voluntarily anticipated the Passover *before* the official date in the Jewish festal calendar. Many scholars have followed and defended this position.¹⁷ One scholar who believes that the gospel accounts of the Passion Narratives can be reconciled is R.T. France.¹⁸ Reconciliation lies in a reinterpretation of the accounts of the Synoptic Gospels. He rejects the attempts based on a reinterpretation

¹⁵ B.D. Smith, *op. cit.*, 29–30.

¹⁶ This is the position traditionally accepted by the Eastern Church, which uses leavened bread for communion.

¹⁷ For scholars who defend the chronology of John against that of the Synoptic, see for example: V. Taylor, *The Gospel According to Mark* (2nd ed.; London: MacMillan, 1966), 667; R.E. Brown, *The Gospel According to John* (AB 29a; New York: Doubleday, 1970), 556, who holds that the Passover characteristics of the meal influenced the Synoptics; I.H. Marshall, *The Gospel of Luke. A Commentary on the Greek Text* (Exeter: Paternoster, 1978), 790; M.D. Hooker, *The Gospel According to St. Mark* (BNTC; London: A. & C. Black, 1991), 334. More recently, Pope Benedict XVI, *Jesus of Nazareth. Holy Week: From the Entrance Into Jerusalem to the Resurrection* (San Francisco: Ignatius, 2011), 111 ff., has indicated his partial acceptance of the position expounded by J.P. Meier, *A Marginal Jew: Rethinking the Historical Jesus: The Roots of the Problem and the Person, Vol. 1* (ABRL; New York: Doubleday, 1991), 395 ff.

¹⁸ Cf. R.T. France, “La Chronologie de la Semaine Sainte,” *Hok* 9 (1978): 8–16; also France, “Chronological Aspects”.

of John as being “clearly motivated by the desire to harmonize.”¹⁹ For France, the external evidence points too strongly in the direction of Jesus being crucified on Nisan 14,²⁰ an argument supported by astronomical evidence.²¹ Further, the list of events taking place on Nisan 15, a Holy Day, is so great that it raises many obstacles.²² In the light of these, it is preferable to reinterpret the Synoptic accounts. The key question thus becomes: *is it so certain that the Synoptic gospels do in fact date the Last Supper and the crucifixion a day later?*²³ In Mark 14:12, the meal after dark cannot be the regular Passover, which by Jewish reckoning was going to take place the next day. The evening belongs to the day of the killing of the Passover lambs, and therefore the evening of the Last Supper in the Synoptic took place *before* the killing on Nisan 14 in the afternoon. Jesus, then, did not celebrate the official Passover, but anticipated it.²⁴ France’s argument is well thought out, but rather unconvincing. It creates the difficulty, in its reading of Mark 14:12, of making a chronology for the supper itself incredibly tight, especially when one considers the preparations involved.²⁵ Further, to abandon the Synoptic Gospels’ assertions that the Last Supper was a Passover meal is too great a price to pay, and the points

¹⁹ France, “Chronological Aspects,” 48. Examples of a reinterpretation of John can be found in: M.S. Shepherd, “Are Both the Synoptics and John Correct About the Date of Jesus’ Death?” *JBL* 80 (1961): 123–32; D.A. Carson, “Matthew,” in *Matthew, Mark, Luke* (ed. F.E. Gaebelin; Expositor’s Bible Commentary 8; Grand Rapids, MI: Zondervann, 1984), 528–32.

²⁰ The Babylonian Talmud, *b. Sanh. 43a, 67a*, refer to “Yeshua’s” execution “on the eve of Passover;” the gospel of Peter states that Pilate “delivered him to the people on the day before the Unleavened Bread, their feast;” Cf. W. Schneemelcher, *Gospels and Related Writings* (eds E. Hennecke, W. Schneemelcher, and R.M. Wilson; vol. 1 of *New Testament Apocrypha*; Westminster, 1963), 184.

²¹ On astronomical evidence applied to the dating of the crucifixion of Jesus, see C.J. Humphreys and W.G. Waddington, “Astronomy and the Date of the Crucifixion,” in *Chronos, Kairos, Christos* (ed. J. Vardaman and E.M. Yamauchi; Winona Lake: Eisenbrauns, 1989), 165–81; also C.J. Humphreys and W.G. Waddington, “The Jewish Calendar, a Lunar Eclipse and the Date of Christ’s Crucifixion,” *TynBul* 43 (1992): 331–51. These are revisited in various chapters of C.J. Humphreys, *The Mystery of the Last Supper: Reconstructing the Final Days of Jesus* (Cambridge: Cambridge University Press, 2011). For a note of caution on the use of astronomical data, see R.T. Beckwith, “Cautionary Notes on the Use of Calendars and Astronomy to Determine the Chronology of the Passion,” in *Chronos, Kairos, Christos* (eds J. Vardaman and E.M. Yamauchi; Winona Lake, IN: Eisenbrauns, 1989), 183–205.

²² Jeremias, *Eucharistic Words*, 62–6.

²³ France, “Chronological Aspects,” 49.

²⁴ Some scholars who adopt the anticipated Passover view: V. Taylor, *op. cit.*, 664–7; R.H. Fuller, *The Mission and Achievement of Jesus* (London: SCM, 1954), 70–1; T. Preiss, *Life in Christ* (London: SCM, 1954), 81–99; F.F. Bruce, *New Testament History* (London: Oliphants, 1969), 182–3.

²⁵ These included finding the location of the room by following the man carrying the jar of water, followed by all the preparation for the meal. Cf. Carson, *John*, 456.

raised by Jeremias form a formidable objection to this position. Lastly, one must wonder how likely it was that Jesus, a Jew, would have knowingly breached the Mosaic Law by anticipating the Passover.²⁶

R.E. Brown is also of the view that the Johannine chronology is a reflection of the historical unfolding of the events of Jesus' Passion.²⁷ For Brown, there are several reasons for which the chronology in the Synoptic Gospels should be viewed with caution. First, Mark mentions many activities allegedly taking place that day that are hardly reconcilable with a feast day in a Jewish setting. Second, Mark does not attempt to reconcile the last day of Jesus with the earlier reference to the plot of the Jews not to arrest Jesus on the feast. Third, there are no further references to the feast of Unleavened Bread after the supper. These suggest to Brown that Mark did not construct the Passover dating of the meal, but rather took it up from tradition. He did not attempt to change it because it "reflected a Passover characterization of the meal as liturgical theology and not as history."²⁸ Here, argues Brown, we are in the presence of a "theologoumenon . . . a dramatization of the pre-Gospel proclamation of Jesus as the lamb of God."²⁹ Such pre-Gospel material is also present in the fourth Gospel (cf. John 1:29, 36; 1 John 1:7; 2:2), but, significantly, not in the context of the Last Supper. Rather, of the seven Passover references in the fourth Gospel's Passion Narrative, only one (John 19:14) refers to Jesus being the Lamb of God. The Johannine chronology, therefore, is not a construct to fit the theological insight. Rather, it portrays the events as they took place: Jesus was crucified on Nisan 14, day of the slaughtering of the Passover lambs.

While asserting that Jesus' death occurred on Nisan 14—on the day the Passover lambs were slaughtered—Brown falls short of stating that Jesus and his disciples actually anticipated the Passover. He suggests, rather, that "for unforeseen reasons" they celebrated a meal that had Passover characteristics.³⁰ But this position assumes that the Last Supper in the fourth

²⁶ Strack and Billerbeck, op. cit., 844, vol. II; and 49, vol. IV. G. Dalman, *The Words of Jesus* (translated by D.M. Kay; Edinburgh: Clark, 1909), strongly rejects this possibility.

²⁷ "Since a Pilgrimage feast is the most plausible explanation of why Jesus and his Galilean disciples were together in Jerusalem, I would regard as historical that Jesus' final Supper and crucifixion took place just before or at Passover": R.E. Brown, *The Death of the Messiah. From Gethsemane to the Grave: A Commentary on the Passion Narratives in the Four Gospels* (New York: Doubleday, 1994), 1369.

²⁸ Brown, *Death of the Messiah*, 1370.

²⁹ Brown, *Death of the Messiah*, 1370.

³⁰ Brown, *John*, 556.

Gospel took place on the evening before Jesus' death. The time indication in John 13:1 states "before the feast of the Passover" rather imprecisely. Further, like all those which advocate a Thursday evening Last Supper, this view suffers from the difficulties of trying to fit all the events of Jesus' Passion in one night. Lastly, Brown does not account satisfactorily for the Passover characteristics of the meal in John.

J. Meier is another scholar to accept firmly the historical reliability of the Johannine account of the last days of Jesus' life over that of the Markan presentation.³¹ On the basis of form and redaction criticism Meier argues that the two key markan passages which contain Passover references (Mark 14:12a, 12–16), and the significant passage in Luke 22:15–16, are likely to be later additions or redactions. For Meier, once these additional layers are removed, the markan and lukan accounts of the last supper are stripped of their Passover characteristics.³² Once the Passover nature of the supper is surrendered, one can appreciate that the Johannine account shows itself to be a better alternative than the Synoptic portrayal. It is, for Meier, a scholarly desire to fit the events surrounding the last supper—and their significance—in existing defined religious categories that is problematic. However, Jesus was no customary Jew, what he did was so different that it cannot pass the test of historical conformity.³³

It seems to be of little significance to Meier that the solution he favors posits perhaps an overtly *marginal Jew*. But how marginal a Jew could Jesus have been? Do not the Gospel accounts depict him as truthful and faithful to the law of Moses, encouraging his would-be-followers to *observe* the law, while being critical of some of his contemporaries' own *interpretation* of that law? It seems that by avoiding the solution to the problem of the date of the last supper that posits two calendars behind the discrepancies Meier is willing to compromise the significance of the extent to which Jesus the Jew was an observant Jew of his time. True, there were various *philosophies* among first century Jews, as Josephus himself clearly indicates. And a close look at primary sources highlights that schisms between these groups often gravitated around their differing interpretation of *how*, not *whether*, scripture commands should actually be observed. The differing

³¹ Meier, *op. cit.*, 395. Meier states: "a number of considerations lead me to favor the basic outline of the Johannine chronology as the most likely."

³² Meier, *op. cit.*, 396–8.

³³ *The Roots of the Problem*, 399. Meier states boldly: "Given the unique circumstances of this unusual person, it is not surprising that what he did at his last meal with his inner circle of disciples does not fit neatly under any conventional religious rubric of the time."

interpretation between Pharisees and adepts of the 364-day-year tradition of the expression “from the day after the sabbath” (Lev 23:15), which in the biblical text marks the day on which the counting of time should start so that the festival of Weeks may be celebrated according to the law, is a perfect example of this. By considering specific examples, the chapters that follow will highlight the centrality matters calendrical played in Second Temple Judaism. It was not a question of *whether* one should celebrate the festival, but a matter of *when*.

As a Jew of his time it is perhaps unlikely Jesus would have considered the celebration of Passover *optional*. As a Jew of his time, would Jesus have considered *anticipating* the Passover celebration? Some say he would. Considering the ramifications of this would go beyond the limits of the present enquiry and would lead into theological considerations that have to do with the dual nature of Jesus Christ, as fully human and fully divine, which are central to the theological field of Christology.

An additional key difficulty it would seem, especially for the exegete interpreting the text from a hermeneutic of faith in a divinely revealed text, is to posit an *either/or* solution to the problem above over a *both/and* approach. At its simplest level, the question may be “if the text is divinely revealed, how can it contain apparent discrepancies?” More to the point, if the text is believed to be revealed—acknowledging that the process of revelation, involving the giving and the reception and recording of that revelation, somehow involves both human and divine *natures* (and perhaps the use of the term *hypostatic* may be useful in qualifying the co-agency at work)—is it not somewhat inconsistent with a hermeneutic of faith to suggest that one account is *right* while another is *wrong*? It is this difficulty which I believe leads Benedict XVI to reject *partially* the solution proposed by Meier, which argues for the acceptance of the Johannine accounts over and above that of the Synoptic accounts.³⁴ From another angle, or shall we say, from a hermeneutic of suspicion, the argument is neither here nor there, and questions raised by discrepancies between the accounts may be approached with the full battery of tools available in the critic’s historical-critical approach tool kit.

³⁴ The Pope describes as “artificial” Meier’s argument that Passover references were later additions/redactions in the markan narrative. The Pope adds: “The question remains: Why did the Synoptics speak of a Passover meal? What is the basis for this strand of tradition? Not even Meier can give a truly convincing answer to this question.” See Benedict XVI, *op. cit.*, 111.

2.3. *Both the Synoptic and the Johannine Chronologies are Correct*

For those scholars who approach these accounts from a historical critical perspective, and who take a position against the possibilities expounded above, the first preliminary conclusion that can be confidently stated is that neither the Synoptic Passion Narratives, nor the fourth Gospel's account of the last days of Jesus, can be taken separately against the other. This brings us to the second alternative, which must be considered in mapping the terrain of this enquiry: this alternative boldly holds that despite the apparent discrepancies, both the fourth Gospel *and* the Synoptic Gospels' accounts are historically reliable in their portrayal of the Passion. Now, it becomes apparent that for such a hypothesis to hold, one must posit that, a) Jesus and his disciples ate the Passover on Friday (Thursday evening) 15 Nisan (cf. Synoptic), and b) the officials who brought Jesus to Pilate and did not enter the *praetorium* for fear of defilement (John 18:28), had not yet eaten the Passover on the day Jesus was crucified, "the day of preparation of," Friday 14 Nisan. In this light, two observations can already be made. First, either the Passover was eaten on two consecutive days or on two different occasions during the week of Jesus' death. Second, there was, apparently, a difference either of calendar computation, or at least a polemic around the start of Nisan that year.³⁵ Alternatively, the accounts must be reinterpreted to highlight their hidden agreement.

2.3.1. *Passover Celebrated on Consecutive Days*

D. Chwolson's attempt at reconciliation has often been noted by scholars.³⁶ Chwolson built his argument on two principles: a) Exod 12:6 stipulates that the slaughter of the Passover lamb is to take place at "twilight," the transition between Nisan 14 and 15;³⁷ and b) the sabbath rest must not be violated.³⁸ In the event of Nisan 14 falling on a Friday, the slaughter of the Passover lambs at twilight would have interfered with the sabbath rest. Chwolson argues that to avoid such interference, and due to the sheer number of Passover lambs to process, the slaughter was moved that year to Nisan 13 at twilight. The argument goes that the Pharisees proceeded to eat the Passover on that very evening, Nisan 14, with Jesus and his disciples following this practice. The Sadducees ate the Passover at the

³⁵ Presumably relating to the difference of observance of the new moon to declare the start of the month between different Jewish groups.

³⁶ D. Chwolson, *Das Letzte Passamahl Christi und der tag seines todes* (MAIS VII, vol. XLI/1; Amsterdam: Philo Press, 1908, rep. 1979).

³⁷ Cf. Lev 23:5; Num 9:3, 5, 11 ff.

³⁸ Cf. Exod 20:8–11; Deut 5:12–15.

appointed time of Nisan 15, i.e., 24 hours later. Thus, it resulted in Passover being kept on two consecutive days the year of Jesus' death.³⁹

This hypothesis meets with weighty objections. First, Chwolson assumes that at the time of Jesus, the Passover lambs were still slaughtered at "twilight."⁴⁰ But there is evidence to suggest that by this time the slaughter took place in the afternoon of Nisan 14.⁴¹ Second, it is unlikely that either the Sadducees or Jesus would have contravened the Law willingly, the former in finding themselves disobeying Exod 12:10. In Jesus' case, he would perhaps have breached the Law by not celebrating Passover at the appointed time of Nisan 14/15 if other groups did; the issue is strictly that we have no evidence that they did.⁴² The likelihood of this taking place is rather slight.⁴³ Chwolson's theory is inconclusive.⁴⁴

J. Lichtenstein also posited an hypothesis which rested on the assumption that Passover was eaten on two consecutive days the year that Jesus died.⁴⁵ In this H.L. Strack and P. Billerbeck followed him.⁴⁶ The main thrust of their argument goes as follows. Towards the turn of the era, different Jewish groups had different ways of interpreting Lev 23:15 as regards the setting of the date of the feast of Weeks, or Pentecost.⁴⁷ On the one hand

³⁹ M.-J. Lagrange, *L'Évangile de Jésus Christ* (EBib; Paris: Gabalda, 1928), formulates a similar theory, but ascribes the discrepancy to a difference in observance of the New Moon between Galileans and Judeans the year Jesus died. Cf. J.A. O'Flynn, "The Date of the Last Supper," *ITQ* 1 (1958): 59; E. Ruckstuhl, *Chronology of the Last Days of Jesus: A Critical Study* (translated by V.J. Drapela; New York: Desclée, 1965), 30; Jeremias, *Eucharistic Words*, 22. But the lack of evidence to corroborate the hypothesis weakens its appeal and weight.

⁴⁰ *Passamahl*, p. 43 "when the 14th fell on a Friday there was no other solution than to bring forward the slaughter of the sacrificial lamb to the preceding day, i.e., Thursday the 13th." Cf. Jeremias, *Eucharistic Words*, 22 note 9.

⁴¹ Cf. *Jub.* 49:10 defines "between the evenings" as the "third part of the day;" Philo *Spec.* 2.145 indicates "beginning at noon."

⁴² Cf. H.W. Hoehner, *Chronological Aspects of the Life of Christ* (Grand Rapids, Michigan: Zondervan Publishing House, 1977), 256.

⁴³ Hoehner's argument that Jesus would not have had Unleavened Bread for the feast is not very convincing as it is possible to envisage that those groups who possibly anticipated the Passover meal in the event of Nisan 14 falling on a Friday would presumably also anticipate all due preparation for the Passover. To envisage otherwise does not make sense.

⁴⁴ Scholars who followed Chwolson's theory include J. Klausner, *Jesus of Nazareth: His Life, Time, and Teaching* (translated by H. Dandy; London, 1925), 326-8; I. Zolli, *Il Nazareno* (Udine, 1938), 207-9; Lagrange, *L'Évangile de Jésus Christ*, 495-7.

⁴⁵ Cf. *Aus J. Lichtenstein hebraischem Kommentar zum Neuen Testament* (Schriften des Institutum Judaicum zu Leipzig 43, 1895) 24-29; *id. Commentary on St. Matthew* (in Hebrew, Leipzig, 1913) 122 ff.

⁴⁶ H.L. Strack, *P'sahim* (Leipzig, 1911) 10; Strack and Billerbeck, *op. cit.*, 847-53.

⁴⁷ Cf. H.L. Strack, *P'sahim* (Leipzig, 1911) 10. Strack and Billerbeck, *op. cit.*, 847-50; J. van Goudoever, *Biblical Calendars* (Leiden: Brill, 1961 2nd ed.), 15-29 for evidence of differences in reckoning the 50 days forward to Pentecost either from Sunday in Passover week (Sadducees/Boethusians), or from Nisan 16, whichever day of the week this may have

the Boethusian priestly family (who were Sadducees) held that Pentecost was not a movable feast and had to take place on a Sunday, while the Pharisees believed otherwise.⁴⁸ This divergence resulted, it appears, in the year of Jesus' death, in a calendrical polemic centered on the setting of Nisan 1. The Sadducees held the view that Nisan 1 had fallen one day later than the Pharisees reckoned. This Sadducean reckoning allowed for Passover to fall on a Friday evening/Saturday, thus allowing "the day after the sabbath" to be a Sunday, and thus ensuring that Pentecost fell on a Sunday. A status quo was agreed between both parties, which resulted in Passover being celebrated on two consecutive nights, the Thursday evening by the Pharisees and Jesus and his disciples (Synoptic), on the Friday evening by the Sadducees (John). On this theory Jeremias commented: "(it) has been so carefully argued, especially by Billerbeck, that its possibility has to be admitted."⁴⁹ Its main strength is that it allows all groups to celebrate Passover at the right date of Nisan 14/15.⁵⁰ Its main weakness, however, resides in the lack of evidence concerning the slaughtering of the Passover lambs being allowed by the Sadducees on two consecutive days in the Temple.⁵¹ Further, there is no evidence of a polemic between Pharisees and Sadducees over the start of Nisan the year that Jesus died.⁵²

been (Pharisees). Cf. *m. Hag* 11:4; *m. Menah* X:3. Much depended on their interpretation of Lev 23:15 "And you shall count from the day after the sabbath." Pharisees would interpret sabbath to mean *festival*, and would consequently count the fifty days from the day following Passover (Nisan 16), while Sadducees would interpret sabbath literally and would count the fifty days from the Sunday after Passover. Cf. Hoehner, *Life of Christ*, 256. The Qumran Calendrical documents date the feast of Weeks/Pentecost to the 15 of the third month, which suggest that they started their count of the fifty days on the day following the sabbath which followed after the days of Passover and Unleavened Bread, the 26 of the first month.

⁴⁸ Cf. Ruckstuhl, *op. cit.*, 30–2; Jeremias, *Eucharistic Words*, 23–4; Hoehner, *Life of Christ*, 256; I.H. Marshall, *Last Supper and Lord's Supper* (Exeter: Paternoster, 1980), 71–3.

⁴⁹ Cf. Jeremias, *Eucharistic Words*, 23.

⁵⁰ Cf. Hoehner, *Life of Christ*, 256.

⁵¹ Cf. Jeremias, *Eucharistic Words*, 23–4. Also Hoehner, *Life of Christ*, 256; Marshall, *Last Supper and Lord's Supper*, 71–3; France, "Chronological Aspects," 44. More recently, D. Instone-Brewer, "Jesus' Last Passover in the Synoptics and John," *Expository Times* 112 (2000): 122–23, has argued that the rabbinic debate concerning a Passover sacrifice (*m. Zebah. 1:3*), which had not been designated as such by the person offering it, provides the evidence that was missing to the theories of Chwolson on the one hand, and Strack and Billerbeck on the other. This evidence was identified, though not applied to these two theories, by M. Casey, *Aramaic Sources of Mark's Gospel* (SNTSMS 102; Cambridge: Cambridge University Press, 1998a), 223–5. The text shows that some Jews used to bring lambs to be sacrificed on the afternoon of Nisan 13, and called them, perhaps, fellowship offerings. Casey sees in this a willingness to avoid the rush of the feast.

⁵² Cf. France, "Chronological Aspects," 256; Marshall, *Last Supper and Lord's Supper*, 71–3.

J. Pickl approached the problem from a slightly different angle.⁵³ On the basis of a comparison between two passages in Josephus' *Antiquities* (*Ant.* 3.249 and 2.317) referring to a different length of time for the ἄζυμα—Unleavened Bread—he argued that because of the sheer number of Passover sacrifices generated by the thousands of pilgrims in Jerusalem, there arose the custom for the Galileans to slaughter their Passover lambs on Nisan 13, while the Judaeans kept to Nisan 14. This practical reason, however, loses its appeal when it becomes evident, as shown by Jeremias, that the basis for the 8-day celebration of Unleavened Bread was a practice of the Diaspora, the eighth day being added at the end of the feast, i.e., 22nd Nisan, and not at the beginning.⁵⁴ It is unlikely that a practical reason such as this would be enough to move the day of the meal, i.e., the start of the feast.

H.W. Hoehner articulates a theory of harmonization of the Gospel accounts based on the difference of day reckoning among Palestinian Jews at the time of Jesus.⁵⁵ He provides evidence for both the usually accepted sunset-to-sunset reckoning of the day and the less commonly attested sunrise-to-sunrise day reckoning.⁵⁶ Hoehner argues that this difference throws light on the chronology of the Passion Narratives.⁵⁷ Thus in the Synoptic Gospels the Last Supper was a Passover meal. Following a sunrise-to-sunrise reckoning, the Galileans, and with them Jesus and his disciples, had their Passover lambs slaughtered in the afternoon of Thursday Nisan 14, and ate the Passover with unleavened bread in the evening of Thursday Nisan 14.⁵⁸ Judaeans, on the other hand, could not

⁵³ J. Pickl, *Messiaskönig Jesus* (München, 1935), 247 ff.

⁵⁴ Cf. Jeremias, *Eucharistic Words*, 24.

⁵⁵ H.W. Hoehner, "Chronological Aspects of the Life of Christ," *BSac* 131 (1974): 241–64; Hoehner, *Life of Christ*, 65–71.

⁵⁶ Cf. S. Zeitlin, "The Beginning of the Jewish Day During the Second Commonwealth," *JQR* 36 (1945–46b): 403–14, argues for a transition at the time of the exile from a morning to morning to an evening to evening reckoning of the day. Hoehner contests the validity of this argument on the basis of Exod 12:18 (Unleavened Bread), Lev 23:32 (Day of Atonement), the weekly sabbath (cf. note 1), the order in which evening and morning are listed in Deut 1:33; 28:66; 1 Sam 25:16; 1 Kings 8:29; Esth 4:16; Mark 4:27; 5:5; Luke 2:37. Cf. R.T. Beckwith, "The Day, Its Divisions and Its Limits in Biblical Thought," *EvQ* 43 (1971): 218–27.

⁵⁷ Hoehner here follows Morgenstern's suggestion that the Galileans and the Pharisees used a sunrise to sunrise reckoning, while the Judaeans and the Sadducees reckoned the day to begin at sunset. Cf. J. Morgenstern, "The Calendar of the Book of Jubilees, its Origins and its Character," *VT* 5 (1955): 64–5 note 2.

⁵⁸ Some scholars have asserted that in the New Testament, the first day of Unleavened Bread was Nisan 14, and not Nisan 15. Cf. *m. Pesah* 1:1–5; 3:6; 5:4. Beckwith regards this as a reflection of "later custom, recorded in the Mishnah, of preparing for the feast of Unleavened Bread by removing all leaven from the house on the fourteenth." Cf. Beckwith, "The

slaughter their lambs until the Friday afternoon, Nisan 14 having started on the Thursday evening. Consequently, they ate their Passover on Friday evening, start of Nisan 15. As Hoehner suggests, this solution makes good sense of the Pharisees' refusal to enter the *praetorium* (John 18:28). The theory suffers, however, from the difficulty of asserting that the Sadducees allowed two consecutive days for the slaughter of the lambs in the Temple, a point conceded by Hoehner himself.⁵⁹ As already mentioned for the theories that postulate differences in sighting of the new moon that year, Hoehner's theory is weakened by the lack of explicit statements from the sources. More significantly, it is unlikely that the Pharisees would have celebrated Passover on Nisan 14 and not on Nisan 15, thus disobeying the Torah.⁶⁰ And notwithstanding Hoehner's evidence, the consensus at the time of Jesus seems to have been for a sunset-to-sunset reckoning of the day.⁶¹

2.3.2. *Passover Celebrated According to Two Different Calendars*

Prat ascribes the discrepancies between the Gospel accounts to two different, conflicting calendars being in use in the regulation of the cycle of festivals amongst Palestinian Jews in the first half of the first century CE.⁶² Christ and his followers followed a Solar Calendar, while the Jewish authorities fixed the date of Passover according to a lunar calendar.⁶³ This theory differs from all others based on calendrical issues in that it posits, not a discrepancy based on the too conjectural possibility of a difference in observance of the new moon to determinate the start of Nisan, but a direct conflict between two intrinsically conflicting calendrical systems: a solar and a lunisolar calendar.

This hypothesis of two conflicting calendars, lurking in the background of the discrepancies between the Gospel Passion Narratives, formed the central tenet of a major thesis which came to the fore in the 1950s. Professor Annie Jaubert, of La Sorbonne, Paris, identified in the early 1950s what

Day in Biblical Thought," 222. See also J.B. Segal, *The Hebrew Passover from Earliest Times to AD 70* (London Oriental Series 12; Oxford: Oxford University Press, 1963), 244–5.

⁵⁹ Although Hoehner sees this as a real possibility due to the fact that the Sadducees often had to bow to the wishes of the Pharisees, as indicated by Josephus *Ant.* 18.4 (17); Babylonian Talmud *b. Yoma* 19b. Cf. Hoehner, "Chronological Aspects," 262.

⁶⁰ As noted by Marshall, *Last Supper and Lord's Supper*, 73.

⁶¹ Cf. Jeremias, *Eucharistic Words*; Beckwith, "The Day in Biblical Thought," 225, only detects implicit evidence for a sunrise to sunrise reckoning.

⁶² F. Prat, *Jésus Christ: Sa Vie, Sa Doctrine, Son Oeuvre* (Paris: Beauchesne, 1947), 515 ff.

⁶³ Cf. O'Flynn, *op. cit.*, 59.

came to be known, and acknowledged amongst scholars, as the *Jubilees* 364-day year calendar.⁶⁴ She claimed that this particular calendar, a characteristic of which was to follow a sabbatical framework which allowed it to celebrate feast days on the same day of the week year on year, was what may be termed today the *smoking gun* upon which the hypothesis of two conflicting calendars at the root of the discrepancies in the Passion narratives could be positively formulated and defended. So, turning her attention to the Gospel accounts, she sought to apply her discovery to these discrepancies. The result was the publication of a rather short book, but which has had a significant and lasting impact on the scholarly world of New Testament Studies and Inter testamental Studies among others.⁶⁵

3. *Enquiries Undertaken in the Present Study*

Some fifty years after the publication of Jaubert's now famous theory, the present work lays the foundations for its comprehensive timely re-assessment. The present undertaking is organized around three parts.

Part I outlines the Jaubertian theory and assesses the responses formulated by critics. In the process, the question of alignment of the 364-day year with the agricultural season is identified as the primary challenge to the theory (Chapter 1).

Part II is concerned with providing a refutation of the challenge identified in Part I. To this effect, the main second Temple Judaism literary sources concerned with the exposition of the cycle of festivals are visited and their contribution assessed. Chapter Two deals with the relevant passages of the Hebrew Bible, starting with Lev 23 as representative of the Pentateuch, and then moving on to Ezek 45, 1 Kgs 12, 2 Chr 30 & 31, Ezra-Nehemiah. Chapter Three focuses on the *Book of Jubilees* and its particular contribution to the issue. Chapter Four considers the Dead Sea Scrolls, while Chapter Five surveys other Second Temple material (Elephantine Papyri, Josephus, Philo), as well as the Gezer Calendar, a First Temple

⁶⁴ A.M. Jaubert, "Le calendrier des Jubilés et de la secte de Qumrân: ses origines bibliques," *VT* 3 (1953): 250–64.

⁶⁵ A.M. Jaubert, *La date de la Cène: calendrier biblique et liturgie chrétienne* (Paris: Gabalda, 1957); English translation: A.M. Jaubert, *The Date of the Last Supper* (translated by I. Rafferty; New York: Society of St. Paul, 1965). The recent publication of B. Lourie, M. Petit, and A. Orlov, eds, *L'Église des deux Alliances: Mémorial Annie jaubert (1912–1980)* (OJC 1; Piscataway, NJ: Georgias Press, 2008) in memory of Annie Jaubert, with contributions by respected scholars such as VanderKam, Beckwith, Bauckham, is a tribute to the lasting impact Jaubert's contributions had on the academic fields Jaubert researched.

piece of evidence, and the Bar Kokhba letters, of the post 70 CE period. In each of the chapters the sources are assessed for their contribution to the present enquiry. Throughout, a simple yet constant conclusion is drawn: the entirety of the sources considered, without exception, and regardless of the type of ephemeris they followed (354-day lunar year or 364-day year), considered adherence of the cycle of festivals to the agricultural rhythm a pre-requisite to following their religious obligations. This provides strong support to the proposition that the 364-day year was intended to be attached to the agricultural cycle, thus removing permanently the calendar objection leveled against Jaubert.

Part Three considers some specific ongoing aspects of calendrical issues in Second Temple Judaism. In particular, differing lunar reckonings are identified, for the first time, in the *Book of Luminaries* (Chapter Six). Chapter Seven, in turn, engages with the contemporary discussion concerning the identification and interpretation of the X and *dwq* dates recorded in the Calendrical Scrolls from Qumran (4Q320, 4Q321, and 4Q321a).

PART I

THE JAUBERTIAN THEORY

CHAPTER ONE

THE DATE OF THE LAST SUPPER: ANNIE JAUBERT'S THEORY REVISITED

1. *Introduction*

In 1957, in a book titled *La date de la Cène*, Annie Jaubert suggested a novel solution to the problems raised by the discrepancies within the Canonical Gospels' Passion Narratives, especially their less than uniform chronology of events.¹ In a nutshell, Jaubert identified the characteristics of the calendar of the pseudepigraphical *Book of Jubilees*, traced its origins in Priestly writings of the Hebrew Bible, and investigated its influence on early Christian Liturgy. Jaubert's aim was to establish what Jaubert understood to be the facts on which the tradition that placed the Last Supper on Tuesday evening were based. Jaubert then investigated the extent of this early Christian tradition, suggested some conditions in which it might have originated and proposed some explanations for it. She proceeded to establish the extent to which her hypothesis remained faithful to the internal evidence.

In the context of the present study this first chapter is concerned chiefly with the Jaubertian theory concerning the date of the Last Supper. In a first part the theory proposed by Jaubert is scrutinized. The reconstruction of what Jaubert coined "the ancient priestly calendar," her consideration of the Tuesday evening Last Supper tradition, and her proposed reconciliation of the Gospel accounts will be sketched out. In a second part the critics' appraisal of the theory is presented, drawing out the main arguments that have been offered in support of and against it. At the outset, the question of calendrical knowledge of first century Judaea is identified as the main objection advanced against the Jaubertian theory.

¹ Jaubert's book brought together earlier publications by the same author: "Calendrier des Jubilés: origines"; "La date de la dernière Cène," *RHR* 146 (1954): 140–73; "Le calendrier des Jubilés et les jours liturgiques de la semaine," *VT* 7 (1957): 35–61.

2. *The Jaubertian Theory*

2.1. *The Ancient Jewish Calendar in the Book of Jubilees*

2.1.1. *Its Authority*

Jaubert begins her enquiry with a close examination of the *Book of Jubilees*, for the singular document which allowed the discovery of an ancient Jewish calendar.² She dates its composition to the last decades of the second century BCE.³ The book retells the biblical story from Genesis to the theophany on Mount Sinai and the revelation of the Law and the commandments to Moses in the book of Exodus.⁴ It is clear from the Prologue of *Jubilees* that the author considered the book to be authoritative to Jews:

These are the words regarding the divisions of the times of the law and of the testimony, of the events of the years, of the weeks, of their jubilees throughout all the years of eternity as he related (them) to Moses on Mt. Sinai when he went up to receive the stone tablets—the law and the commandments—on the Lord’s orders as he had told him that he should come up to the summit of the mountain.⁵

The work was quoted authoritatively by the *Damascus Document* (CD 16:1–5): “As for the exact determination of their times to which Israel turns a blind eye, behold it is strictly defined in the *Book of the Divisions of the Times into their jubilees and weeks*.”⁶ Further, the *Damascus Document* (CD thereafter) sternly stated that all Israel had gone astray, but to the remnant who had remained faithful to God’s command, God “unfolded before them his holy sabbaths and his glorious feasts,”⁷ which should be

² She states: “L’ouvrage essentiel qui a permis la découverte d’un calendrier juif ancien est le livre des Jubilés.” Jaubert, *date de la cène*, 13.

³ Jaubert, *date de la cène*, 14. Jaubert considers the question of the date of *Jubilees* in an appended index, *date de la cène*, 139041 139–141. More recent studies have suggested a slightly older and more precise date of composition: J.C. VanderKam, *The Book of Jubilees* (GAP; Sheffield: Sheffield Academic Press, 2001), 21, suggests “it seems best to say, in view of all the evidence, that the author composed *Jubilees* in the period between 160–150 BCE. One cannot exclude a slightly earlier date, but it was probably not written at a later time.” See J.C. VanderKam, *Textual and Historical Studies in the Book of Jubilees* (HSM 14; Missoula, Montana: Scholars Press, 1977) for an extensive discussion of the dating of the *Book of Jubilees*.

⁴ Cf. Jaubert, *date de la cène*, 13; J.C. VanderKam, *Jubilees*, 11.

⁵ J.C. VanderKam, trans., *The Book of Jubilees* (CSCO 511; Lovanii: Peeters, 1989), 1.

⁶ Cf. G. Vermes, *The Complete Dead Sea Scrolls in English* (London: Penguin Press, 1997).

⁷ CD 3:13–15.

kept according to strict observances.⁸ The *Community Rule* (1QS), without explicitly quoting *Jubilees*, instructed the members of the community not to “depart from any command of God concerning their times, they shall be neither early nor late for any of their appointed times.”⁹ Thus, *Jubilees* seemingly enjoyed at least a high regard, and possibly an authoritative status, among some of the authors behind the Dead Sea Scrolls.¹⁰

These explicit or implicit references in some fragments of the Dead Sea Scrolls, coupled with the discovery in Cave 4 of a calendrical fragment, prompted Jaubert to assert that the calendar of *Jubilees* could definitely be identified with that of the Qumran sect.¹¹ It is apparent that the works cited above hint at the sacredness of time, as it was perceived by some milieu of Second Temple Judaism. *Jubilees* directly links this sacredness of time to the status of direct divine revelation it claims as its source.¹² Having been revealed by God, the times and their arrangements are viewed as binding for the whole assembly of Israel. Those who err from the commands find themselves in disobedience to God. In an example of *vaticinium ex eventu* the work declares that affliction will befall Israel because Israel have followed the ways of the Gentiles (*Jub.* 1:9), and will forsake God’s ordinances and commandments (*Jub.* 23:19). On the flip side, the composition claims that heavenly secrets were revealed to Enoch, who wrote them down (*Jub.* 4:17–18), and passed them on to Levi, “so that he might preserve them and renew them for his sons until this day” (*Jub.* 45:16).

⁸ CD VI 18–19.

⁹ 1QS I 15–16.

¹⁰ J.C. VanderKam, *The Dead Sea Scrolls Today* (London: SPCK, 1994), has demonstrated the authoritative status of *Jubilees* for the authors of the Qumran manuscripts: fragments of 15 or 16 copies of the work were found in the caves near Qumran, making *Jubilees* the fifth most important work in the Dead Sea Scrolls in terms of numbers of copies recovered. VanderKam suggests that, as well as a reference to the “division of times,” CD X 7–10 may also appeal to the authority of *Jub.* 23:11 as regards the question of the age limit for the judges. Further, according to the same author, 4Q228 contains language strangely reminiscent of *Jubilees*, as the following shows: “for this is the way it is written in the divisions of the day.” One also finds in 4Q228 references to “the division of its time.”

¹¹ Cf. Jaubert, *date de la cène*, 15. The terminology *Qumran sect* is purposely used in this context to reflect the prevailing understanding in the scholarly world at the time of the publication of Jaubert’s thesis. The calendrical fragment on which Jaubert based her conclusion was that which was communicated by J.T. Milik, “Le travail d’édition des manuscrits du désert de Juda,” in *Volume du Congrès Strasbourg 1956* (VTSup 4; Leiden: Brill, 1957), 24–6.

¹² On the sacredness of this calendar, see: A. Dupont-Sommer, “Contributions à l’exégèse du Manuel de Discipline X 1–8,” *VT* 2 (1952): 229–30; A. Dupont-Sommer, *Nouveaux aperçus sur les manuscrits de la mer Morte* (Paris: Maisonneuve, 1953), 145–46. Cf. Jaubert, *date de la cène*, 15.

Jaubert discerns here an important clue for her quest for the origins of the ancient calendar: Israel's priestly milieu.

2.1.2. *Its Characteristics*

Before investigating the origins of this calendar, it is necessary to comment on its characteristics. This calendar is starkly different from the *official* Jewish calendar in use in first century Judaea/Palestine. The official calendar was reckoned according to lunar observations, and counted 354 days. It divided up the year into twelve months of twenty nine or thirty days, mostly designated by their Babylonian names. The lunar year being shorter than the true solar year by roughly 11 and 1/4 days each year, an additional 30-day month was added as a thirteenth month every two or three years, or seven times in a nineteen-year cycle, to keep the solar year in line with the seasons.¹³ This calendar is not the one advocated by *Jubilees*. The *Jubilees* calendar must count 364 days: "And you, command the children of Israel so that they shall guard the years in this number, three hundred and sixty four days, and it will be a complete year."¹⁴ It is divided in four equal time lengths, or seasons, lasting thirteen weeks each, or ninety-one days (*Jub.* 6:29). Each season starts with a day of remembrance (*Jub.* 6:23), and the four seasons add up to $13 \times 4 = 52$ weeks, exactly 364 days. Jaubert sees in it, as well as in the four seasons of exactly thirteen weeks each, a concern to stress the days of the week, which she interprets as the prime characteristic of this *solar* calendar.¹⁵ The framework of the *Jubilees* calendar ensured that year on year feasts and Holy Days would fall on the same day of the week.¹⁶

The length of each month is set at thirty days (*Jub.* 5:27), and the number of months, which are designated by ordinals throughout, is twelve

¹³ On the Lunar Calendar in Judaism and intercalation see J.B. Segal, "Intercalation and the Hebrew Calendar," *VT* 7 (1957): 250-307.

¹⁴ *Jub.* 6:32.

¹⁵ Cf. Jaubert, *date de la cène*, 19. The opposition of *Jubilees* to the lunar reckoning of the year is most apparent in *Jub.* 6:36-37 "There will be people who carefully observe the moon with lunar observations because it is corrupt (with respect to) the seasons and is early from year to year by ten days. Therefore years will come about for them when they will disturb (the year) and make a day of testimony something worthless and a profane day a festival. Everyone will join together both holy days with the profane and the profane day with the holy day, for they will err regarding the months, the sabbaths, the festivals, and the jubilee."

Such profanation of the holy days revealed by God was no less than an abomination in the eyes of the author of *Jubilees*.

¹⁶ Jaubert, *date de la cène*, 19.

(*Jub.* 25:16). One day must have been added to each of the four seasons to make up the shortfall to ninety-one days, and to 364 days in the year. Jaubert acknowledges that, just like the *official* calendar, this *solar* calendar falls short of the true solar year by 1 and 1/4 days each year. This discrepancy, negligible the first few years of use of the calendar, would become significant enough after a while to suggest that eventually, without intercalation, the *Jubilees* calendar would not be practicable, as the New Year would come early by 1 and 1/4 day each year, eventually setting the whole calendar out of line with the seasons. This clearly is not in keeping with *Jubilees'* claim that Enoch

was the first of mankind who were born on the earth who learned (the art of) writing, instruction, and wisdom and who wrote down in a book the signs of the sky in accord with the fixed pattern of their months so that mankind would know the seasons of the years according to the fixed patterns of each of their months. (*Jub.* 4:17)¹⁷

Thus, there must have been some sort of intercalation practiced, but about which Jaubert admitted: “nous sommes réduits à des conjectures.”¹⁸ As we shall see below, this point represents in the author’s opinion the main stumbling block to accepting Jaubert’s thesis on the premise that without any positive evidence for intercalation in the calendar of *Jubilees*, its functionality must have been limited. Soon this calendar would prove to be useless as it would fall out of line with the seasons in a way which would be beyond redemption in that it would dissociate the liturgical cycle from its seasonal significance.

2.1.3. *Start of the Year in Jubilees*

Having highlighted the characteristics of the *Jubilees* calendar, Jaubert proceeded to demonstrate that the year in this calendar started on a Wednesday. First, she noted the centrality and significance of the Festival of Weeks in this calendar, and considered the question of its date. The festival was important in *Jubilees* because it was the occasion for the renewal of the Covenant:

¹⁷ Cf. 1 *En.* 72:13, 19.

¹⁸ Jaubert, *date de la cène*, 20 note 1, suggests, “l’année devant toujours commencer le même jour de la semaine, on peut supposer l’intercalation soit de jours blancs, soit plutôt de semaines entières, peut-être au moment des Sabbats d’années considérés comme des unités de temps. Ces intercalations devaient être possible entre chacune des quatre saisons de l’année.” She points out as a possibility the intercalation of five weeks in a solar cycle of 28 years. On a 28-year-solar cycle, see Jaubert, *date de la cène*, 142–9.

For this reason it has been ordained and written on the heavenly tablets that they should celebrate the festival of weeks during this month—once a year—to renew the covenant each and every year. (*Jub.* 6:17)

Its celebration was fixed “in the third month, in the middle of the month,” i.e., on the fifteenth day of the month.¹⁹ The regulations concerning the fixing of the date of the Festival of Weeks are given in Lev 23:15–16:

And from the day after the sabbath, from the day on which you bring the sheaf of the elevation-offering, you shall count off seven weeks; they shall be complete. You shall count until the day after the seventh sabbath, fifty days; then you shall present an offering of new grain to the Lord.

The Festival of Weeks is, according to the book of *Jubilees*, celebrated on 15/III. Following the instructions of Lev 23:15–16 and counting fifty days backwards from 15/III brings us to 26/I, which must correspond to the *day after the sabbath* as it was understood in *Jubilees*' world view.²⁰ However, the key obstacle for commentators so far was that to accept 26/I as the *day after the sabbath*, i.e., a Sunday, was paramount to stating that 1/I was a Wednesday, in other words, that the year in the calendar of *Jubilees* started on a Wednesday. This seemed so absurd to commentators that the *Jubilees* calendar was relegated to the rank of “fantaisie chimérique.”²¹ However, Barthélémy decidedly contributed to the argument by providing the evidence from the Arab writer Al-Biruni on the Magaryas, or “people of the cave”:²²

Abu-Isa Alwarrak speaks in his *Kitab al-Makalat* of a Jewish sect known as the Maghariba, who claim that festivals are legal only when the moon appears full in Palestine *in the night of Wednesday which follows the day of Tuesday*, after sunset. This is their New Year's Day. It is from this day that the days and the month are reckoned and that the annual cycle of festivals begins. For God created the two great givers of light on a Wednesday. Likewise, they do not allow that the *Pasch* fall on any day other than *Wednesday*. However, they consider the obligations and rituals prescribed for the *Pasch* as necessary only for those who live in the land of Israel. All of this is opposed to the customs of the majority of the Jews and to the prescriptions of the Torah.²³

¹⁹ See *Jub* 15:1; 16:3. *Jub* 44:1–8 is the only text which allows deducing the exact date of the Festival of Weeks. Cf. Jaubert, *date de la cène*, 21 note 1.

²⁰ Months I and II both count thirty days. Cf. Jaubert, *date de la cène*, 21.

²¹ Jaubert, *date de la cène*, 23.

²² D. Barthélémy, “Notes en Marges de Publications Récentes sur les Manuscrits de Qumrân,” *RB* 59 (1952): 187–218.

²³ Cf. Jaubert, *The Date of the Last Supper*, 24, 149 note 17. For a lengthy treatment of Al-Biruni see C.E. Sachau, *The Chronology of Ancient Nations: An English Version of the Arabic*

Thus the year starts on the fourth day of the week because it is on that day that the course of time started. It becomes apparent that the author of *Jubilees* differed significantly in his interpretation of Lev 23:15–16. He reckoned the *morrow after the sabbath* to fall on 26/1, a Sunday. It is worth noting that this Sunday is not the one following Passover, but the Sunday following the sabbath after the Festival of Unleavened bread, i.e., after the octave of Passover.²⁴

Following a different methodology Jaubert comes essentially to the same conclusion. She starts this time from the premise that the views of the author of *Jubilees* on sabbath are such (cf. *Jub.* 50:12) that he would never allow the Patriarchs to break the sabbath by travelling on that day. Jaubert records all the dates in *Jubilees* related to journeys of the Patriarchs, and inserts them in a reconstructed table of the *Jubilees* calendar.²⁵ The results are presented in the following table:²⁶

Months:	I, IV, VII, X	II, V, VIII, XI	III, VI, IX, XII	Day
A	1 8 15 22 29	6 13 20 27	4 11 18 25	Wed.
B	2 9 16 23 30	7 14 21 28	5 12 19 26	Thur.
C	3 10 17 24	1 8 15 22 29	6 13 20 27	Fri.
D	4 11 18 25	2 9 16 23 30	7 14 21 28	Sat.
E	5 12 19 26	3 10 17 24	1 8 15 22 29	Sun.
F	6 13 20 27	4 11 18 25	2 9 16 23 30	Mon.
G	7 14 21 28	5 12 19 26	3 10 17 24 31	Tues.

Day D is the only one free of travel. Jaubert deduced from this that it must have been the sabbath. If this is correct, day A is a Wednesday, and the year in *Jubilees* started always on Wednesday. From this, Jaubert was able to determine the days on which the festivals fell in this calendar:

Passover	15/I	Wednesday
festival of Weeks	15/III	Sunday
Day of Atonement	10/VII	Friday
festival of Tabernacles	15/VII	Wednesday

Text of the Athâr-Ul-Bâkiya of Albîrânî (London/Witefish, MT: Wm. H. Hallen/Kessinger, 1879/2004), 278.

²⁴ Passover fell on Wednesday 15/I in *Jubilees*, with the following sabbath being 18/I. See above for the different interpretations of the expression *morrow after the sabbath* between Pharisees and Boethusians/Sadducees.

²⁵ "L'année étant composée de quatre trimestres égaux de 13 semaines chacun, avec trois mois de trente jours et un jour intercalaire, la disposition des jours de la semaine dans chaque trimestre est symétrique." See Jaubert, *date de la cène*, 26.

²⁶ The days are represented by the letters A to G, A being Wednesday, B Thursday and so on. The dates recorded in bold are the dates of travelling of Abraham as recorded in the *Book of Jubilees*.

She also observed that each of the twelve months of the year started with Wednesday, Friday or Sunday:²⁷

Wednesday	1/I	1/IV	1/VII	1/X
Friday	1/II	1/V	1/VIII	1/XI
Sunday	1/III	1/VI	1/IX	1/XII

On the strength of the evidence provided, Jaubert suggested that in the calendar advocated by *Jubilees* those days were vested with a liturgical significance. She pointed out what she interpreted as a direct correlation between those days and the Patriarchs' travels, thereby suggesting that these events were cloaked with a liturgical dimension.²⁸ Jaubert then extended her enquiry to all other dates in *Jubilees*. She inferred from her results a consistent preponderance of the liturgical days.²⁹ There was thus no doubt for Jaubert that the *Jubilees* calendar recorded events according to a sacred rhythm, unfolding the history of Israel and investing it with a liturgical dimension.³⁰

As already alluded to, *Jubilees* claimed divine revelation as its source and its calendar was asserted as something from the past.³¹ It was vital because on it depended the observance of the festivals and holy days at the appointed times.³² Jaubert noted that the author of *Jubilees* recorded dates by ordinals, echoing the characteristic way of the Priestly documents of the Hebrew Bible concerning the recording of events and dates. Following the same methodology as the one applied to the dates of travels of the Patriarchs in *Jubilees*, she entered in the table above the numerical dates of the Priestly writings of the Hebrew Bible. She considered the priestly parts of the Hexateuch,³³ 1 & 2 Chronicles, Ezra-Nehemiah, and Ezekiel.³⁴ Here again she concluded that her analysis revealed the same concern for the liturgical days, with the first day of the month also given special

²⁷ Each first day of the month had special significance, which was heightened when this was the first day of the season. Jaubert, *date de la cène*, 27–8.

²⁸ Cf. Jaubert, *date de la cène*, 27–8. The author acknowledges the exception of *Jub.* 29:5 and 44:8, respectively Tuesday 21/I and Monday 16/III. Yet, the first is the seventh day of Pasch, and the second is the day after the festival of weeks.

²⁹ Cf. Jaubert, *date de la cène*, 28–9.

³⁰ Jaubert, *date de la cène*, 30: "dans l'état d'esprit qui préside à l'élaboration de ces récits l'histoire du peuple saint est tout entière sacralisée. Elle s'est pliée au rythme d'un déroulement liturgique."

³¹ Jaubert, *date de la cène*, 31.

³² Cf. Barthélemy, op. cit., 201–2, already disputed the view that the calendar of *Jubilees* was utopian.

³³ *Genesis, Exodus, Numbers, Leviticus, Deuteronomy and Joshua.*

³⁴ Jaubert, *date de la cène*, 32–40.

significance. On the basis of this, Jaubert concluded that the affinities, as regards the ordering of time and the recording of dates, between the Priestly writings of the Hebrew Bible, *Jubilees*, the *Damascus Document* and the Qumran fragments of Cave 4 communicated to her by Milik, were not so much the result of chance, but rather witnessed to a “continuité de calendrier.”³⁵ Thus, the same concern for the liturgical days of Wednesday, Friday and Sunday, identified in the priestly writings of the Hebrew Bible and in *Jubilees*, could only mean one thing: “le calendrier *Jubilés-Qumrân* est donc essentiellement celui de l'école sacerdotale.”³⁶

With regard to the liturgical days, Jaubert connected their significance to their location within the unit of the sabbatical week.³⁷ Sunday, first day of the week and day following the sabbath, was the day to start new undertakings and/or to set on a new journey; Friday marked the end of journeys and the assemblies before the sabbath, while the significance of Wednesday could be related to its central place in the week—Tuesday evening (start of Wednesday) being equidistant from the end of one sabbath and the start of another.³⁸ It was this weekly unit, perhaps together with the preponderance of the liturgical days, which for Jaubert decidedly marked the character of the *Jubilees* Calendar. An ancient calendar, coined *Pentecontad* because of its dependence on 50-day sequences, the antiquity of which has been established, already counted the week as a minor unit.³⁹ Thus, the weekly computation present in the *Jubilees* calendar could be an ancient unit of measurement predating the likely date of composition of the book, and most probably predating the 364-day calendar.

In any case, the preponderance of Wednesday as start of the year was attested in Rabbinic Judaism. *Pirke Rabbi Eliezer* and the Babylonian Talmud both witness to the existence of a 28-year solar cycle starting at the spring equinox on a Tuesday evening, start of Wednesday.⁴⁰ Jaubert also adds to these texts the much later evidence from the Arab historian Al-Biruni. The evidence thus suggests that there existed, at the latest in

³⁵ Jaubert, *date de la cène*, 40.

³⁶ Jaubert, *date de la cène*, 41.

³⁷ Jaubert, *date de la cène*, 41.

³⁸ Jaubert also suggests that the significance of Wednesday, the fourth day of the week, may be connected to the mystical aspect of the number 4 in the East. See Jaubert, *date de la cène*, 41–2.

³⁹ On the Pentecontad calendar and its characteristics and origins, see H. Lewy and J. Lewy, “The Origin of the Week and the Oldest West Asiatic Calendar,” *HUCA* 17 (1942–43): 1–152c. Cf. Morgenstern, *op. cit.*, 37ff. Cf. Jaubert, *date de la cène*, 43 note 1.

⁴⁰ Cf. Jaubert, *date de la cène*, 142–9, Appendix II.

the second century BCE, a common calendar in Judaism which started the year on a Wednesday. The calendar in question must have been a 364-day calendar, which alone could ensure a regular start of the year on a Wednesday.⁴¹

2.1.4. *History of the 364-day Calendar*

As to the history of this calendar, Jaubert made some tentative suggestions. By applying to other biblical compositions the methodology already applied to the Priestly writings, she identified numerical dates and their correspondence to days of the week.⁴² The increasing scarcity of the numerical nomenclature for recording dates, allied to the increasing use of the Babylonian computation and the testimony of the book of *Sirach*, signalled to Jaubert “une progressive adaptation du système sacerdotal ancien.”⁴³ This development took place initially under Babylonian influence in the 5th and 4th centuries BCE. In the 3rd century BCE, the process of Hellenization of Palestine continued a process of erosion, whereby the ancient calendar was being brought into line with that of the ruling power. Jaubert hypothesized that this evolving calendar would have kept its liturgical days until the early stages of the 2nd century BCE. It was then that, according to Dan 7:25, the Seleucid ruler Antiochus IV Epiphanes sought to change “the Sacred Seasons and the Law.” This intervention sparked a strong opposition amongst more conservative Jews, whose dissenting voice was recorded in *Jubilees*. The latter aimed to return to the calendar which God, according to the author of *Jubilees*, had revealed to Moses, and which “the whole of Israel” had abandoned. Conversely, the pro-Hasmoneans favored a continuous bringing up to date of the calendrical practice, eventually resulting in the *official* lunar calendar used by the religious leaders and the Temple establishment at the time of Jesus. Jaubert suggested: “le soulèvement assidéo-maccabéen a pu se faire en partie autour d’une lutte de calendrier.”⁴⁴ In any case, the tone of *Jubilees*

⁴¹ Jaubert suggests that a 364 day calendar is attested in 2 *Enoch*, cf. A. Vaillant, *Le Livre Des Secrets d'Hénoch* (Paris, 1952), 13, 17. Jaubert treats this work not as a Christian composition but as a Jewish source. See Jaubert, *date de la cène*, 46–7.

⁴² A few dates appear in 1 & 2 *Kings*, all falling on a Friday; in the Prophets, apart from *Ezekiel* already considered, two numerical dates appear in *Zechariah*; in the Writings, one date in *Daniel* and one date in *Judith*, all falling on liturgical days. Cf. Jaubert, *date de la cène*, 49–50. It is also suggested that the evidence of 1 *Maccabees* points to the influence of this calendar on the authors.

⁴³ Jaubert, *date de la cène*, 50. See also in the same volume Appendix III, 150–59.

⁴⁴ Jaubert, *date de la cène*, 51.

and *CD* strongly indicates that the authors of these works considered that the ancient calendar had been in some respect neglected.

Searching now for external evidence, Jaubert appealed again to Al-Biruni. She quoted a passage in which Al-Biruni treats of intercalation and determination of the new moon among the Jews. The passage is here reproduced:

Avant ce temps-là (= 200 ans après Alexandre) ils (les juifs) avaient l'habitude d'observer les *tequfoth*, c'est-à-dire les quarts d'années (solstices ou equinoxes)... et de les comparer avec la conjonction du mois auquel devait se rapporter la *tequfah* en question. S'ils trouvaient que la conjonction précédait la *tequfah* d'environ 30 jours, ils intercalaient un mois en cette année; par exemple s'ils trouvaient que la conjonction de Tammuz précédait la *tequfah* de Tammuz, c'est-à-dire le solstice d'été, d'environ 30 jours, ils intercalaient en cette année un mois de Tammuz, si bien qu'il y avait un premier Tammuz et un second Tammuz. Ils opéraient de la même manière avec les autres *tequfoth*. (*Chronology* 68)⁴⁵

The text testifies to the practice of intercalation based on the observation of the solstices and equinoxes towards the mid-second century BCE (cf. "200 ans après Alexandre"). It is thus conceivable that in the 364-day calendar intercalation was effectuated at the time of the *tequfah*. Yet, the mention of a 30-day month, not divisible by seven, together with the Babylonian designation of the month (cf. Tammuz) makes it improbable that Al-Biruni was referring to the 364-day calendar. Rather, he seems to be describing a situation where the lunar calendar is still loosely connected to the 364-day calendar.⁴⁶

Al-Biruni's contention "c'est pourquoi on a essayé de construire un calendrier de façon que 2 jours de repos ne se suivent pas" brings further light on the evolutionary phase of the ancient calendar.⁴⁷ To avoid such occurrences, certain festival days were prohibited from falling on certain days of the week.⁴⁸ Thus the liturgical days of the ancient calendar often became prohibited days for holy feasts in the calendar advocated by those anxious to protect the sanctity of the sabbath in a lunar computation.

⁴⁵ Cited in Jaubert, *date de la cène*, 51–2.

⁴⁶ Jaubert, *date de la cène*, 52.

⁴⁷ Al-Biruni, in Sachau, *op. cit.*, 277–8, quoted by Jaubert, *date de la cène*, 53. For an exposition on our contemporary Jewish calendar, see *Encyclopedia Judaica*, "Calendar", Vol. III, p. 503.

⁴⁸ 1 Tishri must not fall on the 1st, 4th, or 6th day of the week; Yom Kippur must not fall on 1st, 3rd or 6th day of the week, nor Pesah on the 2nd, 4th or 6th day of the week. Cf. Jaubert, *date de la cène*, 53.

Such computation gave precedence to the days of the month over the days of the week. This fact may be behind the accusation of the book of *Jubilees* against those who turn a holy day into a profane occasion and render the profane holy (*Jub.* 6:37). Thus, as well as the differentiation between the fixed and mobile days, there arose a differentiation between the days of the week. Yet, not all festivals came to be celebrated on movable days. The festival of Weeks continued to be celebrated on a Sunday, proof for Jaubert of the stronger longevity of the liturgical days over the 364-day calendar framework.⁴⁹ The evidence of the Qumran texts shows that by that time the concern with assigning festivals with days of the week had not diminished.

At the outset Jaubert suggested that there probably existed in Judaism a hybrid calendar which brought together lunar phases and festivals on fixed days of the week.⁵⁰ Alongside this calendar existed a calendar based on a lunar computation, as attested by rabbinic Judaism. Jaubert argued that the *Jubilees-Qumran* calendar existed only in its liturgical form at the time of Jesus. It was the early Christian liturgy which was to ensure the posterity of some aspects of this ancient calendar.

2.2. *The Sources of Christian Liturgy*

Jaubert's investigation of some early Christian writings highlighted the same concern for the liturgical days. On the subject of fasting, *Didache* states:

Your fast must not take place at the same time as those of the hypocrites. They fast on Monday and Thursday; you are to fast on *Wednesday* and *Friday*.⁵¹

Jaubert noted that the early Christian liturgical practice showed an opposition to the days of the week observed by the *hypocrites* (=Pharisees) for their fasts. Wednesday and Friday were to be the Christians' days of fast.⁵²

⁴⁹ Jaubert, *date de la cène*, 56.

⁵⁰ Cf. Jaubert, *date de la cène*, 150–9, Appendix III: “un calendrier mitigé qui s'était adapté aux phases lunaires mais qui avait conservé pour les fêtes liturgiques les mêmes jours de la semaine.”

⁵¹ *Did.* 8:1. The translation is from K. Niederwimmer, *The Didache: A Commentary* (Minneapolis: Fortress, 1998).

⁵² Cf. *Did.* 8:1; *Didascalía*; *Canons of the Apostles*; the *127 Canons of the Apostles*, PG8 (Paris: Graffin-Nau) 685–86; Cf. Tertulian, *Jejun.* 2 & 14; Clement of Alexandria, *Strom.* 7:12 (Griechische Christliche Schriftsteller 17, ed. Stählin, Leipzig) 54, vol. III. See Jaubert, *date de la cène*, 61.

They were also days of Eucharistic assemblies, originating from the Apostles themselves.⁵³ Very early in the tradition these days were connected to the Passion of Jesus, nowhere more explicitly than in chapter XXI of the *Didascalia Apostolorum*.⁵⁴ To these days was to be added Sunday, "the day of the Lord" (Rev 1:10), the day of Christian assembly (Acts 20:7). Jaubert thus contended: "il est difficile de ne pas voir là une continuité liturgique."⁵⁵

These days of commemoration were predisposed to be taken over from an ancient liturgy and to be reinterpreted in the light of the formative event of early Christianity: the Passion, death and resurrection of Christ. Other Christian works testified to the continuity of liturgical practice from a strand of Judaism which had retained the liturgical days, and the emerging Christian liturgy.⁵⁶ As well as a marked preference for the liturgical days of the week, other indications pointed in the direction of a transition from the Old Priestly ritual to the Christian liturgy. Pentecost, the Jewish festival of Weeks, remained, in Christian liturgy, fixed to a Sunday.⁵⁷ The same was true of Easter. These advocated for the Christian liturgy's preference for fixed days of the week (Wednesday, Friday, Sunday), a characteristic of the *Jubilees* calendar. Such adherence to the fixed days of the week and to the liturgical days suggests that the Christian calendar was somewhat opposed to the official Jewish calendar. This, in turn, implied that Christianity arose from a Jewish milieu, which favored the liturgical days of the week over and against the days of the month. "C'est donc que dans ce milieu juif d'où sort le christianisme primitive, était prépondérante la pratique du calendrier ancien."⁵⁸

For Jaubert, the calendrical opposition to Jewish liturgical practices confirmed the polemical tone of the Gospels against the Jewish authorities.⁵⁹ Further, the evidence suggested that the Old Priestly calendar was

⁵³ Cf. Epiphanius, *De Fide* 22; *Did. Addai* 2:2–4. Cf. Jaubert, *date de la cène*, 61.

⁵⁴ Cf. *Didascalia of Addai*; Epiphanius; *Book of Adam and Eve*; *Apostolic Constitutions* 7.23. See Jaubert, *date de la cène*, 61.

⁵⁵ Jaubert, *date de la cène*, 60.

⁵⁶ See Jaubert, *date de la cène*, 62 ff., where Jaubert treats the *Book of Adam and Eve*; the *Armenian Synaxary of Ter Israel*; the *Armenian Book of Childhood*; Hippolytus' *Commentarium in Daniele*.

⁵⁷ Although it is now calculated from the day after the sabbath within the Easter octave, and not from the day following the sabbath after the festival of unleavened bread as was the case for the followers of the calendar of the book of *Jubilees*.

⁵⁸ Jaubert, *date de la cène*, 72.

⁵⁹ It is here important to keep sight of the context of Jaubert's suggestion, when scholarship on the Dead Sea Scrolls was still at an embryonic stage.

observed by the Essenes. Those two points may hint at some sort of affinity between the Jesus circle and the essene circles. Disagreement within Judaism between followers of the pro-*Jubilees* calendar and those in favor of the official lunar calculation must have been very significant. Yet, as acknowledged by Jaubert, there is no extant evidence of a mitigated calendar in use in Judaism at the time of Jesus, even if some elements may give us clues as to its existence.⁶⁰ Likewise, there is no explicit (or implicit) reference in the Gospels to a 364-day calendar being followed at this time.⁶¹ While only the Qumran documents and the book of *Jubilees* witness to an orthodox form of this calendar, they may represent wider circles in first century Palestinian Judaism.⁶² What matters is the fundamental continuity

⁶⁰ E.g. the calculation of Pentecost from within the Easter octave; the date of Easter depending upon the phases of the moon.

⁶¹ However, as argued by É. Nodet and J. Taylor, *The Origins of Christianity: An Exploration* (Collegeville: Liturgical Press, 1998), and in the more recent, updated French version É. Nodet and J. Taylor, *Essai sur les origines du christianisme: Une secte éclatée* (Paris: Éditions du Cerf, 2002), some texts of the New Testament may conserve in disguise some traces of this calendar. Nodet proposes three examples. The first comes from Luke 6:1. On p. 19 of the 2002 French edition, Nodet argues that the textual precision δευτεροπρώτω—“second-first”—sabbath, found in the Occidental Text and absent from the Alexandrian Text, is a reference to the first sabbath of the second Pentecontad, i.e., the first sabbath to follow the festival of Weeks. At that time the firstfruits are ripe, and possibly not harvested yet. Nodet, Nodet and Taylor, *Origines*, 20 note 3, suggests that there are further references to the *Jubilees* calendar in Luke 6:5 and in Luke 22:9. The most compelling case advanced by Nodet, *Origines*, 44–50, is perhaps that of the incident at Troas (Acts 20:6–12). On page 49, Nodet shows that the Passover preceding the incident at Troas most probably occurred on a Tuesday evening. According to the text, Paul arrived seven days previously, after five days journey started at the end of the festival of Unleavened Bread. If one counts back one falls on Tuesday 14 Nisan. A Tuesday evening Passover would occur roughly once every seven or eight years in the lunisolar calendar. However, Nodet rightly points out that in the *Jubilees* calendar such occurrence is annual. On page 49 Nodet concludes: “la lourdeur et la précision des durées données . . . invitent à prendre au sérieux l’hypothèse que le calendrier initial des apôtres soit celui des *Jubilés*, subsistant à l’état de traces.” Further, Nodet may be right in arguing that the textual emendation from *υπολαμπαδες* (Occidental Text) to *λαμπάδες* (Alexandrian Text) is the result of a contextualisation, and suggests Rome as a good backdrop for the presence of *lampes* in the room, whereas *lucarnes* fit better the original setting (and the story—the young man falls from a window). On the Alexandrian Text and the Occidental Text of the Acts of the Apostles, see P. Tavadon, *Le Texte Alexandrin et le Texte Occidental des Actes des Apôtres: Doublets et variantes de structures* (CahRB 37; Paris: Gabalda, 1997); *idem Sens et enjeux d’un conflit textuel: Le Texte Occidental et le Texte Alexandrin des Actes des Apôtres* (CahRB 44; Paris: Gabalda, 1999).

⁶² On a probable estimation of the importance of essenism in Judaea at the time of Jesus: B.J. Capper, “The New Covenant in Southern Palestine at the Arrest of Jesus,” in *The Dead Sea Scrolls as Background to Postbiblical Judaism and Early Christianity. Papers from an International Conference at St. Andrews in 2001* (ed. J.R. Davila; STDJ 46; Leiden: Brill, 2003), 90–116. Other works from the same author also contribute to painting a probable picture of the extent of the *New Covenant* in Palestine in the first century BCE: B.J. Capper, “‘With the Oldest Monks.’ Light from Essene History on the Career of the Beloved

between a fixed-day Jewish calendar and the Christian calendar.⁶³ Thus, if the Apostles kept the liturgical days of the Ancient Priestly calendar, it is probable that they did not diverge from this practice for the celebration of the last Passover of Jesus, and therefore must have celebrated the Passover with Jesus the year of his death on a Wednesday, or more precisely on the Tuesday evening, start of the Wednesday.

2.2.1. *A Patristic Tradition*

2.2.1.1. The Evidence for a Tuesday Evening Arrest

The *Didascalia* is the main textual source for a tradition placing the Last Supper on a Wednesday, starting, and therefore taking place on a Tuesday evening.⁶⁴ The *Didascalia* contains moral exhortation and church legislation attributed to the Apostles.⁶⁵ Its composition is commonly thought to date from the 3rd century CE.⁶⁶ Chapter XXI of the *Didascalia* deals with, and elaborates upon, the law governing the practice of fasting. It contains several, conflicting chronologies of the Passion of Christ. Of particular interest to Jaubert's argument is the passage which depicts a Passion starting on Tuesday evening with the Last Supper, with the arrest of Jesus following in the night between Tuesday and Wednesday. The crucifixion takes place, as one would expect, on the Friday.

2.2.1.2. *Didascalia XXI*

Scholars have acknowledged the rather eclectic content of the composition.⁶⁷ Yet, three passages consider the chronology of the Passion of Christ. First,

Disciple?," *JTS* 49 (1998): 1–55; "The Church as the New Covenant of Effective Economics: The Social Origins of Mutually Supportive Christian Community," *IJSCC* 2 (2002): 83–102.

⁶³ Jaubert, *date de la cène*, 74–5 "la continuité fondamentale entre le calendrier juif à jours fixes et le calendrier chrétien."

⁶⁴ On the texts of the *Didascalia* see: P.A. de Lagarde, *Didascalia Apostolorum Syriace* (Leipzig, 1854); M.D. Gibson, *The Didascalia Apostolorum in Syriace Edited from a Mesopotamian Manuscript* (Cambridge: MacMillan, 1903). Translations with commentaries: Achelis-Flemming, *Texte und Untersuchungen XXV* (Leipzig, 1904); F.X. Funk, ed., *Didascalia et Constitutiones Apostolorum* (Paderborn, 1905); F. Nau, *La Didascalie* (Paris, 1912, 2nd ed.); R.H. Connolly, *Didascalia Apostolorum. The Syriac Version Translated and Accompanied by the Verona Latin Fragments, with an Introduction and Notes* (Oxford: Clarendon, 1929).

⁶⁵ As do the *Didache*, the *Octateuch of Clement*, the *Canon of Hippolytus*.

⁶⁶ Cf. Nau, p. 21; Connolly, p. 40; P. Galtier, "La date de la *Didascalie* des apôtres," *RHE XLII* (1947): 348, where he suggests the 2nd century CE: "l'atmosphère générale dans laquelle semble se mouvoir la communauté . . . ressemble plus à celle du second siècle qu'à celle de la fin du troisième." Cf. Jaubert, *date de la cène*, 79–80.

⁶⁷ E.g. Connolly, who stated: "[there is] much confusion of thought and treatment in this chapter." Cited by Jaubert, *date de la cène*, 84. For instance, the requirement to follow

14.9–12 appears to justify the three days spent in the womb of the earth. Thus the exegesis of the Friday darkness. Hence, argues Jaubert, the three days in prison have no link to this exegesis and cannot have been invented for that purpose. Further, it is doubtful that they were invented to justify the Wednesday fast. Second, in 14.18–21, the Wednesday fast is linked to the commemoration of the arrest of Jesus on Wednesday. Third, 17 presents a new perspective of Passion Week, in which the Last Supper is no more attributed to Tuesday evening. Rather, the author now endeavors to explain things which may otherwise remain unintelligible to his contemporary reader. This may suggest that he is working with a chronology imposed on him by an earlier tradition, which he may not fully understand anymore. Jaubert argues that the first two passages, treating different aspects of the same theme, are the earlier tradition, and precede the composition of the *Didascalía*.⁶⁸ Jaubert advocates that this tradition of a Last Supper on the Tuesday evening is corroborated by external evidence. In his *De Fide* 22, Epiphanius agrees with the *Didascalía* on the date of the arrest of Jesus.⁶⁹

Le mercredi et le vendredi se passent dans le jeûne jusqu'à la neuvième heure parce que, alors que le mercredi commençait, le Seigneur a été arrêté et le vendredi a été crucifié.⁷⁰

In the same work, Epiphanius demonstrates that he is familiar with a tradition which places the Last Supper on Thursday evening.⁷¹ Yet, he strongly opposes this tradition, in favour of a tradition known to him and which indicates that Jesus broke bread with his disciples from prison on Thursday “towards the ninth hour.”⁷² Epiphanius’ lack of critical apparatus notwithstanding, he forcefully asserts a tradition emanating from his Palestinian origins and which, seemingly, he no longer fully grasps.

the fourteenth day of the Pasch, whenever it falls (20, 9) is contradictory with the principle of fasting from Monday to Saturday, which supposes a resurrection on the Sunday.

⁶⁸ Jaubert, *date de la cène*, 87 “la tradition de la Cène au mardi soir est donc antérieure à la composition de la *Didascalía*”.

⁶⁹ K. Holl, “Ein Bruchstück aus einem bisher unbekanntem Brief des Epiphanius,” in *Gesammelte Aufsätze zur Kirchengeschichte Vol II* (Tübingen: Mohr (Siebeck), 1927), 212, argued convincingly that Epiphanius had read the *Didascalía*. See Jaubert, *date de la cène*, 87–88. The extract is cited from p. 88.

⁷⁰ Cf. *Griechische Christliche Schriftsteller* 37 (ed. Holl) 522.

⁷¹ *Ibid.*, p. 523.

⁷² Cf. *Frag.*, (Holl) 206, 217–20.

The tradition of the arrest of Jesus during the night from Tuesday to Wednesday is also found in Victorinus, bishop of Petau.⁷³ In the treatise *De Fabrica Mundi*, in a section which treats of the days of creation, Victorinus writes:

L'homme Jésus Christ, auteur des choses que nous avons mentionnées plus haut, a été arrêté par les impies le *quatrième jour*. C'est pourquoi nous faisons du quatrième jour un jour de jeûne, à cause de son emprisonnement, à cause de la majesté de ses oeuvres, et afin que le cours des saisons amène la santé aux hommes, l'abondance des moissons, et le calme des intempéries.⁷⁴

Victorinus does not appear to depend on the *Didascalia* for his account. There existed, therefore, a tradition, common to Victorinus and the *Didascalia*, which held that the arrest took place on the fourth day of the week, Wednesday, during the night. This tradition must antedate both works, and must have existed in the course of the second century CE.⁷⁵ Further indication of the tradition is found in the *Book of Adam and Eve*:

Let us do this three times a week, throughout our life, on Wednesday, Friday and Sunday. Then the word of God said to Adam: Adam, you have determined in advance the days when suffering will come upon me when I shall have become flesh; for those days are Wednesday and Friday.⁷⁶

The mention of suffering on Wednesday can only make sense in the context of a Wednesday start of the Passion of Jesus. There is no literary dependence on either the *Didascalia* or Victorinus. One must therefore go back to a Jewish-Christian milieu, probably of the second century, to find the origins of a tradition common to the sources considered above.

How early was this tradition? Before any knowledge of the fixed day calendar, it was assumed that the Wednesday arrest had been supplemented to justify the observance of the Wednesday fast.⁷⁷ Yet, textual criticism suggests that a common milieu must go back to an environment Jewish in origins. As seen above, there was a group which influenced early Christian liturgy, and who celebrated Passover on Tuesday evening, start

⁷³ Cf. Holl, pp. 212–13. Victorinus is believed to have died in 304 CE.

⁷⁴ J. Haussleiter, ed., *Tractatus de Fabrica Mundi* (CSEL 49; Vienna, 1916), 4.

⁷⁵ Jaubert, *date de la cène*, 90.

⁷⁶ English translation: S.C. Malan, *The Book of Adam and Eve. A Book of the Early Eastern Church*. (from the Ethiopic; London: Williams, 1882), 82–3. Cf. Jaubert, *The Date of the Last Supper*, 79, 161 notes 24 and 25.

⁷⁷ Jaubert, *date de la cène*, 89–90.

of the fourth day of the week. The tradition could possibly have found its origins in this milieu.

2.2.1.3. The Evidence for a Thursday Evening Arrest

Approaching the problem from another angle, Jaubert asks whether there ever existed a tradition which defended the position of a Thursday evening meal in early Christianity, and if yes, when did it arise in placing the Last Supper on Thursday evening? The key evidence is found in 1 Corinthians:

For I received from the Lord what I also handed on to you, that the Lord Jesus on the night when he was *betrayed* took a loaf of bread, and when he had given thanks he broke it and said: "This is my body that is for you. Do this in remembrance of me. (1 Cor 11:23–24)

This took place on the night *before he was betrayed*, and not on the night *before his death*. What lurks in the background is Jesus' arrest, not his death. It is this formula that the earliest liturgy kept.⁷⁸ Tradition of a commemoration of Holy Thursday, argues Jaubert, is not attested before the second half of the 4th century CE.⁷⁹

Allusions to a Thursday evening meal appear earlier among ecclesiastical writers and, significantly according to Jaubert, in the midst of an exegetical debate. In his argumentation in *Adversus Haereses* against those who held that Jesus died in the twelfth month, Irenaeus of Lyons stated that Jesus ate the Passover and suffered on the following day:⁸⁰

Then, when he had raised Lazarus from the dead, and plots were formed against him by the Pharisees, He withdrew to a city called Ephraim; and from that place, as it is written "he came to Bethany six days before the Passover," (John 11:54; 12:1) and going up from Bethany to Jerusalem, he there ate the Passover and suffered on the day following. (*Adv. Haer.* II 22, 23)

Apollinaris, bishop of Hierapolis (ca. 165 CE), addressed a polemic about Easter. Apparently, some people held that:

⁷⁸ Cf. *Apostolic Tradition* of Hippolytus: "Ton fils...qui, alors qu'il était *livré* à une Passion volontaire..." (Ed. Dix) 8; *Testament of Our Lord Jesus Christ*: "Alors qu'il était *livré* à une Passion volontaire" (Ed. Rahmani, Mayence, 1899) 41; *Apostolic Constitutions* 8.12: "La nuit où il fut *livré*." Cf. Jaubert, *date de la cène*, 94.

⁷⁹ The third council of Carthage (AD 397) regulates the eucharistic fast, "excepté au seul jour anniversaire où est célébrée la Cène du Seigneur," chap. 29, ed. Mansi, *Concil. Ampl. Collection.*, vol. III, col. 885. See Jaubert, *date de la cène*, 94 note 3.

⁸⁰ *Haer.* II:22,23 (ed. Harvey, Vol. I) 329.

Le 14, le Seigneur a mangé l'agneau avec ses disciples et que lui-même a souffert le grand jour des Azimes; ils prétendent que Matthieu dit comme ils pensent. Mais leur opinion est contraire à la loi et introduit une contradiction dans les Évangiles.⁸¹

Apollinaris argued against opponents who held that Jesus celebrated his Last Supper the day before his death. He rejected this position on the premise that Jesus could not have died on the festival of Passover. He did not indicate, however, the exegesis he followed. Another witness, Clement of Alexandria, held that the date of the Last Supper was dependent on the day Jesus died, 14 Nisan.⁸² His position has been shown to depend on a work by Melito of Sardis, i.e., from the same period as Apollinaris. Thus, it is around the date 165 CE that the first exegetical difficulties on the Passion Narratives appear, and with them the position that the Last Supper may have taken place on the day before Jesus died. For Jaubert, these difficulties are the result of exegetical deductions, not of liturgical tradition.⁸³

As for the liturgy, it knew only the tradition of the Wednesday. The original Wednesday fast was preserved in memory of the day when the bridegroom was taken away: *Didascalía* "Des jours viendront où l'époux leur sera enlevé, et alors en ces jours là ils jeûneront."⁸⁴ As the memory of the three-day chronology was disappearing, it became necessary to interpret the liturgical tradition. Peter of Alexandria, who died around 311 CE, assigned the Wednesday fast to the Jewish authorities' plot against Jesus, and the Friday fast to Jesus' suffering.⁸⁵ The *Apostolic Constitutions* 5.15 relates the Wednesday fast to the betrayal of Jesus by Judas, and the Friday fast to the Passion.⁸⁶ As for the *Didascalía of Addai* (2, 3), it held that Jesus gave special revelations about his suffering on the Wednesday.

The investigation of Patristic writings confirmed to Jaubert the conclusions she had reached from the study of the ancient calendar. First, Wednesday was the sole possible day for the Passover meal. Second, the evidence from the earliest Christian tradition, which itself emanated from a Jewish-Christian perspective, pointed to the same results. As to the tradition of a Thursday evening meal, it appeared only late in the

⁸¹ Cf. *Chron. pas. P.G.* 92, 80. (ed. Dindorf, I) 13–14. Cf. Jaubert, *date de la cène*, 96–7.

⁸² Cf. *G.C.F.* 17 (ed. Stählin, Vol. III) 216. Cf. Jaubert, *date de la cène*, 97.

⁸³ Jaubert, *date de la cène*, 99.

⁸⁴ This is also the interpretation of Epiphanius and Victorinus of Petau. Cf. Jaubert, *date de la cène*, 99–100.

⁸⁵ *Ep. can.*, 15 (*P.G.* 18, 508b); Jaubert, *date de la cène*, 100.

⁸⁶ "Il nous a ordonné de jeûner le mercredi et le vendredi, le premier jour à cause de la trahison, le second à cause de la Passion," quoted by Jaubert, *date de la cène*, 101.

tradition, as a result of exegetical enquiries. The tradition of the Wednesday meal was the oldest and most reliable. faced with this evidence, Jaubert asked: "les récits évangéliques seraient-ils en contradiction avec la tradition liturgique?"⁸⁷

2.3. *The Gospels*

2.3.1. *Solution of the conflict between John and Synoptic Gospels*

As noted by Jaubert, the issue of the discrepancies in the Gospels' accounts of Jesus' passion has generated much literature and many hypotheses.⁸⁸ We have noted above an outline of the problem, and visited some of the main attempts at suggested reconciliation. Jaubert believed that the Gospel accounts did not contradict one another. She suggested, rather, that the *Didascalia's* three-day chronology reconciled the discrepancies between the Synoptic Gospels and the Gospel of John. Thus, Jesus celebrated Passover with his disciples on Tuesday evening, the start of Passover in the Old Priestly calendar. He was arrested during the night from Tuesday to Wednesday, and was crucified on Friday, Nisan 14 of the official calendar. The Passover of the Old Priestly calendar and that of the official calendar fell three days apart that year, a possibility if one considers the existence of a mitigated calendar among Jewish circles which gave rise to Christianity. The fact that the Synoptic Gospels present a Last Supper with Passover characteristics is a (possible) indication that they preserve a primitive tradition which can only refer to the Passover of the Old Priestly calendar. In Mark 14:12 the gloss *when the Passover lamb is sacrificed* seems to indicate that the first day of unleavened bread was the day in the evening of which the festival started, hence Nisan 14, and not Nisan 13.⁸⁹

The Gospel of John, on the other hand, was interested in the official calendar.⁹⁰ This may have been because of its interest in a Hellenistic

⁸⁷ Jaubert, *date de la cène*, 102.

⁸⁸ Jaubert mentions the following works for reference: Strack and Billerbeck, op. cit., 812–53; M.-J. Lagrange, *Evangile Selon Saint Marc* (Paris: Gabalda, 1942), 354–63; G. Ogg, *Chronology of the Public Ministry of Jesus* (Cambridge: Cambridge University Press, 1940), 205–42. For further discussions see: P.J. Heawood, "The Time of the Last Supper," *JQR* XLII (1951–52): 37–44; Torrey, op. cit., 237–50; S. Zeitlin, "The Last Supper as an Ordinary Meal in the Fourth Gospel," *JQR* XLII (1951–52b): 251–60.

⁸⁹ See Jaubert, *date de la cène*, 108 notes 1 and 2 for the difficulties associated with this verse at the time.

⁹⁰ There are many references to the festivals of Judaism in John's Gospel: 2: 13 ff. "The Passover of the Jews was near . . ."; 2: 23 "during the Passover festival . . ."; 6: 4 ff. "the Passover,

audience, who would have celebrated Passover on 15 Nisan.⁹¹ This may also have been because of its primary theological preoccupation, i.e., that worship *in spirit and truth* replaced the rites and celebration of what he viewed as legalistic Judaism (cf. John 2:6–10; 4:11–14). For the author of the Fourth Gospel, Jesus was the Passover Lamb which surpassed all Temple sacrifices. In any case, dates are given in the Fourth Gospel according to the official calendar.⁹² Thus, it is “Now *before* the feast of the Passover” that the meal and the washing of the feet take place (John 13:1), while it was “the day of preparation of the Passover”, i.e., the *eve* of Passover, on which Pilate’s judgment was rendered (19:14). Thus, the Synoptic Gospels and the Gospel of John do not allude to the same Passover. The Synoptic Gospels follow a liturgical tradition in line with Palestinian catechesis which is not interested in celebrating Passover according to the official reckoning. The Fourth Gospel mentions Passover only according to the official calendar.

In this light, Jaubert solved the difficulty associated with the anointing at Bethany, and did so without appealing to a transfer on the part of Mark/Matthew of the anointing within the Passion. Thus for Jaubert the following chronology emerged:

- Saturday evening: anointing at Bethany (John 12:1–8; Matt 26:6–13; Mark 14:3–9)
- “the following day” (John 12:12), Sunday, solemn entry in Jerusalem (Matt 21:1–9; Mark 11:1–10; Luke 19:28–38). Jesus returns to spend the night at Bethany (Mark 11:1; Matt 21:17).
- “the following day” (Mark 11:12), Monday, Jesus leaves Bethany and curses the fig tree.

the festival of the Jews, was near. . .”; 7: 2 ff. “Now the Jewish festival of Booths was near. . .”; 7: 37 ff. “Now on the last day of the festival, the great day. . .”

⁹¹ See Al-Biruni’s remark that the Magaryas’ observances were only binding for those who lived in Israel: “Likewise they do not allow the passover except on a Wednesday, nor do they impose its rules and customs upon anyone except those who live in the land of the Israelites.” For quote and bibliographical references, see J. Fossum, “The Magharians: A Pre-Christian Jewish Sect and Its Significance for the Study of Gnosticism and Christianity,” *Hen* 9 (1987): 304.

⁹² Yet, as pointed out by Weber, *Bulletin ecclésiastique du Diocèse de Strasbourg* (1955) 542, the author of the Fourth Gospel shows a good deal of sensitivity towards the days of the week, e.g., the sequence in Jn 1:29–2:1. Commentators have long suggested that the wedding at Cana must have taken place on a *Wednesday*. Cf. Strack and Billerbeck, *op. cit.*, 398; R. Bultmann, *Das Evangelium der Johannes* (Göttingen: Vandenhoeck & Ruprecht, 1952), 79 note 3. See Jaubert, *date de la cène*, 110, for a suggestion of a reading of the time indications in the Cana pericope which may highlight the liturgical days.

- “the following morning” (Mark 11:20), Tuesday, the disciples notice the fig tree dried up, they ask where to prepare for the Passover (Mark 14:12 + //).
- “in the evening” Jesus sits down at table with his disciples (Mark 14:17 + //).

2.3.2. *The Events of the Passion in a Three-day Chronology*

2.3.2.1. The Synoptic Accounts

There is no explicit indication in the Gospels that Jesus' Passion lasted three days. For Jaubert, the key issue with the arrest followed by crucifixion on the next day resides with the sheer number of events which are supposed to have taken place during a rather short time lapse.⁹³ In the Synoptic Gospels, Jesus is led before the High Priest (Mark 14:53, 54), witnesses are sought but not found (Mark 14:55), the first testimonies are contradictory (Mark 14:56); “later” (Matt 26:60) witnesses accuse Jesus of wanting to destroy the Temple (Mark 14:56–58; Matt 26:60–61); then the High Priest delivers his verdict: death. The impression so far is not of a hasty judgment, but rather of a plenary session of the Sanhedrin in due form.⁹⁴ Then mocking takes place, followed by a *second* session of the Sanhedrin “early in the morning” (Mark 15:1), after which Jesus is taken to Pilate. There Jesus is questioned several times (Mark 15:2–5; Matt 27:11–14). He is then sent before Herod (Luke 23:6–12—possibly a legendary event according to Jaubert). He appears before Pilate a *second* time, this time with the Priests and the leaders of the people (Luke 23:13; cf. Matt 27:17). [Judas is overtaken by remorse and visits the Priests (Matt 27:3)]. The sentence is not passed immediately, but after an exchange with the crowd and the release of Barrabas (Matt 27:15–26; Mark 15:6–15; Luke 23:13–28).⁹⁵ After all these, Jesus is scourged and sent to be crucified at the *third* hour.⁹⁶

⁹³ Jaubert, *date de la cène*, 116 “Si Jésus a été arrêté la veille du crucifiement, comment tant d'événements ont-ils pu trouver place dans le laps de temps qui s'écoule entre l'arrestation et la mise en croix?”

⁹⁴ The Sanhedrin was composed of 71 members (*Sanh.* 1:6), however, in case of capital punishment, only 23 members were required (*Sanh.* 4:1).

⁹⁵ Jaubert, *date de la cène*, 118, suggests the Priests must have needed a full day to manipulate public opinion.

⁹⁶ Mark's reckoning is the one adopted by liturgical tradition. Cf. *Apostolic Tradition* (Dix ed.) 62–63. Cf. *Canons of Hippolytus* (*ibid.*) and the *Testament of Our Lord Jesus Christ* (Rahmani ed.) 144–45. Yet, it is likely that this reckoning is the most ancient and viable. The *Apostolic Constitutions* (5.14; 8.34) have inserted a more logical time reckoning of: sentence at third hour, execution at sixth hour. But this may be to allow more time for the events to take place in a context where the three-day chronology is disappearing. It is

Admittedly argues Jaubert, it is difficult to imagine so many events taking place in such a short lapse of time.⁹⁷ The appeal to the Gospel of John complicates the matter even further, as one must also account for the short stay at Annas' house, and the questioning before the High Priest (John 18:13–24).

2.3.2.2. How do the events reported by the evangelists fit together?

There is a contradiction between Mark/Matthew on the one hand and Luke on the other hand concerning the time of the trial. All Gospels agree that the three-fold denial of Peter took place during the night following the arrest of Jesus. However, Mark/Matthew place the trial before the High Priest within the Peter pericope, i.e., at night (Mark 14:54–72; Matt 26:58–75). Luke, on the other hand, records the trial during the day (Luke 22:66), while John implies that the questioning before the High Priest Annas occurred during the night. This tradition is somewhat echoed by at least one of the *Didascalia's* chronology of the passion, which declares that it was during the day on Wednesday that Jesus was held at the house of Caiaphas, while the elders kept counsel about him. The questioning before the High Priest at night is different from the trial, and there is no reason to ascribe it to Caiaphas. Interestingly, Tatian's *Diatessaron* likewise avoids the presentation of a night time trial, placing the last two of Peter's denials after the interrogation before Annas and before Jesus' transfer Caiaphas, while the High Priests and scribes gathered only after that.⁹⁸ The *Didascalia* further dates the first appearance before Pilate on the Thursday. This solves the problem of the second hearing before the Sanhedrin "early in the morning" in Mark/Matthew. The first session took place on Wednesday during the day, while the second took place on Thursday morning.⁹⁹

interesting to note that Epiphanius, who defends the three-day chronology, defends the third hour according to Mark and according to John. He claims that some copies of John have been altered, so that the third hour has now become the sixth hour, a fact known to Clement, Origen, Eusebius Pamphilius. This is corroborated by Eusebius of Caesarea (*P.G.* 22) 1009; (*P.O.* 14) 270–2, and by a fragment of the *Chronicon Pascale* (ed. Dindorf, I, Bonn, 1892) 10–11. Cf. Jaubert, *date de la cène*, 119–20.

⁹⁷ Jaubert, *date de la cène*, 118: "Il faut reconnaître qu'une telle compression des faits n'est guère satisfaisante pour l'esprit."

⁹⁸ Arabic text, French trans. (ed. Marmardji, Beyreuth, 1935). See P. Benoit, "Jésus devant le Sanhédrin," *Ang XX* (1943): 158–60, for an example of a modern interpretation following those lines. Cf. Jaubert, *date de la cène*, 121–22.

⁹⁹ The Mark/Matthew tradition places the hearing in the context of Peter's denial, i.e., at night. Further, it mentions only one High Priest: Caiaphas. The loss of perspective resulted in the portrayal of only one trial, together with the hearing before the High Priest, in the context of Peter's denial. Cf. Jaubert, *date de la cène*, 121.

According to Jaubert, a text from the *Mishnah* tractate *Sanhedrin* may bring additional support to the argument that two sessions of *Sanhedrin* were needed in the context of Jesus' trial.¹⁰⁰ The text is explicit enough:

In non-capital cases the trial takes place during the day, and the verdict may be delivered during the night. In capital cases the trial takes place during the day, and the verdict must also be delivered during the day. In non-capital cases the verdict of acquittal or condemnation may be delivered the same day; in capital cases a verdict of acquittal may be delivered the same day, but a verdict of condemnation may not be delivered until the following day. For this reason, no trials may be held on the eve of a sabbath or on the eve of a festival.¹⁰¹ (*m. Sanh* 4:1)

Thus, it would appear that the Jewish authorities tried Jesus according requirements of the Jewish Law not entirely different from those recorded in the *Mishnah* some one and a half century later, bringing the accusation of blasphemy against him.¹⁰² The regulation of the *Mishnah* seems to favor the *Didascalía's* three-day chronology. According to this regulation, Jesus could not have been arrested on the night before a sabbath or a festival. This rules out an arrest on the Thursday/Friday night, which belongs to Friday, the day of preparation. Conversely, an arrest on the night from Tuesday to Wednesday gave hope of a resolution before the festival.¹⁰³

Jaubert suggested the following chronology to Jesus' Passion:

Night from Tuesday to Wednesday: Jesus arrested and taken to the High Priest (Mark 14:53; Luke 22:54) Annas (John 18:13), who questioned him (John 18:19–23). He was then taken to Caiaphas (John 18:24).

Wednesday, during the day: Jesus was tried in a plenary session of the Sanhedrin (Mark 14: 55–64 and //), then mocked (Matt 26: 68 and //; Luke 22: 63–65).

Thursday morning: The guilty verdict and the sentence of capital punishment were delivered during a second session before the Sanhedrin, according to the Jewish Law (Matt 27:1; Mark 15:1). Jesus was then taken to Pilate (Matt 27:2; Mark 15:1; Luke 23:1; John 18:28).

¹⁰⁰ Jaubert, *date de la cène*, 123, takes the view that the *Mishnah* reflects ancient Jewish legislation.

¹⁰¹ J. Neusner, *The Mishnah: A New Translation* (New Haven: Yale University Press, 1988), 589–90.

¹⁰² No early Christian texts accused the Jewish authorities of illegal proceedings in the matter of Jesus' trial. Cf. Jaubert, *date de la cène*, 124.

¹⁰³ The three-day chronology thus resolves the contradiction in Mark/Matthew where it is said that the priests and scribes decided to arrest Jesus not during the festival, and apparently proceeded to arrest him on the eve of passover! Cf. Jaubert, *date de la cène*, 125.

Thursday during the day: Jesus appears for the first time before Pilate and is then sent to Herod (Luke 23:6–12). Jesus is sent back to Pilate and spends the night in prison.

Friday morning: Second hearing before Pilate (Luke 23:13). Jesus condemned and crucified at the third hour.

This chronology “montre la cohérence implicite des récits évangéliques... elle résout ainsi beaucoup d’objections soulevées contre l’historicité du récit.”¹⁰⁴ For Jaubert the double trial of Jesus gave back to the Jewish trial a legal aspect “auquel les critiques avaient renoncés.”¹⁰⁵ The Jewish authorities needed also an official trial and condemnation by the Roman authorities in order to discredit Jesus among his Gentile sympathizers.¹⁰⁶

2.3.2.3. How could the memory of a three-day Passion have been lost in the Gospel narratives?

Early Palestinian catechesis was interested in reporting the significance of the events, rather than their exact chronological order. In the midst of historical turmoil, e.g. persecution under Nero (64 CE), proclamation of the kerygma became paramount for early Christians. In this perspective, what appeared to be duplicated material was compressed, perhaps to simplify catechesis. Thus, the two hearings before the High Priest could be shortened into one, as could the two sessions before the Sanhedrin. When catechesis passed onto the Gentile world, the Last Supper was associated with the Passover of the Diaspora Jews, i.e., 15 Nisan according to the official lunar calendar. Allowing for a level of fluidity of the tradition over a period of time, the true circumstances in which the trial took place were forgotten.

2.4. *Jaubert’s Conclusions*

The Gospels confirm the ancient liturgical analogy. The three-day chronology, the most ancient attested to in the tradition, resolves the discrepancies between the Gospel of John and the Synoptic Gospels on the subject of Jesus’ Passion and death.

Further, the thesis brings light to some aspects of early Christian faith and community. Jesus celebrated Passover following a sacred calendar

¹⁰⁴ Jaubert, *date de la cène*, 128.

¹⁰⁵ Jaubert, *date de la cène*, 128.

¹⁰⁶ See Jaubert, *date de la cène*, 128–9 for a discussion.

which regulated the liturgical life of some of the Children of Israel. All the memories of the priestly tradition were encompassed in the Last Supper. It replaced all the sacrificial meals of the ancient law.

By dying on Friday, eve of the official Passover, Jesus substituted himself for the lamb sacrificed in the Temple. He thus brought together the double heritage of Israel and fulfilled it. On Wednesday, commemoration of the essene Passover, Jesus was handed over, and he died on Friday, at the time when the lambs for the official Passover were being slaughtered. Together with Sunday, day of the resurrection, these days were God's signs for the first Christian Community.

3. *The Critics' Appraisal of the Jaubertian Theory*

Jaubert's theory, somewhat novel when first published, has been outlined above for convenience. Its publication in 1957 (translated in English in 1965) was followed by a wide range of responses from scholars, ranging from the most enthusiastic to the highly skeptical. This scrutiny continues to the time of writing these pages, as indicated by the treatment the theory received in two notable books published in 2011.¹⁰⁷ What follows visits what are for the present writer the main points raised by scholarship as regards the calendar of *Jubilees* and its characteristics, the Patristic evidence of a three-day chronology of Passion Week, and Jaubert's application of it to the Gospel accounts. The areas where further enquiry is needed are highlighted.

3.1. *The Calendar of Jubilees*

3.1.1. *Its Structure*

This aspect of the thesis has, almost unanimously, been accepted by critics. R.T. Beckwith summed up the consensus well by stating: "she has proved, to the satisfaction of most scholars, that the solar calendar expounded in *1 Enoch* and the book of *Jubilees*, and actually practiced at Qumran, assigned exactly fifty two weeks (364 days) to the year, and that its new year's day was a Wednesday."¹⁰⁸ J. Morgenstern rightly pointed out

¹⁰⁷ Benedict XVI, *op. cit.*; Humphreys, *op. cit.*

¹⁰⁸ Cf. Beckwith, "Cautionary Notes," 200. In a recent publication Beckwith states: "All students of the Jewish calendar owe a great debt to the late Annie Jaubert. It was she who demonstrated that the 364-day year, consisting of an exact number of complete weeks, is

Jaubert's apparent lack of concern for the conclusions of biblical science regarding the ages and cultural backgrounds of the different literary strata of the *Hexateuch*.¹⁰⁹ He also emphasized that there was probably more than one calendar in ancient Israel, and that the calendar of *Jubilees* was a "direct outgrowth of the ancient Pentecontad calendar."¹¹⁰ Morgenstern proposed his own reconstruction of the calendar, and concluded that his results showed near-perfect agreement with those proposed by Jaubert, with the proviso that in his reconstruction the year started on a Tuesday rather than Wednesday.¹¹¹ Jaubert successfully refuted this challenge by reasserting, to the satisfaction of other scholars, that the start of the year in the *Jubilees*'s calendar could only have taken place on Wednesday.¹¹² The evidence points thus to a consensus on the characteristics of the calendar of *Jubilees*. It counted 364 days and was divided in twelve months and in four time-periods of exactly thirteen weeks each.¹¹³ It started on Wednesday and ensured that holy days and festivals fell every year on the same day.¹¹⁴

not only championed but exemplified by the *Book of Jubilees* . . . her [Jaubert's] basic thesis that the Book of Jubilees begins each year of history on Wednesday (understood as the day of the creation of the heavenly luminaries, in accordance with Gen 1:14–19) stands fast." See R.T. Beckwith, *Calendar, Chronology and Worship: Studies in Ancient Judaism and Early Christianity* (AJEC 61; Leiden: Brill, 2005), 54. Endorsement of this part of Jaubert's theory came also from no lesser scholarly authorities than J.M. Baumgarten, "Some Problems of the Jubilees Calendar in Current Research," *VT* 32 (1982): 487; and S. Talmon, "The Calendar of the Covenanters from the Judaean Desert," in *The World of Qumran from Within* (Jerusalem: Magnes, 1989), 147–85.

¹⁰⁹ Cf. Morgenstern, *op. cit.*, 34.

¹¹⁰ Morgenstern, *op. cit.*, 34, 55.

¹¹¹ Morgenstern, *op. cit.*, 59.

¹¹² See the discussion in Jaubert, "Calendrier des Jubilés: jours liturgiques," 35–44. Also Talmon, "The Calendar of the Covenanters from the Judaean Desert," 162. Thus, Ogg's objection based on the confusion regarding the start of the year in *Jubilees* is inconclusive. Cf. G. Ogg, "Review of Melle Jaubert: *La Date de la Cène*," *NovT* 3 (1959): 150. Other scholars who have since endorsed Jaubert's reconstruction of the *Jubilees*'s calendar include Baumgarten, "Some Problems"; and J.C. VanderKam, "The Origin, Character and Early History of the 364-Day Solar Calendar: A Reassessment of Jaubert's Hypotheses," *CBQ* 41 (1979): 390–411.

¹¹³ E. Kutsch, "Der Kalendar des Jubiläenbuches und das Alte und das Neue Testament," *VT* 11 (1961): 39–47, has argued that the dates of the Flood story in *Jubilees* follow the scheme of a lunar year (354 days) plus 11 days, thus expounding a calendar of 365 days. But this is clearly a misreading, as *Jubilees* is explicit as to the length of the year, and the author clearly means 364 days in the story. Cf. J.C. VanderKam, "Reassessment," 397.

¹¹⁴ J.T. Rook, "A Twenty-eight-day Month Tradition in the Book of Jubilees," *VT* 31 (1981): 83–87, resurrects Epstein's theory in the light of what he claims to be new evidence concerning the story of creation of Adam and Eve. He argues that the evidence of *Jubilees* can only fit a 28-day month, especially in *Jub.* 3:1–17. Rook, however, does not consider seriously enough the explicit statements in *Jubilees* expounding the structure of the year.

3.1.2. *Jaubert's Methodology*

The methodology employed has attracted much criticism. It will be recalled that Jaubert tabulated the dates of travel of the Patriarchs recorded in *Jubilees* in her calendrical table, and deduced that the only day that remained constantly free of travel must have been the sabbath. Applying the same methodology to the dates of the *Hexateuch*, she highlighted the same concern for the days of the week and inferred that the Priestly school knew this calendar.¹¹⁵ It is Baumgarten who mounted the strongest challenge to this aspect of the thesis.¹¹⁶ He pointed out that sabbath regulations were only given to Jacob (*Jub.* 2:20–23), and could not, therefore, have applied to the Patriarchs beforehand. Yet, it is clear from *Jub.* 2:17–18 that for the author the sabbath was observed in heaven from the first week of creation. In this perspective, it is understandable that the author would not have made *any* of the Patriarchs travel on the sabbath.¹¹⁷ Baumgarten also questioned some of the interpretations of the passages in the priestly writings from which Jaubert inferred that the *Hexateuch* presupposed a 364-day calendar.¹¹⁸ Although he may be right in some of his readings, this does not warrant a rejection of Jaubert's position.

Testuz argued that the method used to determine the start of the year from the date of the festival of Weeks, which is known in *Jubilees* as festival of the Oath, is unreliable because either the author did not know Lev 23:15, or else ignored it on purpose.¹¹⁹ He also argued that the beginning of the year in *Jubilees* was a Sunday, because the rule concerning the slaughter of the Passover sacrifice *between the evenings* at the start of I/15 was to protect the sabbath of I/14. To these, one must object that,

For responses to Rook, see J.C. VanderKam, "A Twenty-Eight-Day Month Tradition in the Book of Jubilees?" *VT* 32 (1982): 504–6; Baumgarten, "Some Problems".

¹¹⁵ Kutsch, "Der Kalendar des Jubiläenbuches", has questioned Jaubert's conclusions regarding the dates of the *Hexateuch* and their transliteration in the *Jubilees* calendar table. For replies to his objections, see H. Cazelles, "Sur les origines du calendrier des Jubilés," *Bib* 43 (1962): 202–12; E. Vogt, "Note sur le calendrier du déluge," *Bib* 43 (1962): 212–16. Cf. Ruckstuhl, *op. cit.*, 86.

¹¹⁶ Cf. J.M. Baumgarten, "The Calendar of the Book of Jubilees and the Bible," *Tarbiz* 32 (1962): 317–28.

¹¹⁷ Cf. J.C. VanderKam, "Reassessment," 393. Baumgarten holds that Abraham's journey in *Jub.* 18 necessarily involved the sabbath. VanderKam rejects the assertion that the patriarch travelled on that day, and suggests that the journey there took place on I/15, 16, 17; I/18 was the sabbath, and the journey back took place on I/19, 20, 21. For a reply to VanderKam's criticism, see Baumgarten, "Some Problems," 486.

¹¹⁸ Especially Gn 8:4 the date VII/17; Exod 16:1; Num 10:11–12a, 13; Josh 4:19. Cf. J.C. VanderKam, "Reassessment," 394.

¹¹⁹ M. Testuz, *Les idées religieuses du livre des Jubilés* (Paris: Minard, 1960), 147–9, 159–61.

a) it is unthinkable the author of *Jubilees* would not have complied with the Leviticus rule if he was aware of the rule; b) although the festival is known as festival of the Oath in *Jubilees*, it is clear that the author intends an identification with the festival of Weeks (*Jub.* 6:17–22); c) the author is explicit as to the meaning of “between the evenings” (*Jub.* 49:10).¹²⁰

It must be considered that the Essenes, repositories of the *Jubilees* calendar, engineered the calendar by noticing that by making the year start on Wednesday, festival days would never fall on the sabbath. Thus, the author of *1 Enoch* shaped his calendar around the biblical events, and “the author of *Jubilees* reversed this process and shaped the events of his book around the revealed calendar.”¹²¹ This position fails to consider seriously, however, the importance of the sabbath and of the sabbatical week. This particular time unit is shown to have been part of the Pentecontad calendar, and may be older.¹²² Israel was used to the 364-day calendar as a time reckoning device which ensured that festival days and sabbaths never clashed. Above all, although this calendar may not have been the only one in ancient Israel, the Priestly writings do show an implicit knowledge of it, as shown by Jaubert. The *Jubilees* calendar is unlikely to have been made up sometime in the second century BCE. Rather, all evidence points to its antiquity.

We have noted above some of the reservations raised by scholars regarding the methodology employed. Some of these reservations still stand today, especially concerning the interpretation of some of the dates collected by Jaubert in the Priestly writings. Yet, the sum of these objections does not form a compelling argument *against* Jaubert’s assertion that the 364-day calendar was already known to the Priestly writers.

3.1.3. *History of the Calendar and the Liturgical Days*

Jaubert confidently stated that the calendar of *Jubilees* and *1 Enoch*, evidenced in the Qumran documents (available to her at the time), and identified in the backdrop of the Priestly writings of the Hebrew bible, was one and the same calendar.¹²³ The calendar had undergone some kind of

¹²⁰ Cf. Ruckstuhl, op. cit., 76–9.

¹²¹ R.T. Beckwith, *Calendar and Chronology, Jewish and Christian: Biblical, Intertestamental and Patristic Studies* (AJEC 33; Leiden: Brill, 1996), 104.

¹²² Cf. Morgenstern, op. cit.

¹²³ It is now clear that this position was somewhat off the mark. J.J. Obermann, “Calendaric Elements in the Dead Sea Scrolls,” *JBL* XXV (1956): 285–97, doubted that the Qumran calendar could possibly be identified with that of *Jubilees*. See also J.T. Milik, *Dix ans de découvertes dans le désert de Juda* (Paris: Éditions du Cerf, 1957), 70 ff. More recently,

evolution: the 364-day framework became lost, while the liturgical days retained their appeal and importance. Baumgarten has raised one strong objection concerning the liturgical days. He rightly pointed out that *Jubilees* nowhere refers to the days of the week, but only dates events according to the day of the month.¹²⁴ Thus, there appears to be little support for Jaubert's assertion that the calendar of *Jubilees* was designed to valorize the liturgical days. Nevertheless, the extensive evidence put forward by Jaubert herself remains.¹²⁵ Granted that *Jubilees* does not explicitly mention the days of the week, the fact is that in the vast majority, festival days, first days of the months and significant events fall on Wednesdays, Fridays or Sundays, and by far outweigh the occurrences of such events on any of the other days. This is also true for a good deal of the numerical dates of the Hexateuch. The purpose of *Jubilees* may not have been to focus on the liturgical days, but it is evident that it implicitly highlighted them.¹²⁶

As to the history of the calendar, Jaubert proposes that it antedated the book of Ezekiel. Thus it must have existed at the time of the exile, possibly before. It evolved through the following centuries under the influence of foreign rule. The Maccabean revolt marked a crux in the history of this calendar and provided the departure from the liturgical days in the official calendar. VanderKam contributed to the argument and suggested that the *gězērôt* (decrees) of Antiochus IV Epiphanes, the Seleucid ruler at the time of the revolt, imposed a change of cultic calendar in the Temple,

U. Glessmer has echoed the differences between *Jubilees* and 1 *Enoch*, and has suggested a new designation for the calendar: the 364 Day Tradition Calendar, as opposed to solar calendar, as the calendar is clearly not aligned with the true solar year. See U. Glessmer, "The Otot-Texts (4Q319) and the Problem of Intercalation in the Context of the 364-Day Calendar," in *Qumranstudien: Vorträge und Beiträge der Teilnehmer des Qumranseminars auf dem internationalen Treffen der Society of Biblical Literature, Münster, 25–26 Juli 1993* (eds H.J. Fabry, A. Lange, and H. Lichtenberger; Göttingen: Vandenhoeck & Ruprecht, 1996), 143–5. Also U. Glessmer, "Calendars in the Qumran Scrolls," in *The Dead Sea Scrolls After Fifty Years: A Comprehensive Assessment* (eds P.W. Flint and J.C. VanderKam; Leiden: Brill, 1999), 213–78; and U. Glessmer, "Investigation of the Otot-Text (4Q319) and Questions About Methodology," in *Methods of Investigation of the Dead Sea Scrolls and the Khirbet Qumran Site, Annals of the New York Academy of Sciences 722* (eds M. Wise, et al.; New York: New York Academy of Sciences, 1994), 429–40. J. VanderKam has evidenced the lack of homogeneity between the calendrical texts of the Qumran library. Cf. J.C. VanderKam, *Calendars in the Dead Sea Scrolls: Measuring Time* (London: Routledge, 1998).

¹²⁴ Baumgarten, "The Calendar of the Book of Jubilees and the Bible," 319–20.

¹²⁵ Jaubert, *date de la cène*, 31–48.

¹²⁶ In this regard we find VanderKam's assertion, that there are no warrants in *Jubilees* to accept Jaubert's thesis regarding the liturgical days, slightly misleading. It might be helpful to qualify the statement and suggest that nothing *explicitly* warrants Jaubert's position. Cf. J.C. VanderKam, "Reassessment," 401.

where traditional sacrifices and the keeping of festivals were prohibited, resulting in the desecration of the Holy of Holies in 167 BCE.¹²⁷ This, argues VanderKam, provided the *terminus ad quem* of the calendar in terms of its official status as a liturgical calendar of the Temple. Such a backdrop best accounts for the polemic tone of the Qumran documents, for the sudden polemic on calendrical issues, and for the lack of evidence in the pre-Maccabean era demonstrating the use of a lunar calendar to determine the festivals.¹²⁸ The exact history of this particular calendar in the official circles is relevant to the purpose of this enquiry, and much will be gained from an understanding of its milieu up to the first century CE. Its continued use beyond the Maccabean revolt, and probably well inside the first century CE, begs the question of its practicability. To this we now turn.

3.1.4. *The Question of Intercalation in the 364-day Calendar*

The efforts of the authors of *1 Enoch* and *Jubilees* suggested to Barthélemy that the calendar they expounded was all but utopia.¹²⁹ We noted earlier that Jaubert admitted that the question of intercalation was vexed by the lack of extant textual evidence.¹³⁰ The discrepancy between the true solar year and the 364-day year is such that the latter would soon fall in arrears without proper intercalation, i.e., the New Year would come every year more than one day ahead, resulting after a number of years in a total disconnect between the 364-Day calendar and the cycle of the seasons. For this reason, many scholars hold that the 364-Day year could not have been more than an idealized scheme.¹³¹ Yet, the fact that the Dead Sea Scrolls evidence its use over a period of more than two centuries strongly

¹²⁷ Cf. Dan 8:1–14; 9:27; 11:31; 12:11; 1 Macc 1:41–61; 2:15–26; 2 Macc 6:1–11. Cf. J.C. VanderKam, "Reassessment".

¹²⁸ J.C. VanderKam, "2 Maccabees 6, 7a and Calendrical Change in Jerusalem," *JSJ* 12 (1981): 52–74. This conclusion has been challenged by P. R. Davies, who shows that the 364-days calendar was not in use anymore in the circles that wrote the book of Esther, and prefers Jaubert's solution of an amended calendar by the time of the second century BCE. Cf. P.R. Davies, "Calendrical Change and Qumran Origins: An Assessment of VanderKam's Theory," *CBQ* 45 (1983): 80–9.

¹²⁹ Barthélemy, *op. cit.*

¹³⁰ Jaubert, *date de la cène*. Segal rejected the assertion that the calendar of the Israelites was based on computation before the exile, and stated "it is for this reason that the calendar of *Jubilees*, composed probably in the second century BC, cannot have been ancient." Cf. J.B. Segal, "Intercalation," 251.

¹³¹ Morgenstern, *op. cit.*; J.B. Segal, "Intercalation," 251. J.T. Milik, *The Books of Enoch: Aramaic Fragments of Qumrān Cave 4* (Oxford: Clarendon, 1976), 8, states: "in the Persian period this calendar was of a chiefly theoretical nature... it was only the Essenes who introduced it effectively in their liturgical life."

suggests that intercalation must have taken place. Several schemes of intercalation, which would have brought the 364-day calendar in line with the true solar year, have been suggested, but without evidence they remain entirely conjectural.¹³²

Admittedly, the lack of evidence weakens Jaubert's thesis considerably as without intercalation, by 124 BCE the 364-day calendar would have been at least a month off the true solar year. By the time of Jesus, the discrepancy would have been of at least half a year, enough to rule out completely the possibility of a 364-day calendar Passover falling on the same week as the official Passover.¹³³ The difficulty is enhanced by the fact that the exact date of introduction and start of operation of this calendar remains unknown. Likewise, the exact nature of the computation of the lunar/official calendar is still to be determined. The task, therefore, of determining with certainty the occurrences of the sacerdotal Passover and the official Passover falling in the same week appears very difficult to resolve.¹³⁴ Nevertheless, the absence of textual evidence cannot of itself justify the assertion that intercalation did not take place in the 364-day year calendar.

3.2. *Patristic Evidence: A Three-day Chronology of Jesus' Passion*

3.2.1. *The Didascalia Apostolorum*

The critical response has, on the whole, been less than favorable concerning Patristic sources put forward by Jaubert evidencing a tradition based on a three-day chronology of Jesus' Passion.¹³⁵ The main pillar supporting the thesis is chapter 21 of the *Didascalia Apostolorum*. Jaubert's critics

¹³² Cf. Jaubert, *date de la cène*, 142–59; E.R. Leach, "A Possible Method of Intercalation for the Calendar of the Book of Jubilees," *VT* 7 (1957): 392–7; Testuz, *op. cit.*, 127–8; E. Kutsch, "Die Solstitien in Kalender des Jubiläenbuches und in äth. Henoch 72," *VT* 12 (1962): 205–07; Kutsch, "Die Solstitien"; Ruckstuhl, *op. cit.*, 91–6; A.R.C. Leane, *The Rule of Qumran and Its Meaning* (NTL; London: SCM, 1966), 85. R.T. Beckwith, "The Modern Attempt to Reconcile the Qumran Calendar with the True Solar Year," *Revue de Qumrân* 7 (1969–71a): 379–96. The latter offers some objections to the above scholars, and argues that there was neither a hypothetical nor a practical need for intercalation, as the Essenes did not partake in the sacrifices of the Temple. Cf. R.T. Beckwith, "The Qumran Calendar and the Sacrifices of the Essenes," *RevQ* 7 (1969–71b): 587–91. Further bibliographical references on the question of intercalation of the 364-day calendar are given below, chapter 4 note 63.

¹³³ Cf. Beckwith, "Modern Attempt," 396.

¹³⁴ Cf. Ogg, "Review of Jaubert," 150; Beckwith, *Calendar and Chronology*, 292.

¹³⁵ E. Ruckstuhl is a noticeable exception. In his *Chronology*, 56–72, he devotes a full chapter to the witnesses to the three-day chronology, and investigates the decline of the tradition. He largely agrees with Jaubert's thesis.

argue that this passage is a secondary development out of the fasting practice of the church.¹³⁶ Connolly sums up the main purpose of the author of the *Didascalia* thus:

To show the reason why the fast before Easter should extend over the whole six days, from Monday to Saturday. To the end he adopts, and probably invents, a strange chronology of Holy Week for which there is no shadow of authority in the Gospels.¹³⁷

The view commonly held is that early Christians started to fast on Wednesdays and Fridays as a reaction to the practice of the *hypocrites*, who fasted on Mondays and Thursdays (*Didache* 8:1). Only in the second or third century did the meaning given to this fast—Wednesday for the sin of the Jews in arresting Jesus, Friday for the crucifixion—become the basis for a “fanciful” chronology of Passion week.¹³⁸

3.2.2. *Epiphanius*

The testimony of the Bishop of Salamis is rejected by critics on the premise that it was largely dependent on the *Didascalia*,¹³⁹ and on the strong suspicion on the part of experts concerning Epiphanius’ critical abilities.¹⁴⁰ The fact remains that Epiphanius’ forcefulness in objecting the view, held by some of his contemporaries, that Jesus was arrested on Thursday night, is a possible indication that this view was perceived to be wrong.¹⁴¹ In any case, one may argue that had Epiphanius been a proponent of the Thursday evening tradition, he may well have been dependent on the *Didascalia* for this tradition too.

3.2.3. *Victorinus of Petau*

The main objection to Victorinus’ witness is not his lack of independence from the *Didascalia*,¹⁴² but the assertion that a tradition, which is common

¹³⁶ Jeremias, *Eucharistic Words*, 25. This argument was first developed by Holl, op. cit.

¹³⁷ Cf. Connolly, op. cit. Cited by M. Black, “The Arrest and Trial of Jesus and the Date of the Last Supper,” in *New Testament Essays* (ed. A.J.B. Higgins; Manchester: Manchester University Press, 1959), 28.

¹³⁸ Jeremias, *Eucharistic Words*, 25.

¹³⁹ Ogg, “Review of Jaubert,” 153; Black, op. cit., 29.

¹⁴⁰ Ogg, “Review of Jaubert,” 153. This point is acknowledged by Jaubert, Jaubert, *date de la cène*, 89.

¹⁴¹ Holl, op. cit., 206; Ruckstuhl, op. cit., 68.

¹⁴² M. Black is not positively confident that Victorinus’ *De Fabrica Mundi* was entirely independent of the *Didascalia*. He points to the phrase “c’est pourquoi nous faisons du quatrième jour un jour de jeûne” as a likely dependence of the *Didascalia*. Cf. Black, op. cit., 29.

to both Victorinus and the *Didascalía*, must necessarily be older than the two works which testify to the tradition. Jerome states that Victorinus used the work of Origen, and it is likely that he also used the *Didascalía*.¹⁴³

3.2.4. *Things as they Stand*

Most of Jaubert's critics were content to base their assessment of Jaubert on the independent appraisals of the *Didascalía* by Holl and Connolly. For them, the *Didascalía*'s three-day chronology bore no resemblance to the Gospels, but rather was the result of an over-enthusiastic elaboration designed to offer a theological justification for the days of fast during Holy Week. As a plausible historical tradition it had little to stand on.¹⁴⁴ Against Jaubert, Ogg rejected the contention that the tradition which portrayed the three-day chronology could go back to a period of time very close to the events, and could be independent and flowing from the liturgical tradition of the primitive church.¹⁴⁵

Clearly, to reject the tradition on the grounds that it did not reflect the Gospel accounts, as Connolly did, was simply to ignore the possibility that a very early tradition—or traditions—might have existed, which though it/they shaped the liturgical life of the early church because of its/their plausible connections to the historical memory of the events, had little influence on the later compositions of the Gospel accounts.¹⁴⁶ The key question revolves around the antiquity of this or these traditions, not on the reliability of the character of its witnesses, or the sources they used. If it can be shown that there exists a Wednesday-arrest tradition predating the Thursday-arrest tradition, then the antiquity of this tradition will be asserted. Subsequent witnesses who refer to this tradition will therefore not be considered with skepticism, but as reliable witnesses of this ancient tradition.

In this respect Jaubert's contribution in a number of subsequent publications designed to further the case for the three-day chronology in the Patristic traditions must be taken into account.¹⁴⁷ Sadly, this evidence has

¹⁴³ Ogg, "Review of Jaubert," 154.

¹⁴⁴ Black, *op. cit.*, 29; C.S. Mann, "The Chronology of the Passion and the Qumran Calendar," *CQR* 160 (1959): 452; O'Flynn, *op. cit.*, 62; X. Léon-Dufour, "La date de la Cène," *RSR* 3 (1960): 491; Jeremias, *Eucharistic Words*, 25; Marshall, *Last Supper and Lord's Supper*, 73.

¹⁴⁵ Ogg, "Review of Jaubert."

¹⁴⁶ This is a key aspect of the discussion, which will require further enquiry at a later stage.

¹⁴⁷ A.M. Jaubert, "Une discussion Patristique sur la chronologie de la passion," *RSR* 54 (1966): 407–10; "Une lecture du lavement des pieds au mardi / mercredi saint," *Mus* 79

largely been ignored by critics, and subsequent assessments of Jaubert's thesis have failed to consider seriously the weight of the large body of evidence she assembled.

3.3. *Jaubert's Application of the Three-day Chronology to the Gospel Accounts*

Undoubtedly, it is this aspect of the thesis which has most attracted the attention of scholars. The possibility of applying to the reconciliation of the Passion Narratives the existence of two different calendars not based on differences of lunar observations but differing in their manner of computation, had on the whole eluded scholars. A few solutions had been suggested based on the differences in determining the start of the month of Nisan the year Jesus died. These, as argued above, are weakened by the lack of evidence available. It is then understandable that the novelty suggested by Jaubert should generate as much interest as it did. In what follows we consider the positive and negative responses.

3.3.1. *Positive Responses to Jaubert's Thesis*

Those scholars who support Jaubert's position have most readily welcomed the extra time allowed by the three-day chronology for the unfolding of the events.¹⁴⁸ For these scholars, those who maintain that all the events recorded in the Gospels could well fit the picture painted by the Gospel accounts of a Thursday evening last supper, followed by a Friday crucifixion, must address the challenge forcefully. Conversely, as argued by Jaubert, it is likely that the arrest, the interrogation before the high priest, the trial (assuming for a moment there really was only one session of the Sanhedrin), the transfer to and questioning before Pilate, the appearance before Herod and the return before the Roman Consul, the public trial, then all the preparation for the crucifixion and the execution itself, took far longer than the texts suggest.¹⁴⁹ To suggest otherwise is to

(1966): 257–86; "Le mercredi où Jésus fut livré," *NTS* 14 (1967–68): 145–64; "Le mercredi de Nouvel An chez les Yezidis," *Bib* 49 (1968): 244–48.

¹⁴⁸ For Jaubert's suggested chronology, see *date de la cène*, 125–33.

¹⁴⁹ Scholars who point to this aspect of the thesis are E. Vogt, "Une lumière nouvelle sur la semaine de la Passion," *Christus* XI (1956): 408–13; F.F. Bruce, "Review of 'La Date de la Cène'," *JSS* 2 (1958): 219–21; O'Flynn, *op. cit.*; N. Walker, "Jaubert's Solution to the Holy Week Problem," *ExpTim* 72 (1959–60): 93–94; Mann, *op. cit.*; Ruckstuhl, *op. cit.*, 35–55; R.E. Brown, *New Testament Essays* (New York: Image Books, 1968), 212–14, with some strong objections; E.E. Ellis, *The Gospel of Luke* (2nd ed.; London: Marshall, Morgan and Scott, 1974), 250; Barrett, *op. cit.*, 550–1, with some reservations.

allow for a readiness of all the characters involved to play their parts in a synchronized fashion that perhaps befits better a twenty first century dramatized screenplay than a first century succession of events which claim at their root a historical dimension.

Jaubert's suggestion that the account in Mark appears to have undergone some kind of compression has been echoed by some form critics, who point to the evidence of 'telescoping' of events in the Gospels.¹⁵⁰ Such 'telescoping', it is alleged, is founded on the principle of 'contemporary historiography', which focuses on the dramatic portrayal of the event, Jesus' Passion in this case, rather than on an orderly recollection of the exact sequence of events.¹⁵¹ Thus, the *short chronology* is the result of compressing and reduction of events for a rhetorical purpose, rather than a true reflection of the actual sequence. Its aim is catechesis, not historical recording.¹⁵² A close examination of the Gospel accounts, independent of any calendrical issues, appears to confirm Jaubert's conclusions. The texts themselves do suggest a long chronology.¹⁵³

More importantly, the three-day chronology allows for the regulations of the *Mishnah* tractate concerning trials in capital cases to be met (*m. Sanh.* 4:1).¹⁵⁴ As already alluded to, this legislation insists that in cases

¹⁵⁰ M. Black, "Arrest and Trial", extends T.W. Manson's thesis of 'telescoping' in Mark's account of Holy Week, and identifies traces of compression in the Synoptics' Passion Narrative. E. Trocmé, *The Formation of the Gospel According to Mark* (trans. SPCK; London: SPCK, 1975), 234 note 2, supports the view that the way the Passion story was collated in Mark is an indicator consistent with the proposition of a Tuesday evening Last Supper. See also Ellis, *op. cit.*, 250.

¹⁵¹ Cf. Black, *op. cit.*, 25. In this perspective, the portrayal of a nocturnal trial of Jesus heightens significantly the whole dynamic surrounding the denial of Peter.

¹⁵² For an opposite view, see P. Benoit, "Le procès de Jésus," *ExeTh* 1 (1961a): 260, who rejects the 'blocage des perspectives' and the 'lois de compression et réduction des analogues' argued by Jaubert. See below.

¹⁵³ Cf. Vogt, "Lumière nouvelle"; N. Walker, "Pauses in the Passion Story and Their Significance for Chronology," *NovT* 6 (1963a): 16–19; Ruckstuhl, *op. cit.*, 35–55.

¹⁵⁴ Vogt, "Lumière nouvelle," 418–9, sees in the three-day chronology a solution to the 'casse-tête' concerning the deliberations of the Sanhedrin. See also Mann, *op. cit.*, 452; N. Walker, "Yet Another Look at the Passion Chronology," *NovT* 6 (1963b): 286–89, argues against J. Blinzler, "Das Synedrium von Jerusalem und die Strafprozessordnung der Mishna," *ZNW* 52 (1961): 54–65, that in Roman Herodian times, the Sadducees had to follow the more influential Pharisees in judicial matters; Ruckstuhl, *op. cit.*, 41–5; Brown, *New Testament Essays*, 212, with the reservation that no evidence exists to suggest that the mishnaic legislation in this matter was enforced at Jesus' time; Ellis, *op. cit.*, 250. In "Les séances du Sanhédrin et les récits de la passion," *RHR* 166 (1964): 143–69, and "Les séances du Sanhédrin et les récits de la passion," *RHR* 167 (1965): 1–33, Jaubert revisited the question of the trial of Jesus and augmented the case for the importance of the Mishnaic regulation in the case of Jesus' trial. She concludes that a legal Jewish trial is simply impossible

of capital punishment, a trial cannot be held on the eve of a festival, and therefore could neither be held on Nisan 14 nor on Nisan 15. Further, deliberations and verdict cannot occur on the same day. The verdict must be delivered, and the sentence carried out, on the day *following* the day of the trial. It must be stressed again at this point that Christian authors never accused the Jewish authorities of illegal judicial proceedings in Jesus' trial.¹⁵⁵ If the *Mishnah* regulation was in effect, the delivery of the verdict could take place only on Thursday morning, and the first session of the Sanhedrin on Wednesday morning. In any case, traces of a tradition of an earlier supper and subsequent arrest have been found in John 13:1 Πρὸ δὲ τῆς ἑορτῆ τοῦ πάσχα.¹⁵⁶ Further, in John 18:28, Jesus is taken to Pilate at dawn, and therefore the early morning session could not have taken place at the same time. This alone points to an at-least-two-day chronology in John.¹⁵⁷

The long chronology dispenses with the difficulties raised by the Thursday evening supper that, a) the Fourth Gospel *and* the Synoptic Gospels cannot all be correct *a priori*; b) all the events can hardly fit in one night; and c) it is highly improbable that all participants, from the Priests to Pilate, the soldiers and the mob, all acted in a well orchestrated and synchronized manner.¹⁵⁸ In any case, it is almost incomprehensible that the Tuesday night tradition could have grown out of the Gospel accounts.¹⁵⁹ The opposite development, however, makes sense in the light of the principle of telescoping of contemporary historiography. An original Tuesday evening supper, a Passover, was shifted to the night before Jesus' death. The Tuesday evening tradition would appear to be more antique than the Thursday evening tradition.¹⁶⁰

Lastly, scholars have credited Jaubert for strengthening the case for calendrical confusion at the time of Jesus.¹⁶¹ Vogt proposed reconstruction

in the short chronology, while to surrender entirely the historicity of the Sanhedrin legal trial is equally impossible.

¹⁵⁵ Vogt, "Lumière nouvelle," 418–9. See also P. Winter, G. Vermes, and T.A. Burkill, eds, *On the Trial of Jesus* (SJ 1; Berlin: De Gruyter, 1961).

¹⁵⁶ Black, *op. cit.*, 26ff.

¹⁵⁷ Ruckstuhl, *op. cit.*, 50–1.

¹⁵⁸ N. Walker, "Concerning the Jaubertian Chronology of the Passion," *NovT* 3 (1959): 317–20.

¹⁵⁹ A. Gilmore, "The Date and Significance of the Last Supper," *SJT* 3 (1961): esp. 266.

¹⁶⁰ A. Jaubert has shown the antiquity of the Tuesday tradition in subsequent publications. Cf. "Lavement Des Pieds"; "Discussion Patristique"; Jaubert, "Le mercredi où Jésus fut livré".

¹⁶¹ O'Flynn, *op. cit.*, 62; L. Morris, *The Gospel According to John* (London: Marshall, Morgan and Scott, 1971), 784. J. Nolland, *Luke* (WBC 35a; Dallas, Texas: Word Books, 1993), 1024, regards Jaubert's thesis as the best-defended calendrical solution 'by far'.

of the calendar.¹⁶² He concluded that, allowing for a computation of the official Lunar Calendar on a three year cycle with a one day plus remainder, the adjustment would bring the official celebration of Passover during the same week as the “sectarian” Passover, a day later than the “sectarian” Tuesday evening celebration in the first year, i.e., Wednesday evening; two days in the fourth year, i.e., Thursday evening; and three days in the seventh year, i.e., Friday evening. The data of the Gospel would thus reflect the calendar of the seventh year, and would strongly support Jaubert’s thesis.¹⁶³ In this perspective on the social and religious background to the events surrounding Jesus’ ministry and death and resurrection, the existence of a group of more orthodox Jews who followed an alternative calendar and celebrated Passover earlier could make “a deviation from the official timetable by Jesus somewhat more probable.”¹⁶⁴ Several scholars are in favor, rightly we think, of pursuing the avenue of two conflicting calendars to explain the discrepancies.¹⁶⁵

3.3.2. *Objections to Jaubert’s Thesis*

Not all scholars accepted in full, or in part, the new chronology. Jaubert’s premise that the Gospel accounts reflected a “blocages des perspectives” and, therefore, had been under the influence of a law of “compréhension et réduction des analogues” was disputed, among others, by Benoit.¹⁶⁶ The latter pointed out that chronology mattered for early catechesis, and for this reason preferred to see in the Gospels an objective memory. For him, the only problem with the Synoptic Gospels’ tradition is that it gave the Last Supper a Passover dimension that it never really had because of its anticipatory character.¹⁶⁷ But to speak of “gauchissement” is, to say the

¹⁶² E. Vogt, “Antiquum kalendarium sacerdotale,” *Bib* 36 (1955): 403 ff.

¹⁶³ Mann, *op. cit.*, 447.

¹⁶⁴ Although Marshall, *Last Supper and Lord’s Supper*, 74, does not pursue this line, but favours the approach taken by those scholars who consider the Johannine chronology to be right. See also Marshall, *Luke*, 790.

¹⁶⁵ C.H. Dodd, *Historical Tradition of the Fourth Gospel* (Cambridge: Cambridge University Press, 1963), 111 note 2, with a preference for the Billerbeck approach; Morris, *op. cit.*, 785; Ellis, *op. cit.*, 249–50; Nolland, *op. cit.*, 1024–5; Nodet and Taylor, *Origins of Christianity*, 88; B. Witherington III, *The Gospel of Mark. A Socio-Rhetorical Commentary* (Grand Rapids, MI: Eerdmans, 2001), 371.

¹⁶⁶ Benoit, “Le procès de Jésus”. *Idem*: “Jésus devant le Sanhédrin,” *ExeTh* 1 (1961b): 290–311; “Le procès de Jésus selon J. Blinzler et P. Demann,” *ExeTh* 1 (1961c): 312–14; *Passion et résurrection du Seigneur* (Paris: Éditions du Cerf, 1966).

¹⁶⁷ Benoit, “Le procès de Jésus,” 260: “le seule gauchissement de la tradition synoptique aura été de donner un caractère pleinement pascal à ce qui n’a pu être en réalité qu’une évocation anticipée de la Pâque du lendemain.” A more recent, and admittedly more

least, an understatement. It is hard to believe that Jewish eyewitnesses could have made such a mistake as to confuse the eve of Passover with the festival itself.¹⁶⁸ In the tradition, the memory of the meal as a Passover

elaborate, formulation of the view that the Passover characteristics of Jesus' last supper in the Synoptic Gospels accounts are the result of later additions, and therefore that Jesus' last supper was not a Jewish Passover meal, is articulated by Meier, *op. cit.*, 395 ff, and endorsed in part by Pope Benedict XVI, in his *Jesus of Nazareth: Holy Week*, 111 ff. Whereas Meier argues in favour of later additions in the markan passion narrative by the author or by a redactor [Meier assumes Markan Priority], Pope Benedict, following a hermeneutic of faith and history, proposes that Jesus celebrated *his* Passover with the disciple, as a *fulfillment* of the old Jewish Passover. For the Pope, this was not the traditional Jewish Passover but Jesus' Passover. The Pope writes: "We have to ask, though, what Jesus' Last Supper actually was. And how did it acquire its undoubtedly early attribution of Passover character? The answer given by Meier is astonishingly simple and in many respects convincing: Jesus knew that he was about to die. He knew that he would not be able to eat the Passover again. Fully aware of this, he invited his disciples to a Last Supper of a very special kind, one that followed no specific Jewish ritual but, rather, constituted his farewell; during the meal he gave them something new: he gave them himself as the true Lamb and thereby instituted *his* Passover." On the premise that Luke 22:15–16 is an indication that Jesus did not eat the Jewish Passover with his disciples, the Pope continues: "One thing emerges clearly from the entire tradition: essentially, this farewell meal was not the old Passover, but the new one, which Jesus accomplished in this context. Even though the meal that Jesus shared with the Twelve was not a Passover meal according to the ritual prescriptions of Judaism, nevertheless, in retrospect, the inner connection of the whole event with Jesus' death and Resurrection stood out clearly. It was Jesus' Passover. And in this sense he both did and did not celebrate the Passover: the old rituals could not be carried out—when their time came, Jesus had already died. But he had given himself, and thus he had truly celebrated the Passover with them. The old was not abolished; it was simply brought to its full meaning." See Benedict XVI, *op. cit.*, 111 ff. If this is so, it is surprising to find that an important and noteworthy early adept of the Johannine chronology in the tradition such as Irenaeus of Lyons fails to acknowledge the proposed distinction between the Jewish Passover and the last Passover celebrated by Jesus. The disciple of Polycarp, who himself was a disciple of the fourth evangelist, observes in a passage that follows immediately after a passage already quoted above and concerned with the refutation of those who held that Jesus died in the twelfth month, that Jesus came three times to Jerusalem during his public ministry to celebrate the Passover: "... going up from Bethany to Jerusalem, he there ate the Passover, and suffered on the day following. Now, that these three occasions of the Passover are not included within one year, every person whatever must acknowledge. And that the special month in which the Passover was celebrated, and in which also the Lord suffered, was not the twelfth, but the first, those men who boast that they know all things, if they know not this, may learn it from Moses" (*Haer.* II 22, 23). There appears to be no question for Irenaeus, in his adoption of the Johannine chronology, that the third Passover Jesus ate in Jerusalem during his public ministry was, just like the first and the second, the Passover of Moses (the institution of which is recounted in Exod 12), and not an anticipated Passover or a fulfillment of the Passover before the Jewish Passover.

¹⁶⁸ Cf. A.M. Jaubert, "Jésus et le calendrier de Qumrân," *NTS* 7 (1961–62): 29, where she states: "On ne peut admettre que des témoins oculaires Juifs aient confondu la veille de la Pâque avec la Pâque elle-même. . . la nuit de la Pâque dans sa solennité même n'est pas une nuit interchangeable."

celebration was such that it could not be changed, even in the context of a catechesis to the Gentiles.¹⁶⁹

Benoit's failure, and with him that of all the scholars who accept the Gospel chronology of Jesus' Passion *prima facie*, is not to allow for any development of the different traditions. Such developments *did* occur, as is witnessed, for example, in Epiphanius' resistance against the alteration concerning the hour of the crucifixion in John's Gospel from the third to the sixth hour.¹⁷⁰ Leaving aside momentarily the question of the original language in which the Gospel of John was written, it is unwise, in the view of the example above, to assume uncritically that the Gospel Passion Narratives record the objective, original tradition with regard to the chronology of the events. The short chronology raises many difficulties, not least that of the quasi-impossibility to fit all the events in a mere twelve hours. Further, the traces of "telescoping" identified in the Synoptic Gospels cannot be discarded lightly. Although the last week of Jesus' ministry, as portrayed in Mark, appears to have lasted just that, it is highly probable that the evangelist has compressed events which in reality may well have occurred over a period of several months.¹⁷¹ Confirmation of this can be deduced from John's Gospel, which implies a two-year + chronology for Jesus' ministry, while the Synoptic Gospels may simply portray a one year ministry of Jesus.

It is of no surprise, therefore, to note that the first main objection raised against the long chronology is its apparent questioning of the Gospel accounts: the texts are unambiguous in suggesting that the supper and arrest took place the night before Jesus was executed.¹⁷² But this position obviously depends on the assumption that the Gospels are faithful to the

¹⁶⁹ Jaubert, "Jésus et le calendrier de Qumrân," 29.

¹⁷⁰ Cf. Ruckstuhl, *op. cit.*, 46–8. For further discussion on the hour of the crucifixion, see: Torrey, *op. cit.*, 248–9, where the author, assuming an Aramaic writing of the Gospel, suggests that the alteration from 3 to 6 is due to a confusion between the letter *gimel*, sign for the numeral 3, and the letter *waw*, sign for the numeral 6. N. Walker, "The Dating of the Last Supper," *JQR* 47 (1957): 293–95, proposes against Torrey that John of Ephesus is using an Asiatic reckoning of twelve hours from midnight to mid-day, the 6th hour being the time of condemnation, and the 9th hour the time of crucifixion. This proposition, however, fails to account for the discrepancies between the different Johannine manuscripts as testified by Epiphanius.

¹⁷¹ See above. On the formation of the Gospel of Mark, see Trocmé, *op. cit.*

¹⁷² Cf. Benoit, "Le procès de Jésus," 260; Morris, *op. cit.*, 783–4; W.L. Lane, *The Gospel According to Mark* (The New London Commentary on the New Testament; London: Marshall, Morgan and Scott, 1974), 498–9 note 33; France, "Chronologie," 12; Beckwith, *Calendar and Chronology*, 296; Brown, *Death of the Messiah*, 1366; D.L. Bock, *Luke 9:51—24:53* (Grand Rapids, MI: Baker Books, 1996), 1957–8; Nodet and Taylor, *Origins of Christianity*, 215.

original chronology, a conclusion that cannot be substantiated beyond doubt, as we have seen, by the internal evidence and by the testimony of some of the Fathers. It is also argued that the short chronology allows enough time for the events of Jesus' Passion to take place.¹⁷³ Those who take this position underestimate the basic discrepancies between the Gospel accounts regarding the events that took place between the Last Supper and the crucifixion of Jesus. These scholars have to cram into a short period of time *all* the events, and somehow hope for the best. Alternatively, they must favor one account at the expense of the other(s), too high a price to pay, whether one follows a hermeneutic of faith, or a hermeneutic of suspicion. From a historical perspective, how can one be absolutely certain that those events, recorded by the discarded account(s), and which are not mentioned in the (arbitrarily) favored one, are pure fiction and did not take place? It may be wiser to assume that the sum of all the events recorded in the different Passion Narratives is somewhat closer to the original picture.¹⁷⁴

Nevertheless, there are difficulties with some aspects of Jaubert's chronology. First, her dating of the anointing at Bethany is dubious, and has rightly been rejected by scholars.¹⁷⁵ The time indication in Mark 14: 1–2 "After two days" does not refer to the anointing itself, but to the plot of the Jewish authorities against Jesus.¹⁷⁶ Further, while the anointing in John precedes Palm Sunday, it comes after it in the Synoptic tradition.¹⁷⁷ It seems, therefore, that this passage is preferably viewed as an insert in this context, a point subsequently accepted by Jaubert.¹⁷⁸ Second, there is the question of the dream of Pilate's wife. This recollection could possibly have been borrowed from popular tradition.¹⁷⁹ Although this tradition

¹⁷³ Benoit, "Le procès de Jésus," 260; Brown, *New Testament Essays*, 215; Barrett, op. cit., 50–1. O' Brien, op. cit., 122, argues that, in the light of the regulations governing the closure of the city gates, "Jesus could not leave the city, for Temple or city gate, only access points to or from the city, was unavailable to them on Tuesday night in their chronological reconstruction of a paschal meal." O'Brien suggests that his own thesis allows an extra four hours to the non-Lukan narrative.

¹⁷⁴ Already Walker, "Pauses in the Passion," 16; Walker, "Yet Another Look," 288.

¹⁷⁵ Benoit, "Le procès de Jésus," 259; Brown, *New Testament Essays*, 215; *idem* Brown, *Death of the Messiah*, 1366.

¹⁷⁶ Benoit, "Le procès de Jésus," 259.

¹⁷⁷ Brown, *New Testament Essays*, 216. Although, if the anointing is setting Jesus apart as messiah, as suggested by Capper, "Church as New Covenant", John's sequence is better.

¹⁷⁸ Cf. Jaubert, "Le mercredi où Jésus fut livré," 155 note 2. Jaubert suggests that the "two days" have a liturgical meaning connected to the arrest, and recalling "Jesus handed over." See "Le mercredi où Jésus fut livré," 159.

¹⁷⁹ Brown, *Death of the Messiah*, 1368.

may well have historical basis, it is difficult to use the event to support the long chronology, even if it makes sense in this context. In any case, this item is not totally incompatible with the short chronology, as Pilate may well have known about Jesus before Friday morning.¹⁸⁰

The trial of Jesus raises a number of questions for scholars.¹⁸¹ Chiefly among these is the lack of evidence to suggest that the Mishnaic code concerning trials was in effect during Jesus' time.¹⁸² However, a lack of evidence cannot be used as conclusive proof against a hypothesis, especially if this hypothesis renders the accounts more intelligible. A discussion in the light of more recent scholarship in this field is in order. We noted above the argument of the internal evidence not supporting the long chronology, and a possible response to this argument. Here again, it will be necessary to study the Gospel accounts closely to assert whether they rule out any indication of a long chronology.

Scholars advance two further objections. First, there is the lack of evidence (internal or otherwise) that Jesus followed, in the course of his ministry, an essene calendar. This argument is two-dimensional. On the one hand it is pointed out that the links between Jesus and the Essenes were very few.¹⁸³ On the other hand, there appears to be no evidence that Jesus followed the old "solar" calendar for Passover or any other festivals.¹⁸⁴ The combination of these would negate the hypothesis that Jesus followed a different calendar. However, as we have pointed out, the lack of evidence,

¹⁸⁰ John 18: 12 is consonant with this view. Cf. Brown, *New Testament Essays*, 215–6.

¹⁸¹ It is beyond the scope of this section to list all the questions linked to the trial of Jesus. On the question of Jesus' trial, see S.G.F. Brandon, "The Trial Of Jesus: The Enigma of the First Good Friday," *HT* 16 (1966): 251–59; H.H. Cohn, *The Trial and Death of Jesus* (London: Weidenfeld and Nicolson, 1972); Winter, Vermes, and Burkill, op. cit.

¹⁸² Ogg, "Review of Jaubert," 158; Brown, *New Testament Essays*, 215. For discussions on the trial of Jesus, see: J. Blinzler, *Der Prozess Jesu* (3rd ed.; Regensburg, 1960), 95–115; Benoit, "Le procès de Jésus"; Benoit, "Sanhédrin"; Benoit, "Le procès de Jésus selon J. Blinzler et P. Demann"; Winter, Vermes, and Burkill, op. cit.; Dodd, op. cit., 88–96, on the antiquity of the tradition of Jesus' appearance before Annas as being independent from the Synoptic traditions; "Séances Du Sanhédrin II"; Cohn, op. cit.

¹⁸³ Mann, op. cit., 451; Jeremias, *Eucharistic Words*, 24–5; Hoehner, "Chronological Aspects," 254; Marshall, *Last Supper and Lord's Supper*, 73; Beckwith, *Calendar and Chronology*, 291.

¹⁸⁴ O'Flynn, op. cit., 62–3; Léon-Dufour, op. cit., 494; Benoit, "Le procès de Jésus," 261; Brown, *New Testament Essays*, 216; *idem*, Brown, *Death of the Messiah*, 1368; Hoehner, "Chronological Aspects," 254; Lane, op. cit., 498–9 note 33; Barrett, op. cit., 50–1; France, "Chronologie," 13; J.A. Fitzmyer, *The Gospel According to Luke* (AB 28; New York: Doubleday, 1985a), 1381; Carson, *John*, 457; B.D. Smith, op. cit., 30; Bock, op. cit., 1957–8. More recently, Benedict XVI, op. cit., 111, who states "Jesus is unlikely to have used a calendar associated principally with Qumran."

though it may weaken a hypothesis, does not render it redundant without a negative demonstration. Certain hints of an essene link to Jesus have emerged in recent scholarship.¹⁸⁵ Second, there is the question of the essene Passover coinciding with the official festival. Beckwith argues that without proof of intercalation of the 364-day calendar, such occurrence is purely an assumption.¹⁸⁶ Other scholars point to the scarcity of the two celebrations falling on the same week.¹⁸⁷ In any case, there are no (explicit) references to an essene Passover in the Gospels.¹⁸⁸

To the above must be added the question whether Jesus would have had a lamb for the ritual if he celebrated the festival at a non-official date. It is argued that his followers could simply not have had at their disposal a ritually sacrificed lamb for the simple reason that the Temple authorities would not have allowed any such practice at any other time than the official date.¹⁸⁹ Carmignac, in an erudite article, has outlined how it *could* have been possible for Jesus and his disciples to obtain a ritually sacrificed lamb acceptable for the celebration of Passover.¹⁹⁰ An alternative would be to posit a Passover rite independent from the Temple, which may or may not contain the slaughter of the Passover lamb.¹⁹¹ There existed after all at Jesus' time a Passover rite without Passover sacrifice, e.g. for those away

¹⁸⁵ See for example Capper, "With the Oldest Monks.,"; B. Pixner, "An Essene Quarter on Mount Zion?" in *Studia Hierosolymitana in onore di P. Bellarmino Bagatti* (Studi Archeologici, Studium Biblicum Franciscanum, Collectio Major 22; Jerusalem: Franciscan Printing Press, 1976), 245–84; "Das Essenerquartier in Jerusalem und dessen Einfluss auf die Urkirche," *Das Heilige Land* 113 (1981): 3–14; B. Pixner, "The History of the 'Essene Gate' Area," *ZDPV* 105 (1989): 96–104; B. Pixner, *Wege des Messias und Stätten der Urkirche* (ed. R. Riesner; Giessen / Basel: Brunnen, 1994); *With Jesus in Jerusalem: His First and Last Days in Judaea* (Rosh Pinna: Corazin, 1996); B. Pixner, "Nazoreans on Mount Zion (Jerusalem)," in *Le Judéo-christianisme dans tous ses états. Actes du Colloque de Jérusalem, 6–10 Juillet 1998* (ed. S.C. Mimouni; LD; Paris: Cerf, 2001), 289–316; R. Riesner, "Das Jerusalemer Essenerquartier und die Urgemeinde," in *Aufstieg und Niedergang der Römischen Welt* 26.2 (eds H. Temporini and W. Haase; Berlin: De Gruyter, 1995), 1175–1222.

¹⁸⁶ Cf. Beckwith, *Calendar and Chronology*, 292.

¹⁸⁷ E.g. J. Milik suggests that an essene Passover preceding a sabbath Passover would occur only once every thirty years. Cf. Mann, op. cit., 453.

¹⁸⁸ Cf. R. Schnackenburg, *The Gospel According to St. John, Vol. 1–3* (London: Burns and Oates, 1982), 35, vol. 1.

¹⁸⁹ Cf. Ogg, "Review of Jaubert," 156; Morris, op. cit., 785; Lane, op. cit., 498–9 note 33; Marshall, *Last Supper and Lord's Supper*, 73; Carson, *John*, 457; Brown, *Death of the Messiah*, 1368; Bock, op. cit., 1957–8.

¹⁹⁰ Cf. J. Carmignac, "Comment Jésus et ses contemporains pouvaient-ils célébrer la Pâque à une date non-officielle?" *RevQ* 5 (1964–66): 59–79. In the case of a sacrifice of well being (Lev 3:1–17), a sacrifice of first-born (Exod 13:2, 12–13), and a sacrifice of second tithe (Lev 27:30–33), the ritual regulations which applied to the Passover sacrifice could be met.

¹⁹¹ Cf. Jaubert, "Jésus et le calendrier de Qumrân," 22 ff.

from Jerusalem, although it is unlikely that this was the one followed by Jesus and his followers, as these were in Jerusalem. Philo may bring some light on the argument. He describes the whole nation as taking on the nature of a Priest at the time of Passover, each one performing its own sacrifices.¹⁹²

It may be conceivable that there existed at the time of Jesus some circumstances in which he and his followers could have celebrated Passover without a Passover lamb, or in which his followers could have attained a ritually sacrificed lamb from the Temple at a different date from the official one, or in which Jesus and his followers did not depend on the Temple to obtain a Passover victim, but sacrificed their own. Whichever of these may be the most likely, the argument that suggests that Jesus could not have celebrated Passover at any other time than the official date is not as strong as scholars have suggested. Jaubert has demonstrated that the *Jubilees* calendar fixed Passover on a Wednesday (starting Tuesday evening). It remains to assert the part this calendar played in the overall context of Jesus' first century Palestine. As acknowledged by Jaubert, ignorance of calendrical practices in Palestinian Judaism in the first century CE remains perhaps the greatest stumbling block to considering the long chronology of the passion of Jesus.¹⁹³

4. Conclusions

Jaubert's suggestion that the discrepancies contained in the Passion narratives could be explained by the fact that Jesus shared his last meal with his disciples on the occasion of the Passover according to the essene 364-day calendar has generated much comments, endorsements and rejections. Some fifty years on, aspects of her thesis remain significant, and Jaubert certainly made an extraordinary contribution to the scholarly world of Second Temple Judaism and early Christianity.¹⁹⁴

¹⁹² Cf. Philo, *De Vita Mosis* 2. 224.

¹⁹³ Jaubert, "Le mercredi où Jésus fut livré," 164: "Si certains hésitent encore, c'est à cause de notre ignorance des conditions de calendrier en Palestine au temps de Jésus."

¹⁹⁴ See, for instance, Lourié, Petit, and Orlov, *op. cit.*, with contributions by B. Lourié, "Annie Jaubert et les études de l'Orient Chrétien;" *idem* "Les quatre jours 'de l'intervalle': une modification néotestamentaire et chrétienne du calendrier de 364 jours;" F. I. Andersen, "The Sun in 2 Enoch;" R. Bauckham, "The Honorarium of Adam and the Chronology of the Passion;" R.T. Beckwith, "The Significance of the 364-day calendar for the Old Testament Canon;" G. Dorival, "Un seul ou deux jeunes hommes riches?"; M. van Esbroeck, "L'année régulière de 364 jours dans la contreverse au sujet de Chalcédoine;" A. Orlov,

However, the above overview of the Jaubertian theory, and the appraisal of the responses it generated from critics, allows one to draw a preliminary conclusion: the 364-day calendar expounded in the book of *Jubilees* started the year on a Wednesday and allowed festival days to fall every year on the same day of the week. No serious scholar now contests the findings of Annie Jaubert in this field, and no serious scholar now doubts that there was, in Second Temple Judaism, a 364-day year tradition within which Passover was celebrated on a Tuesday evening.¹⁹⁵

The overview implies an immediate second conclusion, however, that is: unless it can be evidenced that the 364-day calendar was kept in line with the true solar year and with the seasons, by means of intercalation or otherwise, any tentative suggestion that it was followed in first century Palestine, let alone that it approximately coincided with the official calendar in use at the time of Jesus to the extent that in the year of his death the official Passover fell three days after the *Jubilees* Passover, will remain in the realm of hypothesis. This was the crux of the matter for most of the objectors to Jaubert's thesis, and a point the author acknowledged, as pointed out in the introduction to the present chapter.

Therefore, it is with this particular issue that the present study is concerned. The second part of the thesis investigates the cycle of festivals and the seasons in the main sources of Second Temple Judaism, paying particular attention to those sources which depict the festival of Passover in various calendrical reckonings. Other festivals are also considered. This enquiry begins with the cycle of festivals in the Hebrew Bible.

"Vested with Adam's Glory: Moses as the Luminous Counterpart of Adam in the Dead Sea Scrolls and in the Macarian Homilies;" W.D. Ray, "The Use of Evidence from Patristic and Liturgical Sources in Annie Jaubert's *The Date of the Last Supper*;" J.C. VanderKam, "Jaubert's Solution to the Passion Chronology."

¹⁹⁵ See for instance the short description of the calendar in Benedict XVI, op. cit., 109–10.

PART II

FESTIVALS AND THE SEASONS IN THE SOURCES

CHAPTER TWO

THE CYCLE OF FESTIVALS AND THE SEASONS IN THE HEBREW BIBLE

1. *Introduction*

In Part I it was argued that only a strong indication that cultic calendars in Second Temple Judaism—either according to the lunisolar reckoning or following the 364-day tradition—were aligned with the agricultural cycle could positively support Jaubert's contention that Jesus celebrated his last Passover with his disciples on a Tuesday evening, following the 364-day cultic calendar evidenced at Qumran and related literature. Our investigation, therefore, will start with key documents of the period: the Hebrew Scriptures (chapter 2), the book of *Jubilees* (chapter 3), relevant documents from the Qumran caves (chapter 4), and other documents spanning the millennium or so from the erection of the First Temple to the destruction of the Second Temple ca. 70 CE (chapter 5).

The present chapter is concerned with Hebrew Scriptures, in which the cycle of festivals is presented in several places.¹ Some passages of Scriptures provide theological reasons for the celebration of festivals. Usually these are based on the commemoration of arguably the defining historical moments of biblical Israel: the Exodus from Egypt and the subsequent giving of the Torah and wilderness wanderings. More specifically, these are remembered on the occasions of the festivals of Pesah/Passover, Shavu'ot/Weeks, and Sukkot/Tabernacles.² Those passages of Scriptures also often

¹ Exodus (12; 13; 23; 34); Leviticus (23); Numbers (9; 28; 29; 33); Deuteronomy (16; 31). Calendrical references also appear in Ezekiel (45), while the Chronicler relates the occasions of kings Hezekiah and Josiah and their celebrations of the Passover (2 Chr 30; 35).

² Additional festivals and days of fast were later added to the Jewish festal calendar, also in connection with historical events. The festival of Hanukkah, a prominent festival for some contemporary Jews, commemorates the rededication of the Jerusalem Temple in 164 BCE by Judas Maccabaeus and his followers three years after the desecration of the sacred place by Antiochus IV Epiphanes occurred, an event not recorded in the Hebrew Bible. The festival of Purim recalls the intervention of Queen Esther and the foiling of Haman's plot to eliminate the Jews. This festival is not recorded either in the written Torah, and the event, rather than a commanded festival, is all that the Book of Esther tells of. There are other holy days which punctuate the calendar: sequentially these are (1) Rosh Hashanah on 1 Tishri, (2) Yom Kippur on 10 Tishri, (3) Hoshanah Rabbah, Shemini

locate the festivals within the agricultural seasons. Scholars have for a long time suspected a dependence of the biblical festivals on more ancient agricultural festivals.³ The sabbath, the seventh day, is the first mentioned in the list of the “appointed festivals of the Lord.”⁴ This must be kept at the forefront of our investigation as it will appear as a *lietmotiv* throughout the sources.⁵ Each of the sources gives to the sabbath a special

Atzeret on 21 and 22 Tishri, (4) Simhat Torah on 23 Tishri, (5) Hanukkah on 24 Kislev to 1 Tevet, (6) Fast of 10 Tevet, (7) Tu B'Shevat on 15 Shevat, (8) Fast of Esther on 13 Adar, (9) festival of Purim on 14 Adar, (10) Shushan Purim on 15 Adar, (11) Lag B'Omer on 18 Iyar, (12) Fast of 17 Tammuz, (13) Ninth of Av. See, for an initial introduction on the Jewish calendar, E. Zuesse, “Calendar of Judaism,” in *Encyclopaedia Judaica, Vol I: A-I* (eds J. Neusner, A.J. Avery-Peck, and W.S. Green; New York: Continuum, 1999), 35–50. This particular treatment departs from most other general presentations in that it considers the festal calendar as a whole, as opposed to each fast or festival individually, arguing that “each festival, its timing and meaning determined by the specific religion and world view, plays a particular role in the annual experience of the worshiper” (p. 33).

³ “Festivals,” in *Encyclopaedia Judaica Vol 6* (Encyclopaedia Judaica Jerusalem; Jerusalem: Keter Publishing House Ltd, 1971), 1237–46. Various attempts were made to trace the roots of the festival of Purim amid Babylonian festivals. See the discussion in C.A. Moore, *Esther: Introduction, Translation and Notes* (AB 7B; New York: Doubleday, 1971), xxi–xxv. Based on a dating of Hebrew Esther ca. 400–300 BCE, “both the story of Esther and the festival of Purim can likewise be traced to within a few generations of the events upon which they are purportedly based”, as recently argued by J.E. Burns, “The Special Purim and the Reception of the Book of Esther in the Hellenistic and Early Roman Eras,” *JSJ* 37 (2006): 5. For a discussion of the dating of Hebrew Esther, see Burns, op. cit., 5 note 9.

⁴ Lev 23:2–3.

⁵ The constraints of the present undertaking do not allow for a thorough investigation of the sabbath. Scholars readily comment on the difficulty posed by the question of the origins of the sabbath, especially in its pre-exilic state. See, for instance, B.S. Childs, *Exodus* (London: SCM, 1974), 412–7 and bibliography. M. Albani, *Astronomie und Schöpfungsglaube: Untersuchungen zum astronomischen Henochbuch* (WMANT 68; Neukirchen-Vluyn: Neukirchener Verlag, 1994), 278–9, reviews the arguments concerning the origins of the sabbath. He locates its emergence as a *sign* between Yahweh and the people of Israel at the time of the Exile (cf. Ez 20:12). In pre-exilic times the sabbath was most likely associated with a specific stage of the lunar cycle. J. Meinhold, “Die Entstehung des Sabbat,” *ZAW* 29 (1909): 81–112, argued that it was celebrated at the time of the full moon. T. Veijola, “Die Propheten und das Alter des Sabbatgebots,” in *Prophet und Prophetenbuchs: FS für O. Kaiser zum 65. Geburtstag* (eds V. Fritz, et al.; BZAW 185; Berlin: De Gruyter, 1989), 246ff, accepts Meinhold's theory. From the same author, see also T. Veijola, “The History of Passover in the Light of Deuteronomy 16,1–8,” *ZABR* 2 (1996): 53–75. For an interpretation of the sabbath as a weekly event dissociated from the lunar phases before the exilic period, see J. Hehn, *Siebenzahl und Sabbat bei den Babyloniern und im AT* (Leipzig: Hinrichsche Buchhandlung, 1907). Albani, *Astronomie*, 279, dismisses Hehn's theory on the grounds that it requires a calendrical technical knowledge that simply was not available in pre-exilic Israel but could only be accessed once the Israelites were in contact with Babylonian astronomy. See also M. Albani, “Zur Rekonstruktion eines verdrängten Konzepts: Der 364-Tage-Kalender in der gegenwärtigen Forschung,” in *Studien zum Jubiläenbuch* (eds M. Albani, J. Frey, and A. Lange; TSAJ 65; Tübingen: Mohr (Paul Siebeck), 1997), 79–126. Also, U. Glessmer, “Explizite Aussagen über kalendrische Konflikte im Jubiläenbuch:

significance, of which only the interpretation varies. This is perhaps the first major clue available to scholars of a calendrical framework based on the number seven.⁶

The task of presenting a succinct picture of the cycle of festivals and festivals in the Hebrew scriptures is not an easy one.⁷ It is complicated by the fact that the sources do not present a uniform picture as to the duration of particular festivals, their exact dating in the year, the reasons

Jan 6,22–32,33–38,” in *Studien zum Jubiläenbuch* (eds M. Albani, J. Frey, and A. Lange; TSAJ 65; Tübingen: Mohr (Siebeck), 1997), 127–64. For a brief discussion of the meaning of **שבת** and **חדש** before the Exile, see U. Glessmer and K. Koch, “Neumonds-Neujahr oder Vollmonds-Neujahr? Zu spätsäraelitischen Kalender—Theologien,” in *Antikes Judentum und frühes Christentum: Festschrift für Hartmut Stegemann zum 65. Geburtstag* (eds B. Kollmann, W. Reinbold, and A. Steudel; BZNW 97; Berlin: De Gruyter, 1999), 125–6. They locate the change in meaning (and practice) not during the Exile and Babylonian influence, but rather to Josiah’s reform, which took place sometime in the later part of the seventh century BCE. A recent treatment of the origins of the Sabbath in French can be found in M. Bauks, “Le shabbat: un temple dans le temps,” *ETR* 77 (2002): 473–90. For a more skeptical approach as to what assertions of sabbath practice can be deduced from the Hebrew Scriptures, see H.A. McKay, *Sabbath and Synagogue: The Question of Sabbath Worship in Ancient Judaism* (RGRW 122; Leiden: Brill, 1994).

⁶ S. Stern, *Time and Process in Ancient Judaism* (Oxford: The Littmann Library of Jewish Civilization, 2003), 64, identifies in the seven-day cycle a re-enactment of the creation of the world. He states: “the only cycle in the Jewish calendar that is not based on natural phenomena is that of the sabbath or the seven day week. At first sight, the seven day week is completely abstract and arbitrary, and could thus be interpreted as representative of the cyclical of time... However, the arbitrary nature of the seven-day cycle does not relate it, *ipso facto*, to an abstract concept of ‘pure time’. The week is primarily a socially (or religiously) sanctioned cycle of human activity, defined by the cyclical recurrence of the sabbath... it is evident already from Genesis 1 that the observance of a sequence of seven days culminating with the sabbath represents a cyclical re-enactment of the creation of the world.”

⁷ Much ink has been poured on the subject of calendrical issues in the Bible and related fields, reflecting the constant state of flux this particular field has been subjected to, from the discovery of the *Geniza* texts to the more recent parallels that have been drawn between Jewish texts and Babylonian Cuneiform texts. It is not possible to include here a comprehensive list. The reader may find the following starting bibliography on this subject helpful: S. Zeitlin, “Notes relatives au calendrier juif,” *REJ* 89 (1930): 349–54; Lewy and Lewy, op. cit; S. Talmon, “Yom Hakkippurim in the Habakkuk Scroll,” *Bib* 32 (1951): 549–63; Jaubert, “Calendrier des Jubilés: origines”; Jaubert, “Calendrier des Jubilés: jours liturgiques”; J.B. Segal, “Intercalation”; van Goudoever, op. cit; B.Z. Wacholder, “The Calendar of Sabbatical Cycles During the Second Temple and the Early Rabbinic Period,” *HUCA* 44 (1973): 153–96; S. Talmon, *King, Cult and Calendar in Ancient Israel* (Jerusalem: Magnes, 1986); M.E. Cohen, *The Cultic Calendars of the Ancient Near East* (Bethesda: CDL, 1993); J.C. VanderKam, *Calendars in the DSS*; S. Stern, *Calendar and Community. A History of the Jewish Calendar Second Century BCE—Tenth Century CE* (Oxford: Oxford University Press, 2001); M. Chyutin, *The Role of the Solar and Lunar Calendars in the Redaction of the Psalms* (Studies in the Bible and Early Christianity 54; Lewiston, NY: Mellen, 2002); J. Bendov and W. Horowitz, “The Babylonian Lunar Three in Calendrical Scrolls from Qumran,” *ZA* 95 (2005): 104–20.

for which they are celebrated or even the manner in which they must be observed. The actual duration of the calendar is nowhere explicitly stated in the Masoretic Text of the Hebrew Bible.⁸ The same can be said of the Septuagint version. This of course does not mean that this was always the case. Scholars have become more and more attuned to the *organic* character of the biblical (and non-biblical for that matter) text.⁹ Technical aspects of the calendar(s) have been discussed and differing day reckonings, month reckonings, dates for celebrations, and so on, have been identified, or rather evidenced, in different Jewish sources of the Second Temple period.¹⁰ The same can be said of the duration of the month, or

⁸ R. Elior, "Ancient Jewish Calendars: A Response," *Aleph* 5 (2005): 293–302.

⁹ See for instance the recent work by Ulrich. Cf. E. Ulrich, "The Dead Sea Scrolls and the Biblical Text," in *The Dead Sea Scrolls After Fifty Years: A Comprehensive Assessment*. Vol. 1 (eds Peter W. Flint and James C. VanderKam; Leiden: Brill, 1998), 79–100. Recently Burns, Burns, op. cit., 6 note 13, stated: "the notion of a fixed Jewish scriptural canon can be reliably traced to the age of the Maccabees, when we find testimony to a collection of writings stored in the Temple (2 Macc 2:13–14)." For further discussion on the question of the Hebrew canon, see A. van der Kooij, "The Canonization of Ancient Books Kept in the Temple in Jerusalem," in *Canonization and Decanonization. Papers Presented to the International Conference of the Leiden Institute for the Study of Religions (LISOR), Held at Leiden 9–10 January 1997* (eds A. van der Kooij and K. van der Toorn; SHR 82; Leiden: Brill, 1998), 17–40; A. van der Kooij, "Canonization of Ancient Hebrew Books and Hasmonean Politics," in *The Biblical Canons* (eds J.M. Auwers and H.J. de Jonge; Leuven: University Press, 2003), 27–38.

¹⁰ The debate is not new and is perhaps far from being resolved. Key studies in this field are R.A. Parker, *The Calendars of Ancient Egypt* (SAOC 26; Chicago: The Oriental Institute of the University of Chicago, 1950); J.W. McKay, "The Date of Passover and Its Significance," *ZAW* 84 (1972); J.A. Wagenaar, "Passover and the First Day of the Festival of Unleavened Bread in the Priestly Festival Calendar," *VT* 54 (2004): 250–68; J.C. VanderKam, op. cit; R.T. Beckwith, "The Essene Calendar and the Moon: A Reconsideration," *RevQ* 15 (1992): 457–66; Glessmer and Koch, op. cit; Bauks, op. cit; B.Z. Wacholder and B.D. Weisberg, "Visibility of the New Moon in Cuneiform and Rabbinic Sources," *HUCA* 42 (1971): 227–42; K. van der Toorn, *Family Religion in Babylonia, Syria and Israel. Continuity and Change in the Forms of Religious Life* (SHCANE 7; Leiden: Brill, 1996); W.W. Hallo, "New Moons and Sabbaths," *HUCA* 43 (1977): 1–13; E. Auerbach, "Die Feste im alten Israel," *VT* 8 (1958). The debate on the beginning of the day at sunrise or at sunset has been equally rich: P.J. Hae-wood, "The Beginning of the Jewish Day," *JQR* 36 (1945–46): 393–401; Zeitlin, "Beginning of the Jewish Day"; R. de Vaux, *Les Institutions de L'Ancien Testament I–II* (Paris, 1958–60); J.M. Baumgarten, "The Beginning of the Day in the Calendar of Jubilees," *JBL* 77 (1958): 355–60; H.R. Stroes, "Does the Day Begin in the Evening or Morning? Some Biblical Observations," *VT* 16 (1966): 460–75; Beckwith, "The Day in Biblical Thought"; S. Talmon, "The Reckoning of the Day in the Biblical and the Early Post-Biblical Periods: From Morning or From Evening?" in *The Bible in the Light of Its Interpreters. Sarah Kamin Memorial Volume* (ed. S. Japhet; Jerusalem: Magnes, 1994), 73–108; J.C. VanderKam, *Calendars in the DSS*; S. Talmon, "Calendars and Mishmarot," in *EDSS* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 108–17; J. Milgrom, *Leviticus 23–27: A New Translation with Introduction and Commentary* (AB 3b; New York: Doubleday, 2001). A most recent example of scholarly debate on calendrical issues pertaining to the Second Temple period

indeed the time when the month was reckoned to start. No one unified picture of a single Jewish calendar is presented across the spectrum of the sources from the Second Temple period. That is one point upon which most scholars agree. From this perspective it is perhaps preferable, although inevitably more cumbersome, to present the sources and draw some tentative conclusions as to the festival calendars presented in Hebrew Scriptures.

2. *The Pentateuch*

Many passages in the various books constituting the Pentateuch expound to some extent the fasts and festivals of biblical Israel. The most complete presentation of the cycle of festivals is offered from a Priestly perspective in Lev 23.¹¹ It is perhaps not the oldest list available, but it is the most complete list of biblical festivals, and for this reason will here be followed.¹²

is found in *Aleph, Historical Studies in Science and Judaism* 5 (2005), where S. Stern (pp. 287–92) reviews unfavorably R. Elijor's *The Three Temples. On the Emergence of Jewish Mysticism* (Oxford: Littmann Library of Jewish Civilization, 2003), and where Elijor offers a response to Stern's comments.

¹¹ It is here acknowledged that several sources, emanating from different schools, are present in the Pentateuch alone. These are commonly known as J (Yahwist—using the Tetragrammaton), E (Elohlist—using the name Elohim), P (Priestly Code), and D ([part of] the book of Deuteronomy). The H source (Holiness Code) is also posited by some scholars, and is generally thought to be a part of P. Chapter 23 of Leviticus, which is here followed, belongs to this Holiness Code. For a recent inquiry into the composition of Lev 23, see I. Knohl, *The Sanctuary of Silence: The Priestly Torah and the Holiness School* (Minneapolis: Fortress, 1995), 9–14 and 46–55, for whom, on page 14, “the examination of the structure of Leviticus 23 shows the priority of PT [Priestly Torah] over HS [Holiness School].”

There is no space to consider the scholarly discussions on issues pertaining to the various source theories. Recent contributions on the subject can be found in J. Milgrom, “Priestly (P) Source,” in *ABD, Vol. 5* (ed. D.N. Freedman; New York: Doubleday, 1992), 453–61; Knohl, *op. cit.*, especially the introduction for a clear summary; J. Blenkinsopp, “An Assessment of the Alleged Pre-Exilic Date of the Priestly Material of the Pentateuch,” *ZAW* 108 (1996): 495–518; J. Milgrom, “The Antiquity of the Priestly Source: A Reply to Joseph Blenkinsopp,” *ZAW* 111 (1999): 10–22.

In his recent book, J. Klawans, *Purity, Sacrifice, and the Temple: Symbolism and Supersessionism in Ancient Judaism* (Oxford: Oxford University Press, 2006), esp. 50–1, dismisses as “evolutionists” the hypotheses put forward by Milgrom and by Knohl that seek to date P and H in a sequential manner.

For our purpose it is enough to accept a *terminus ad quem* of ca. 500 BCE for the dating of H (and P). The point is that during the Second Temple Period the Pentateuchal sources considered here were mostly already set.

¹² For a brief discussion of the other lists of biblical festivals in the Pentateuch, see J.A. Wagenaar, “Post-Exilic Calendar Innovations. The First Month of the Year and the Date of Passover and the Festival of Unleavened Bread,” *ZAW* 115 (2003): esp. 3–8. Knohl argues

2.1. *The Festival of Passover*

[I]n the first month, on the fourteenth day of the month, at twilight, there shall be a Passover-offering to the Lord. (Lev 23:5)

Whereas in other passages the command to celebrate the festival of Passover is associated with the memory of the liberation from slavery in Egypt (e.g. Exod 12:1, 11, 27; Num 9:1–3; Deut 16:1), no theological reason for the festival of Passover is given in Lev 23:5.¹³ Rather, the text states that the festival shall be celebrated “in the first month, on the fourteenth day of the month, at twilight . . .” (Lev 23:5).¹⁴ This is corroborated by the records of King Josiah’s Passover (2 Chr 35:1); and it is also on this date that Ezekiel reckons the Passover to be kept (45:21). Furthermore, an indirect reference to the fourteenth of the first month is also understood in the law concerning the second Passover, which is to be kept “in the second month on the fourteenth day, at twilight . . .” (Num 9:11).¹⁵

In the Pentateuch the date of Passover is also indicated by reference to the month of Abib—אֲבִיב. In Deut 16:1 the command is to “observe

that the Priestly source, that is PT (Priestly Torah) and HS (Holiness School) combined, “is the result of literary activity spanning the course of several centuries,” from before the destruction of the First Temple (Cf. Kaufmann), to the period of the Exile and return. See Knohl, *op. cit.*, 200–1 and notes. This places the material from Leviticus 23 at the very latest in the sixth to fifth centuries BCE.

¹³ For a thorough treatment of the festival of passover and its developments up to the first century CE, see J.B. Segal, *Hebrew Passover*; J. Halbe, “Passa-Massot im deuteronomischen Festkalender. Komposition, Entstehung und Programm von Dtn 16:1–8,” *ZAW* 87 (1975): 147–68; B.M. Bokser, *The Origins of the Seder, the Passover Rite, and Early Rabbinic Judaism* (Berkeley, CA: University of California, 1984); R. Albertz, *A History of the Israelite Religion in the Old Testament Period* (Translated by J. Bowden; London: SCM, 1994); S. Bar-On, “Zur literarkritischen Analyse von Ex. 12,21–27,” *ZAW* 107 (1995): 18–30; Veijola, “Passover”; J.C. Gertz, “Die Passa-Massot-Ordnung im deuteronomischen Festkalender,” in *Das Deuteronomium und seine Querbeziehungen* (ed. T. Veijola; SFEG 62; Göttingen, 1996), 56–80; Wagenaar, “Post-Exilic Calendar Innovations”; T. Prosic, *The Development and Symbolism of Passover Until 70 CE* (JSOTSup 414; London: T. & T. Clark, 2004); Wagenaar, “Passover”.

¹⁴ This dating of the festival of Passover on the fourteenth day of the first month is also recorded in Num 9:5 “they kept the Passover in the first month, on the fourteenth day of the month, at twilight”; Num 28:16 “On the fourteenth day of the first month there shall be a Passover-offering to the Lord.” The dating in Num 33:3 implicitly indicates a dating of Passover on the fourteenth day of the first month: “They set out from Rameses in the first month, on the fifteenth day of the first month; on the day after the Passover the Israelites went out boldly . . .”

¹⁵ It is in the second month that King Hezekiah invited the whole of Israel and Judah to keep the Passover (2 Chr 30:2), “they slaughtered the Passover lamb on the fourteenth day of the second month” (2 Chr 30:15).

the month of Abib by keeping the Passover of the Lord”—שָׁמֹר אֶת־חֹדֶשׁ לִיהוָה וְעֵשִׂיתָ פֶּסַח לִיהוָה—(cf. Exod 13:4). The day in Abib is identified only through the reference to the “time of day when you departed from Egypt” (Deut 16:6). There is no doubt for the author, however, that this month is the beginning of the year: “This month shall mark for you the beginning of months; it shall be the first month of the year for you” (Exod 12:2). This festival is to be celebrated on the fourteenth day of the month (Exod 12:6).

Most scholars accept that the reference to חֹדֶשׁ הָאָבִיב (Exod 23:15; 34:18), is to a Canaanite month-name, and an indication of the antiquity of the tradition here used.¹⁶ The technical term אָבִיב is interpreted as “month of the green ears,”¹⁷ “ears of corn,”¹⁸ “milky ears of grain,”¹⁹ or as a reference to barley already ripe but soft.²⁰ The above identification of Abib with an ancient Canaanite month has been challenged recently. Wagenaar argues that “the word אָבִיב is in the Old Testament always used in the sense of “ear” referring to “uncut or freshly cut, unprocessed cereal, specifically barley (DCH s.v. אָבִיב; HAL s.v. אָבִיב).”²¹ If this is correct, the *season of ears* would be a better translation of the expression חֹדֶשׁ הָאָבִיב. From the premise that Abib is not a month but a season Wagenaar argues that the festival calendars found in Exod 23:14–19; 34:18–26 and Deut 16:1–17 link the three festivals (Unleavened Bread, Weeks and Tabernacles) to the agricultural season in the same way.²² We will have leisure to return to this.

Additionally, one of the commands for the preparation of the festival is to sacrifice a “lamb without blemish, a year old male” (Exod 12:5).²³ The

¹⁶ Cf. for instance G. von Rad, *Deuteronomy* (OTL; London: SCM, 1964 trans. 1966), 111. Scholars often point out that the term אָבִיב does not occur in extra biblical sources. It is possible that the term אָבִיב survived the period of adoption of the Babylonian calendar and the switch to the use of Babylonian months names, as suggested by L.-J. Bord, “L’adoption du calendrier babylonien au moment de l’Exil,” in *Le Temps et les temps: dans les littératures juives et chrétiennes au tournant de notre ère* (eds Christian Grappe and Jean-Claude Inge-laere; JSJSup 112; Leiden: Brill, 2006), 26.

¹⁷ von Rad, op. cit., 111.

¹⁸ R. de Vaux, *Ancient Israel, I, II* (New York: McGraw-Hill, 1965), 183.

¹⁹ L.H. Ginsberg, *Israelian Heritage* (New York: KTAV Publishing House, 1982), 60.

²⁰ Prosic, op. cit. In a recent article L.-J. Bord notes that “il n’y a aucune autre attestation, en dehors de la Bible, d’un mois portant le nom d’*abib*, et il se pourrait fort bien que ce חֹדֶשׁ הָאָבִיב soit en fait l’appellation de la célébration des épis... soit une fête de la moisson.” See Bord, op. cit., 26.

²¹ Wagenaar, “Post-Exilic Calendar Innovations,” 10.

²² Wagenaar, “Post-Exilic Calendar Innovations,” 11.

²³ In Deut 16:2 the Passover sacrifice may be taken “from the flock and the herd,” while in Ezekiel 45:22 it is a young bull.

latter indication may connect the celebration of the festival to the lambing period, which traditionally takes place early in Spring, although not too much weight must be accorded to this argument. In any case, the dating in the Pentateuch of the Passover to the “month of Abib” suggests a strong connection between the festival, its celebration, and the season of the agricultural cycle during which it occurs.²⁴

2.2. *The Festival of Unleavened Bread*

[A]nd on the fifteenth day of the same month is the festival of Unleavened Bread to the Lord, and for seven days you will eat unleavened bread. (Lev 23:6)

Similarly, the festival of Unleavened Bread takes place in the first month. It starts the day after Passover according to Leviticus, and lasts seven days.²⁵ It is the occasion for remembrance of the start of the exodus (Exod 12:14–20).²⁶ Its close connection to the day “after the sabbath, the day on which you bring the sheaf of the elevation offering” (Lev 23:15), also suggests that the festival of Unleavened Bread was also strongly related to the

²⁴ Wagenaar, “Passover”; “Post-Exilic Calendar Innovations”.

²⁵ Not all sources date this festival separately from Passover. In J.B. Segal, *Hebrew Passover*, 55–77, Segal considers the textual sources for what he terms the “post-exodus Pesah” (55–60), and the “post-exodus Passover week (Maṣṣoth Festival)” (60–65). He observes: “two documents, however, integrate the Pesah and the Maṣṣoth week closely in date. One, in the Exodus narrative, gives the latter the date and time of the Pesah, the other, Deut 16, treats the Pesah as the opening ceremony of the Maṣṣoth week” (61). There is no scope in the confines of the present study to review all the issues surrounding the origins and developments of the festivals of Passover and Unleavened Bread. Many scholars have done much very good work on the subject. For a start, the author just mentioned offers a good survey of scholarship in the chapter titled “Modern Theories on the Origins and Early Development of the passover,” J.B. Segal, *Hebrew Passover*, 78–133, and ventures to suggest (114–54) that the festival marked the occasion for a new year festival, “the festival of the people” (154). The scholars mentioned in note 18 above have also contributed to the discussion.

²⁶ For some interesting remarks on the relationship between passover and unleavened bread, see Bar-On, *op. cit.* Notably, Bar-On suggests (p. 26) that Exod 12:18 presupposes a switch of day reckoning: “Andererseits suggeriert der redaktionelle Anschluß von V.14 an die Passa-Gesetze (welchen in der Jetztgestalt des Textes ihr ursprünglicher Abschluß fehlt!) und der auf Bekanntes zurückweisende Demonstrativ וְהָיָה הַיּוֹם הַזֶּה eine Kontinuität, in welcher die Mazzot als Erinnerungszeichen des Passa-Rituals der Auszugsnacht erscheinen. Diese von der Redaktion angedeutete Gleichsetzung des Passa-Tages mit dem Auszugstag wird in V.18f. durch einen kalendarischen Kunstgriff ausdrücklich vollzogen: בְּרֵאשֵׁן בְּאַרְבַּעָה עָשָׂר יוֹם לַחֹדֶשׁ בְּעֶרֶב תֹּאכְלוּ מִצַּת עַד יוֹם הָאֶחָד וְעֶשְׂרִים לַחֹדֶשׁ בְּעֶרֶב. שְׁבַעַת יָמִים... ”

Da sich der Datumswechsel des neuen Tages hier bereits an seinem vorangehenden Abend vollzieht, fällt die Zeit des Passa-Rituals auf den ersten tag des Mazzot-Fests” (26).

agricultural season. This day is designated in Deuteronomy as “the time the sickle is first put to the standing grain” (Deut 16:9).

2.3. *Festival of the Raising of the Sheaf*

You shall bring the sheaf of the first fruits of your harvest to the priest . . . on the day after the sabbath the priest shall raise it. (Lev 23:10–11)

This is the first festival directly connected to the cycle of agriculture. As such it is the first of the two biblical first fruits festivals.²⁷ There is no date explicitly given for the festival, only the time indicator מִמָּחֳרַת הַשַּׁבָּת—“on the day after the sabbath.” The immediate context in which the passage is situated, between the legislation regulating the festivals of Passover and Unleavened Bread (Lev 23:4–8) immediately prior to it, and the command to count seven weeks from “the day after the sabbath” (Lev 23:15), until the day after the seventh sabbath, the day when “you shall present an offering of new grain to the LORD”, indicates that the festival took place in the first month. There is evidence from 2 Sam 21:9 that on this instance at least this first grain festival coincided with the barley harvest, and was the occasion for the offering of first fruit.²⁸ As will become evident, different strands of Judaism interpreted the expression *morrow after the sabbath* differently, and disagreed on the date the Sheaf should be raised. Consequently, these groups also celebrated the festival of Shavu’ot on different dates. The vagueness of the dating of the Sheaf offering in the Priestly code, and in the entire Pentateuch, was the root for strong and deep calendrical disputes attested by later non-biblical sources such as *Jubilees*, and which caused deep schisms in Judaism.²⁹

2.4. *The Festival of Weeks*

And from the day after the sabbath, from the day on which you bring the sheaf of the elevation offering, you shall count off seven weeks . . . then you shall present an offering of new grain to the Lord. (Lev 23:15–16)

This very day marks the time from which seven complete weeks must be counted, after which the festival of Weeks (Shavu’ot) is celebrated. This

²⁷ R.T. Beckwith, “The Temple Scroll and Its Calendar: Their Character and Purpose,” *RevQ* 18 (1997): 16.

²⁸ Biblical evidence comes from 2 Sam 21:9 “They were put to death in the first days of harvest, at the beginning of the barley harvest”. Cf. Beckwith, “Temple Scroll,” 16.

²⁹ Echoes of such Second Temple disputes were kept in the *Mishnah*.

festival is the occasion for remembrance that “you were a slave in Egypt” (Deut 16:12), by an offering of new grain to the Lord (Lev 23:16), the “first fruits of the wheat harvest” (Exod 34:22b). The reference to the first fruit of the grain harvest suggests a direct correlation between the festival of weeks and the agricultural season. This is the second first fruits festival in the bible.³⁰

2.5. *The Festival of Tabernacles*

On the fifteenth day of this seventh month, and lasting seven days, there shall be the festival of booths to the Lord. (Lev 23:34)

Like the festivals of Passover, Unleavened Bread and Weeks, the festival of Tabernacles is cloaked with historical memory of the exodus from Egypt. The fifteenth day of the seventh month is to be the occasion when the “citizens of Israel shall live in booths, so that your generations may know that I made the people of Israel live in booths when I brought them out of the land of Egypt” (Lev 23: 42–3). And, as is the case for the above mentioned festivals, the festival of Tabernacles is also connected to the agricultural year (Lev 23:39–40):

The fifteenth day of the seventh month, when you have gathered in the produce of the land, you shall keep the festival of the Lord . . . on the first day you shall take the fruit of majestic trees, branches of palm trees, boughs of leafy trees, and willows of the brook; and you shall rejoice before the Lord your God for seven days.

Elsewhere in the Pentateuch the festival’s first day marks the “festival of ingathering at the turn of the year” (Exod 34:22c), “when you have gathered the produce from your threshing floor and your wine-press” (Deut 16:13b). The reference to the produce of the wine-press is self-explanatory and need not be explained further. The reference to the “produce of your threshing floor” is, however, not explicit. It is doubtful whether it relates to any of the four kinds mentioned in Lev 23:39–40.³¹ These are fruits from the trees, and would not have necessitated any treatment on the threshing floor. Rather, references to *first fruits* in the Pentateuch are linked to

³⁰ Beckwith, “Temple Scroll,” 16.

³¹ “On the first day you shall take the fruit of majestic trees, branches of palm trees, boughs of leafy trees, and willows of the brook, and you shall rejoice before the Lord your God.”

corn, oil and wine.³² Of those, the last two were hand-picked and then pressed in order to retrieve the oil and the grape juice necessary to make the wine. The corn, however, needed to be beaten in order to separate the grain from the ear, and this was most likely done on the threshing floor. All these indicate a very close connection between the cycle of festivals and the rhythm of nature through the agricultural year. There is no doubt that the different authors agreed that the festival of Tabernacles was connected to the agricultural time of the year when the first fruit of wine was gathered.

2.6. *Other Festivals in the Pentateuch*

As already observed, the most complete and detailed festal calendars appear in Lev 23 and in Num 28–9.³³ In addition to those treated above, Lev 23 adds a “day of complete rest, a holy convocation commemorated with trumpet blasts” on the first day of the seventh month (Lev 23:24). The tenth day of the seventh month is the Day of Atonement, a holy convocation on the occasion of which work is prohibited (Lev 23:27ff.). The addition “on the ninth day of the month at evening, from evening to evening” (v. 32b) is probably a later scribal addition, reflecting a change of day reckoning from sunrise-to-sunrise to sunset-to-sunset. The second Passover, not mentioned above, only appears in Numbers (Chapter 9:1–14).³⁴

2.7. *Festivals and the Seasons in the Pentateuch: Summary*

The Pentateuch, and more specifically the Priestly material contained in Leviticus 23, gives key indications as to the dating of the festivals, as it was legislated for as early as, or as late as, the sixth to fifth centuries BCE.

³² Beckwith, “Temple Scroll,” 16, observes that corn, oil and wine are mentioned together in relation to first fruits in Deut 7:13; 11:14; 12:17; 14:23; 28:51. They are assigned to the priests in Num 18:12; Deut 18:4 and 2 Chr 31:5, in the context of the tithe. See also 2 Chr 2:15; 32:28; Neh 5:11; 10:39; 13:5, 12; Jer 31:12; Hos 2:8; Joel 2:19, 24.

³³ J.C. VanderKam, “Festivals,” in *EDSS, Vol. 1* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 290.

³⁴ According to Knohl, *op. cit.*, 21, both the reference to the equality between the Israelite and the stranger (Num 9:14), and the concept of “bearing one’s sin” (Num 9:13)—**הַטְּאֵוֹ הַיְהוָה אֲשֶׁר הָאָדָם אֲשֶׁר**—are indications that the law concerning the second Passover finds its origin in HS (Holiness School). It will be argued in Chapter 3 below that the author of *Jubilees* modelled its account of the Passover (*Jub.* 49) on Num 9:1–14. However, in the *Jubilees*’ passage the author voluntarily deleted any reference to the second Passover, ignoring the reference to strangers, while retaining the notion of “bearing one’s sin” (cf. *Jub.* 49:9 “That man will bear responsibility for his own sin”).

The connection between the festivals and the exodus from Egypt in the text has been exemplified. Indeed, it is most probably the case that this yearly recurring cycle of festivals, with its commemoration of God's action in history on behalf of his people Israel, serves the purpose of constantly renewing the covenantal aspect of the relationship between God and his people. Thus the boundaries between sacred and profane are once again reaffirmed, and God's people repositioned within these boundaries.³⁵ The role of the festival calendar is significant, and the connections that exist between the cycle of festivals and the seasons were outlined. At key periods in the year the first fruits of the land are offered to the Creator. In the first month, on the fifteenth day of the month, at the festival of Unleavened Bread, the first fruits of the barley harvest are offered. Seven weeks later, counting from the *morrow after the sabbath* (Lev 23:15), the festival of Weeks is the occasion for the offering of the first fruits of the wheat harvest. Lastly, on the fifteenth day of the seventh month, the festival of Tabernacles takes place, at the time "when you have gathered the produce from your threshing floor and your wine-press" (Deut 16:13b). This cycle of first fruit offering is essential to the actualization of time and space every year through the festival cycle. Indeed, the agricultural cycle and the cycle of festivals are intrinsically connected.

3. *Festivals and the Seasons in Other Writings of the Hebrew Bible*

Particularly relevant to the present thesis are passages from Ezek 45; 1 Kgs 12; 2 Chr 30–31; and some short passages from Ezra-Nehemiah.

3.1. *Ezekiel 45*

In the book of the prophet Ezekiel the cycle of festivals is presented in 45:18–25. Passover is dated, as in the festival calendars of the Pentateuch, to the fourteenth day of the first month (Ezek 45:21). It differs from other sources in that it describes the festival as "a feast of seven days," during which unleavened bread must be eaten. One other festival is mentioned, although not named. It is to take place on the fifteenth day of the seventh month (45:25).

³⁵ On the significance of this, see M. Eliade, *The Sacred and the Profane: The Nature of Religion* (Translated by W.R. Trask; New York: Harcourt, 1959), 68–113.

3.2. 1 Kings 12—*King Jeroboam's Calendar innovation in Israel*

Related in this chapter are the events that led to the division of the monarchy in northern Israel, sometime in the tenth century BCE. Throughout history, for many kingdoms and ruling regimes, unpopularity stemmed from an excessive burden of taxation placed upon their subjects by the ruling class. It is no exception in the instance under consideration. Representatives of the northern tribes of Israel asked King Rehoboam, son of King Solomon, in exchange for their service, to “lighten . . . this heavy yoke that he [Solomon] placed on us” (1 Kgs 12:4). The young King disregarded the advice his father’s elders gave him and, in an attempt to assert further his own authority, followed the advice of his friends, who had proposed to “discipline them [the people] with scorpions” (1 Kgs 12:6–12). The people’s reaction was swift: they stoned Rehoboam’s taskmaster, Adoram, to death (1 Kgs 12:18). The northern tribes’ rebellion became a full blown secession when they “made [Jeroboam] king over all Israel” (1 Kgs 12:20). The new Israelite regime moved swiftly to reinstate Shechem as its capital city, partly to counteract Jerusalem’s centralized administration, and partly to reinstate northern Israelite customs and practices that had been outlawed by the centralization.³⁶ The secession became complete when King Jeroboam abolished the requirements to sacrifice in the Jerusalem Temple (1 Kgs 12:26–27), built two golden calves and placed them in the sanctuaries at Bethel and Dan (1 Kgs 12:28–29).

Thus King Jeroboam reverted what King David had outlawed by establishing centralized worship in Jerusalem, namely the right to sacrifice in various holy places. The newly established Northern Kingdom now had its own political power house and its own, reestablished, centers for worship. It only needed to reestablish its own priestly class and its own, distinctive cultic calendar. King Jeroboam addressed the former by appointing “his own priests for the high places” (1 Kgs 12:31; 13:33; cf. 2 Chr 11:15).³⁷ As to the calendar, the first book of Kings tells us that he “appointed a festival on the fifteenth day of the eighth month like the festival that was in Judah . . . in the month that he alone had prescribed” (12:32, 33).³⁸

³⁶ S. Talmon, “Divergences in Calendar Reckoning in Ephraim and Judah,” *VT* 8 (1958): 42, 57. Also Z. Zevit, *The Religions of Ancient Israel: A Synthesis of Parallaxic Approaches* (London: Continuum, 2001), 449.

³⁷ For a discussion of the motivation behind Jeroboam’s action, and an identification of the priestly clan favoured by Jeroboam, see B. Halpern, “Levitic Participation in the Reform Cult of Jeroboam I,” *JBL* 95 (1976): 31–42, with bibliographical notes.

³⁸ A recent discussion on the specific issue of the calendar in 1 Kgs 12, see Zevit, *op. cit.*, esp. 449–51.

When reading this passage one must be aware of the *Judaeen* spin adopted by the writer/editor. Jeroboam's action in setting a golden calf in Bethel and the other in Dan for the people to worship as the "gods who brought you up out of the land of Egypt," is declared sinful (1 Kgs 12:30). The same is decreed of Jeroboam's action to appoint priests to himself (1 Kgs 12:13; 13:34). It is not clear, however, whether this condemnation extends to Jeroboam's tampering with the cultic calendar and devising a festival to himself on the fifteenth day of the eighth month. In this regard Shemaryahu Talmon correctly remarked that:

[I]t must be stressed . . . that dissenters, political and religious alike, will as a rule not proclaim themselves innovators. They will, on the contrary, always try to appear as champions of time-honoured ideas and institutions that, according to their contentions, have been desecrated by the leaders of the community from which they strive to detach themselves. Jeroboam is no exception to the rule.³⁹

What the writer/editor of the book of Kings (Dtr) presented as an unwelcome innovation on the part of Jeroboam I, King of Israel, is perhaps better understood as a return to a long established cultic practice in northern Israel. The postponement of the festival of Tabernacles by one month in the north may have represented a realignment of the cultic cycle with the seasons in the Northern Kingdom, alignment that had been broken when the cult was unified and centralized in Jerusalem under the impetus of David and Solomon. As suggested by Talmon, the possible explanation for Jeroboam's action is the existence of two calendars, one in the Northern Kingdom, and one in Judah, both remnants of the times when festivals were not celebrated at the same times across Palestine, reflecting the climatic diversity between the northern part of the kingdom and Judaea in the south.⁴⁰ This would explain the month difference between the north and the south for the festival. It does not mean necessarily that Jeroboam's action marked a departure from the Torah legislation, at least with

³⁹ Talmon, "Divergences," 50.

⁴⁰ Talmon, "Divergences," 56–7. See especially note 2 page 56, where Talmon gives data which indicate that some varieties of grapes ripen in the North approximately a month later than they do in the Shephelah region (in Judaea). This difference is also characteristic of the olive harvest. See also S. Talmon, "What's in a Calendar? Calendar Conformity, Calendar Controversy and Calendar Reform in Ancient and Medieval Judaism," in *Seeking Out the Wisdom of the Ancients: Essays Offered to Honor Michael V. Fox on the Occasion of His Sixty-Fifth Birthday* (eds R.L. Troxel, K.G. Friedel, and D.R. Magary; Winona Lake, IN: Eisenbrauns, 2005), 451–60, for the most recent treatment of the passage by Talmon with, however, no significant addition to his earlier treatment.

regards to the cultic calendar. It is perhaps more likely that the “eighth month” was in fact the seventh month for Jeroboam, i.e., in the north, and the eighth for the writer, i.e., in the south. The two calendars were so closely attached to the seasons that the month difference for harvests was reflected in the year reckoning, the south starting its year roughly one month before the north. The writer (Dtr) used his own calendar reckoning to cast aspersions on Jeroboam. This hypothesis seems to be supported by the fact that the completion of Solomon’s Temple is given two conflicting dates: 1 Kgs 6:38 states “in the month of Bul, which is the eighth month, the house was finished in all its parts.” while 1 Kgs 8:2 suggests that the dedication of the Temple took place “at the festival in the month Ethanim, which is the seventh month.”⁴¹ The festival in the seventh month is the

⁴¹ Talmon, “Divergences,” 57. Also, Zevit, op. cit., 450. Zevit’s hypothesis is that “when the summer months of Tammuz and Ab . . . appeared to be too early *vis-à-vis* the observable weather pattern and the maturity of developing fruit, Jeroboam, or any other empowered northerner, could decree the intercalation of an extra month . . . most likely this is what Jeroboam did.” What Zevit suggests happened is not very convincing, and appears to be in contradiction with a possible reality. First, the hypothesis that the agricultural cycle in the northern part of the former kingdom ran approximately one month behind that of Judea must be taken seriously. To suggest that Jeroboam intercalated in the circumstances described by Zevit is to suggest that Jeroboam aligned the calendar in the north to that of the south. This is not quite consonant with the postulated desire to “restitute cultic practices in the north to what they had been prior to the establishment of Jerusalem as the major center of the united monarchy” (449). Further, Zevit assumes that the calendrical reckoning is indeed lunar and necessitated regular intercalation. There is no clear indication that this was the case at the pre-exilic time Zevit postulates for the composition of the present passage. Cf. Zevit, op. cit., 441, where Zevit follows F.M. Cross’s hypothesis of “Dtr” a pre-exilic historian whose work concluded at 2 Kgs 23:25 and Dtr^a an exilic historian-editor who added material about the fall of Judah after the death of Josiah and who glossed earlier material in the book in order to make it relevant to the people for whom he wrote.” Zevit continues: “there is no evidence in the Deuteronomistic history pointing to a post-exilic, i.e., Persian, milieu . . .” This last statement contradicts Zevit’s premise that Jeroboam intercalated a (lunar) month. Adoption by Israel of a lunar reckoning of the year is more likely to be a post-exilic innovation in Israel. Cf. for instance the short discussion in Stern, *Calendar and Community*, 2, who rightly indicates that “the calendar of Israel in the pre-exilic period remains, among scholars, an extremely controversial issue,” illustrating the point with the possible inference from the Flood narratives (Gen 7–8) that the biblical year was lunar, and exceptionally solar on this occasion, and finding possible support for a solar biblical reckoning in Num 10:11, with a specific lunar reckoning on this occasion. Stern’s suggestion that Jeroboam’s action may point to a lunar reckoning in biblical times must be rejected on the basis of the arguments leveled above against Zevit. In contrast to Stern, who references Beckwith, *Calendar and Chronology*, 101–4, as an example of a scholar who refuted Jaubert’s hypothesis that the biblical calendar was solar, we may quote the very same scholar who recently endorsed Annie Jaubert’s theory on the biblical origins of the 364-day calendar of the Book of *Jubilees*. Although this is not quite a volt-face on the part of the author, it does highlight a key question: how could a solar calendar of 364 days, with no dated events on the sabbath day, have been derived from a lunar calendar, which by

festival of Tabernacles. Clearly the same event is given two dates which, interestingly, differ by one month, and possibly reflect the differing calendars in Israel and in Judah.

3.3. 2 Chronicles 30 & 31—King Hezekiah's Reform in Judah

The events recorded in 1 Kgs 12 and considered above bear directly on the events surrounding King Hezekiah's Passover in Jerusalem towards the end of the eighth century BCE (2 Chr 30). The Chronicler recounts how "Hezekiah sent word to all Israel and Judah... that they should come to the house of the Lord at Jerusalem, to keep the Passover to the Lord the God of Israel" (v.1), which was to take place בַּחֹדֶשׁ הַשֵּׁנִי—"in the second month" (v.2).⁴² It is not entirely clear why this celebration of Passover should have taken place "in the second month." The text gives a double explanation: a) "the priests had not sanctified themselves in sufficient number," and b) "nor had the people assembled in Jerusalem" (v.3).⁴³ Moreover, there is another difficulty in that the festival of Unleavened Bread also was delayed by a month, a move clearly not sanctioned by the Torah.⁴⁴

definition would have had no regard for the sabbath? Beckwith's dating to the mid-third century BCE for the origins of a 364-day calendar has been convincingly refuted. See the chapter on the antiquity of this calendar. Without such late dating, one is faced with the only option that the 364-day year was actually older than first accepted by many scholars. Therefore, Jaubert's initial hypothesis of an *Old Priestly Calendar*—"calendrier sacerdotal ancien"—governing biblical Israel remains the more likely position. Beckwith's arguments, derived from his discussion of the earliest Hebrew canon as comprising those books that date events as opposed to the books which name famous people, indirectly support the present position. See R.T. Beckwith, "The Significance of the 364-Day Calendar for the Old Testament Canon," in *L'Église des deux Alliances: Mémoial Annie Jaubert (1912–1980)* (eds B. Lourié, M. Petit, and A. Orlov; OJC 1; Piscataway, NJ: Gorgias Press, 2008), 69–81.

⁴² As shown by J. Milgrom, "Hezekiah's Sacrifices at the Dedication Services of the Purified Temple (2 Chronicles 29:21–26)," in *Biblical and Related Studies Presented to Samuel Hwry* (eds A. Kort and S. Morschauer; Winona Lake, IN: Eisenbrauns, 1985), 159–61, the inclusion of "all Israel" in the passover celebration, and beforehand in the purification rituals (2 Chr 29:21–6) is explained by the huge increase in size of the population of Jerusalem in the wake of the fall of the Northern Kingdom in 721 BCE. This, argues Milgrom (161 n. 12), is supported by the archeological evidence. See also M. Broshi, "The Expansion of Jerusalem in the Reigns of Hezekiah and Manasseh," *IEJ* 24 (1974): 21–26.

⁴³ J. Milgrom, *Numbers במדבר* (The JPS Torah Commentary; Philadelphia: The Jewish Publication Society, 1990), 372, argues that the two reasons invoked for the postponement correspond exactly to those allowed by the law of the second passover (Num 9:10), and suggests that the passage in Num 9 formed the basis for the actions of King Hezekiah.

⁴⁴ As pointed out by Milgrom, "Hezekiah's Sacrifices," 161 note 10; *idem Numbers במדבר*, 372.

Several explanations have been given for this. The first comes from the Rabbis, the Babylonian Talmud records their disapproval of Hezekiah's calendrical action:

Our Rabbis taught: six things King Hezekiah did; in three they [the Sages] agreed with him, and in three they did not agree with him . . . and he intercalated [the month of] Nisan in Nisan, and they did not agree with him. (*b. Pesah* 56a)⁴⁵

This explanation has been echoed in modern scholarship. Segal's position in this regard is illustrative:

Have we any explicit mention of intercalation in the Bible? There is a plausible reference to intercalation in the description of Hezekiah's celebration of the Passover in the second instead of the first month in 2 Chr. 30. So pious a king, it may be asserted, would not have been the first to differ the Passover for one month. The deferment was due, then, to the insertion in that year of an intercalary month, and this postponement by Hezekiah was later adduced as 'historical' evidence for the Passover 'cleanness' regulations of Num. ix.⁴⁶

Although the reference to an intercalation is plausible, the unfolding of the events in 2 Chr 30 and 31 points in another direction. It is highly possible that Hezekiah's actions were motivated by the lure of a return to centralized worship in Jerusalem. The Northern Kingdom's recent demise at the hands of the Assyrians probably resulted in a huge flux of refugees from the north coming towards Jerusalem. Most certainly the Priestly class who could escape deportation by the Assyrians sought refuge with their counterparts in Jerusalem. In this context it is possible that the book of Deuteronomy found its way to the Jerusalem Temple, and its particular stance on the centralization of worship presented Hezekiah with the opportunity to attempt a unification of calendrical practices between

⁴⁵ B.A. Freedman, *Pesahim* (London: The Soncino Press, 1938), 277–8. See also J. Neusner, *The Talmud of Babylonia. An American Translation. Volume IV.C: Pesahim Chapters 4–6* (BJS 283; Atlanta: Scholars Press, 1993), 32. See also *b. Sanh.* 12a: "It once happened that Hezekiah king of Judah declared a leap year because of uncleanness, and then prayed for mercy, for it is written, *for the multitude of the people, even many of Ephraim and Manasseh, Issachar and Zebulun had not cleansed themselves, [12b] yet did they eat the Passover otherwise than it is written, for Hezekiah had prayed for them, saying: May the Lord in his goodness pardon everyone.* R. Simeon said: if the intercalation was actually on the ground of uncleanness, it holds good. Why then did Hezekiah implore divine mercy?—Because only an Adar can be intercalated and he intercalated a Nisan in Nisan. R. Simeon b. Judah said on behalf of R. Simeon, that it was because he had persuaded Israel to celebrate a second passover," in J. Shachter and B.A. Freedman, *Sanhedrin Vol. I* (London: The Soncino Press, 1935).

⁴⁶ J.B. Segal, "Intercalation," 257.

the north and the south.⁴⁷ Hezekiah delayed the Passover in the south by a month, (possibly) invoking the laws of the second Passover (Num 9:11),⁴⁸ and celebrated the Passover in the second month according to the calendrical reckoning in place in Judah. This second month corresponded to the first month in the calendrical reckoning of the former Northern Kingdom. The Passover on this occasion was therefore celebrated at the correct time according to Israel's reckoning, on the fourteenth of the first month; this was in the second month in the Judaeian reckoning.

The narrative states also that "many people came together in Jerusalem to keep the festival of unleavened bread in the second month" (v.13). The date of the start of the festival is not given, only its length is indicated: seven days (v.21), during which they ate "the food of the festival" (v.22). That Passover and Unleavened Bread are understood in 2 Chronicles to coincide is perhaps indicated in the narrative by the insertion (v.15) of the indication that the Passover lamb was slaughtered on the fourteenth day of the month. It is the slaughter of the Passover sacrifice which is dated to the fourteenth of the (second) month, while it is indicated that the assembly "kept the festival of Unleavened Bread with great gladness for seven days" (v.21).

It is difficult to conceive that a great assembly would have gathered in Jerusalem on two occasions that month, especially if the assembly also included the Israelites from the former Northern Kingdom. The assembly is mentioned in connection with the festival of Unleavened Bread (v.13 "many people"), and in connection with the slaughter of the Passover lamb (v.17) and the Passover meal (v.18). In the light of this, it is reasonable to infer that the festivals of Passover and Unleavened Bread took place at the same time, starting on the fourteenth of the month.⁴⁹ It is also reasonable to infer that the singling out of the fourteenth of the month as the date for the Passover sacrifice may point out that the Passover meal took place on the following day, the fifteenth day of the month, in the

⁴⁷ Milgrom, "Hezekiah's Sacrifices," 160. See also J. Milgrom, "Profane Slaughter and a Formulaic Key to the Composition of Deuteronomy," *HUCA* 47 (1976), and J.M. Myers, *II Chronicles: Introduction, Translation and Notes* (AB 13; New York: Doubleday, 1965), 177.

⁴⁸ Alternatively this specific explanation was inserted by the Chronicler as a theological justification for Hezekiah's actions.

⁴⁹ The Passover and Unleavened Bread are mentioned also in the narrative concerning King Josiah. Josiah's Passover was celebrated on the fourteenth day of the first month, the date when the Passover sacrifice was slaughtered (2 Chr 35:1). This was also the occasion for the observance of the festival of Unleavened Bread for seven days (2 Chr 35:17).

evening, at the start of the day. The day reckoning would therefore be the sunset to sunset reckoning.

Importantly, there is, in the narrative concerning King Hezekiah, no explicit mention of the other two pilgrim festivals of Weeks and Tabernacles. There is, however, an indirect reference to them in chapter 31, where the Chronicler expounds the contributions that King Hezekiah gave, from his own possessions for the Temple's daily sacrifices, sabbaths, new moons/start of the months, and appointed festivals, *כַּכְתוּב בְּתוֹרַת יְהוָה*—“as it is written in the law of the Lord” (31:3). Presumably, these included contributions for the festival of Weeks in the third month (Exod 34; Num 28; Deut 16:9–11, 16; cf. 2 Chr 8:13) and for the festival of Tabernacles in the seventh month (Lev 23:34; Deut 16:13, 16; cf. 2 Chr 8:13). It was seen elsewhere that the occurrence of the festival of Weeks in the third month is due to the counting of seven weeks from the “morrow after the sabbath” (Lev 23:15). In the present context, however, the Chronicler is adamant that Passover *and* unleavened bread have taken place in the *second* month according to the Judaeen reckoning. Therefore, the counting of the seven weeks should have started from “the day after the sabbath,” sometime in the second half of the second month, resulting, presumably, in a date sometime in the first half of the fourth month for the festival of Weeks in Judaea.⁵⁰ Whatever the case may be, the text does not mention by name the festivals of Weeks and Tabernacles.

Whether the festival of Weeks was celebrated in the fourth month (Judaeen reckoning) that year is difficult to assert. If it was, it created a problem for the Chronicler as this would have been against the Torah legislation, a state of affairs simply not considered by the Chronicler (cf. 2 Chr 31:3). In the Torah, the counting of the seven weeks from the *morrow after the sabbath* in the first month is simply not affected by the law of the second Passover. Yet, as pointed out above, in this particular case it is not just the Passover that was delayed by a month, but the seven days of Unleavened Bread also. Therefore, the presentation of the Sheaf, an integral part of Unleavened Bread, did not take place in the (Judaeen) first month but was delayed by a month. By knock-on effect, the festival

⁵⁰ If the count started from the sixteenth day of the second month, reflecting the later rabbinic custom, the festival of Shavu'ot took place on the sixth day of the fourth month. If the count started on the “morrow after the sabbath” following the festival of Unleavened Bread, as was the custom among the followers of the Jubilees calendar, the festival of Shavu'ot would have been celebrated on the twelfth day of the fourth month, a Sunday.

of Weeks was also postponed and must have occurred in the (Judaean) fourth month.

The key to the problem is to be retrieved from the narrative of 2 Chr 31:4–7:

⁴[King Hezekiah] commanded the people who lived in Jerusalem to give the portion due to the priests and the Levites, so that they might devote themselves to the Law of the Lord. ⁵As soon as the word spread, the people of Israel gave in abundance the first fruits of grain, wine, oil, honey, and of all the produce of the field; and they brought in abundantly the tithe of everything. ⁶The people of Israel and Judah who lived in the cities of Judah also brought in the tithe of cattle and sheep, and the tithe of the dedicated things that had been consecrated to the Lord their God, and laid them in heaps. ⁷In the third month they began to pile up the heaps, and finished them in the seventh month.

This passage is illuminating on several counts. First, in the context of King Hezekiah's command to the people concerning the tithe of the produce of the land, the Chronicler indicates that "in the third month they began to pile up the heaps, and finished them in the seventh month" (2 Chr 31:7). This tithe, we are told, was brought to the Temple (2 Chr 31:10). The command in the Pentateuch concerning the pilgrim festivals is that the Israelites "shall not come before the Lord empty-handed" (Deut 16:16). Second, it is likely that the mention of the cycle of tithing starting in the third month and ending in the seventh month suggests, or reflects, an agricultural cycle of harvest. But which agricultural cycle has the Chronicler got in mind? Verse 5 indicates that the people of Israel—בְּנֵי־יִשְׂרָאֵל—responded to Hezekiah's command by giving "in abundance the first-fruits of grain, wine, oil, honey, and of all the produce of the field; and they brought in abundance the tithe of everything" (2 Chr 31:5).⁵¹ Note that there is no time indicator here. Verse 6 goes on to stipulate that the people of Israel and Judah—וְיְהוּדָה וְיִשְׂרָאֵל—"who lived in the cities of Judah" also brought the tithe and dedicated things. Verse 7, it is here argued, indicates that the latter did so "in the third month . . . and in the seventh month". The Hebrew text reads: בַּחֹדֶשׁ הַשְּׁלִישִׁי הֵחִלּוּ הָעַמֻּמּוֹת לְיִסּוֹד וּבַחֹדֶשׁ הַשְּׁבִיעִי כָּלוּ וּבְנֵי יִשְׂרָאֵל וְיְהוּדָה הַיּוֹשְׁבִים בְּעָרֵי יְהוּדָה. The verb הֵחִלּוּ—"they began"—in the Perfect third masculine plural form, most probably refers to הַיּוֹשְׁבִים וְיְהוּדָה הַיּוֹשְׁבִים—"the people of Israel and Judah, the ones living in the cities

⁵¹ As pointed out by Milgrom, "Hezekiah's Sacrifices," 159, 2 Chr 29:24 indicates that King Hezekiah desired the whole of Israel, and not Judah only, to become the beneficiary of the sin offering.

of Judah” (verse 6),⁵² and not to the בְּנֵי־יִשְׂרָאֵל of verse 5. This means that the time indicators in verse 7, בַּחֹדֶשׁ הַשְּׁלִישִׁי . . . וּבַחֹדֶשׁ הַשְּׁבִיעִי—“in the third month . . . and in the seventh month”—apply to the וּבְנֵי יִשְׂרָאֵל וְיְהוּדָה הַיּוֹשְׁבִים בְּעָרֵי יְהוּדָה—“the people of Israel and Judah, the ones living in the cities of Judah”, and not to the בְּנֵי־יִשְׂרָאֵל—“people of Israel”, presumably from the former Northern Kingdom. The distinction made by the Chronicler between, on the one hand, בְּנֵי־יִשְׂרָאֵל (verse 5), and וּבְנֵי יִשְׂרָאֵל וְיְהוּדָה הַיּוֹשְׁבִים בְּעָרֵי יְהוּדָה on the other hand, together with the time indicators applied to the latter, are significant.

This is the key to solve the calendrical problem posed by the passage and suggested by the absence of any connection between the third and seventh months, and the festivals of Weeks and Tabernacles when a connection would be expected. The third and seventh months of 2 Chr 31:7 are those of the Judaeen reckoning, not of the Israelite reckoning. The Chronicler referred to the times of tithing as opposed to the festivals *per se* probably because the celebration of the Passover in the second month (Judaeen reckoning) had introduced a disconnection between the cultic cycle and the agricultural cycle in Judah. Logically, with the Passover and Unleavened Bread in the second month, the festival of Weeks would have been delayed by a month and would have occurred in the fourth (Judaeen) month. Nowhere in the Torah is a festival of Weeks in the fourth month validated. Rather, the festival of Weeks is also called in the Torah the festival of “the first fruits of the wheat harvest” (Exod 34:22), while the festival of Tabernacles is called “the feast of ingathering at the year’s end” (Exod 34:22). Both festivals take place, respectively, in the third and in the seventh months, times of harvest-gathering for the produce of the land.

It is suggested therefore that “the people of Israel and Judah who lived in the cities of Judah” brought their tithe of the first fruits of the land to the Temple (2 Chr 31:10) in the third and seventh month (Judaeen reckoning). These months were traditionally connected with the cultic/agricultural cycle, but on this particular occasion had become disconnected from the (new, Israelite) cultic calendar. This is probably the reason why the text refers to the third and the seventh months as times of tithing instead of referring to those traditionally religious times in terms of their cultic festivals. For the people of Israel, however, the festivals and offerings of tithes and dedicated things presumably took place on the occasion of their festival of Weeks in the third month, and in the seventh month,

⁵² My translation.

on the occasion of their festival of Tabernacles, which were the occasions for harvests of the fruit of the land, according to the Israelite calendar.

By describing the practice of tithe offering for the “people of Israel and Judah who lived in the cities of Judah” in terms of “the third month . . . and the seventh month,” and not in terms of the festivals traditionally associated with these agricultural times, i.e., Weeks and Tabernacles, the Chronicler indicated that there occurred a dislocation in Judah between the (Judaean) agricultural calendar and the (Judaean) cultic calendar. It is because of this disconnection, introduced that year by the celebration of the Passover and unleavened bread *in the second month*, that the Chronicler referred to the third and seventh month as the times when “they began to pile up the heaps, and finished them.” It is likely that subsequently the second Passover became associated with a potential calendrical difficulty, notably a potential dissociation of the cycle of festivals from the agricultural cycle of first fruits offerings in the third and seventh months.

3.4. *Ezra-Nehemiah*

This work, probably written in Palestine, is a historical witness of various levels of reliability. It contains material which deals with events surrounding the rededication of the Temple in Jerusalem (ca. 515 BCE), the return of Ezra (ca. 458 or 398 BCE), and the period when Nehemiah governed in Jerusalem (ca. 445–433 BCE). It is often dated, in its final form, to the fourth century BCE. It recounts the events in Jerusalem surrounding the returns from the Babylonian exile under the leadership of Ezra and Nehemiah.⁵³ There is in Ezra 6:19 the report that “on the fourteenth day of the first month the returned exiles kept the Passover,” and “with joy they celebrated the festival of unleavened bread seven days” (v.22). Here again the Passover is dated in the first month, while the festival of Unleavened Bread is stated as lasting seven days.⁵⁴ Further, there are allusions to the

⁵³ The exact dating of the compilation has been the subject of much debate in scholarly circles. See R.W. Klein, “Ezra-Nehemiah, Books Of,” in *ABD*, Vol. 2 (ed. D.N. Freedman; New York: Doubleday, 1992), 731–42 for a brief discussion of the date of composition of the work. Scholarly opinions vary from a few years after the events to sometime around 300 BCE. A more recent treatment can be found in J.C. VanderKam, *From Joshua to Caiaphas: High Priests After the Exile* (Minneapolis: Fortress, 2004), 1–42, where the author revisits the question of the dating, provides a helpful discussion of the sources, and gives important pointers in the footnotes.

⁵⁴ There is a parallel statement in the Apocrypha. In the LXX version, in the book known as *1 Esdras*, the same event is recounted. In this context also, the Passover is dated to the fourteenth day of the first month (1 Esdras 7:10), and they kept the festival of unleavened

lending of “grain, wine and oil” (5:11), and to the tithe of grain, wine and oil (10:39), to be given by the people of Israel to the priests and Levites. Although no dates are indicated for these, it is reasonable to suggest that these took place on the same occasions as those recorded in 2 Chr 31:7, i.e., “from the third to the seventh month.” Lastly, the indication that the wood offering must take place at “appointed times, year by year” (10:34), is a development on the regulation concerning the fire on the altar, which was to be kept perpetually (cf. Lev 6:12–13).⁵⁵ This will take on a more formal character in the cultic calendar of the people behind the Dead Sea Scrolls.⁵⁶

4. *The Cycle of Festivals in the Hebrew Scriptures: Summary and Conclusion*

The correlation between the cycle of festivals and the agricultural cycle in the Pentateuch was pointed out above. The Priestly exposition of the cycle in Lev 23 leaves no room for doubts: Passover (implicitly), and the Sheaf Offering, the festival of Weeks, and the festival of Tabernacles each were anchored in the agricultural cycle. This correlation is also born out in the historical books considered, where the festivals were in conformity with the Mosaic Law. There are indications through the documents that traditions were changing and adapting. For instance, whereas Passover and Unleavened Bread were two different festivals, they tended to fuse into one (cf. Ezek 45; Ezra 6). It also becomes evident that different calendrical practices were followed, most likely reflecting varying climates. The agricultural cycles in Israel and in Judah were probably off by a month. It is still along those lines that the most probable background to Jeroboam’s so-called calendrical *innovation* in the tenth century BCE may be located. Jeroboam reverted to a calendar in the Northern Kingdom, which was in line with the seasons in the north. His action drew criticism from the Chronicler, who interpreted Jeroboam’s self-appointed calendar from the standpoint of the ephemeris in place in Judah. The same can be said of King Hezekiah’s attempt at synchronizing the cycles of festivals in Israel and in Judah. To this effect, his postponement of the festivals of

bread for seven days (v.14). Cf. W.R. Goodman, “1 Esdras, Book Of,” in *ABD*, Vol. 2 (ed. D.N. Freedman; New York: Doubleday, 1992), 609–11.

⁵⁵ Beckwith, “Temple Scroll,” 16.

⁵⁶ See Chapter 4.

Passover and Unleavened Bread to the second month, although explained on account of the ritual uncleanness of "all Israel," was probably originally motivated by another reason. This second month in the Southern Kingdom was likely to have corresponded to the first month in the Northern Kingdom. From the Chronicler's Judaeian perspective, this celebration in the second month could not affect the times in the third and seventh months, times when tithes and first fruits were brought to the Temple. This is the reason why those times, usually associated with the festivals of Weeks and Tabernacles, were in this particular instance disconnected from those festivals. On this occasion, the third and seventh months (Judaeian reckoning) were indeed the occasion for the gathering of first fruits and offering of tithes. But because the Passover (and Unleavened Bread) was delayed to the second (Judaeian) month, in effect the first month in Israel's reckoning, the third and seventh months (Judaeian reckoning), lost their connection with the cultic cycle.

The overall picture which rises from the Hebrew Scriptures is, therefore, rather composite, and foreshadows the calendrical polemics that took place in the subsequent periods of the Second Temple. The key to understand these is to accept the principle that festivals had to occur according to biblical law, and in accord with the seasons. It is precisely what took place.

CHAPTER THREE

THE CYCLE OF FESTIVALS AND THE SEASONS IN THE *BOOK OF JUBILEES*

1. *Introduction*

Jaubert's contribution to the scholarly understanding of the Book of *Jubilees*, and more specifically her identification and exposition of the cultic calendar therein, has been outlined above. Her input rightly remains central to the discussion of calendrical—and by extension cultic—issues in second temple Judaism. The position of the mid-second century BCE *Book of Jubilees* on the significance of the cycle of time is explicitly stated in its Prologue:¹

These are the words regarding the divisions of the times of the law and of the testimony, of the events of the years, of the weeks of their jubilees throughout all the years of eternity as he related (them) to Moses on Mt. Sinai when he went up to receive the stone tablets—the law and the commandments—on the Lord's orders as he had told him that he should come up to the summit of the mountain.²

This is the “testimony for annual observance.” The cycle of festivals, together with the law and commandments, has been, it is claimed, divinely revealed.³ As such, it is believed to govern the cycle of time and must be adhered to. Generally speaking, the cycle of festivals in the *Book of Jubilees* is identical to the cycle of festivals found in the Pentateuch, although it counts additional festivals.

The methodology used in the preceding chapter will also be applied in the present case, each festival being considered in turn. Within this framework, close scrutiny will be given to two particular matters of legislation. The first is the absence of legislation concerning the second Passover. It

¹ J.C. VanderKam, op. cit.; “The Temple Scroll and the Book of Jubilees,” in *Temple Scroll Studies, Papers Presented at a Symposium on the Temple Scroll, Manchester, December 1987* (ed. G. Brooke; JSPSup 7; Sheffield: Sheffield Academic Press, 1989), 211–36; *Jubilees*.

² All quotes from the *Book of Jubilees* are from the translation by J.C. VanderKam, op. cit. For the critical Ethiopic text, see J.C. VanderKam, ed., *The Book of Jubilees. A Critical Text* (CSCO 510; Lovanii: Peeters, 1989).

³ For “the law and commandments” see Exod 24:12 וְהַתּוֹרָה וְהַמִּצְוֹת.

will be argued that, in his reworking/re-writing of Num 9:1–14, the author of the *Book of Jubilees* purposefully omitted and the retelling of the incident which form the background to the mosaic institution of the second Passover (Num 9:6–8), and the legislation about the second Passover itself (Num 9:9–12). The second matter of legislation is concerned with an important aspect of cultic praxis: the offering of first fruits and second tithes. This particular legislation both assumes and requires that the cultic calendar be closely attached to the agricultural cycle. At the outset, it is argued that the absence of a second Passover law on the one hand, and the existence of a precise legislation concerning the consumption of first fruits on the other hand, are together very strong indications that the author of the *Book of Jubilees* expounded in his narrative a cultic calendar that he understood to be attached to the agricultural cycle. Put in negative terms, the author simply could not fathom a cultic calendar that could possibly be dissociated from the agricultural cycle.

2. *The Festival of Passover in Jubilees*

There are two main passages in the *Book of Jubilees* that expound the festival of Passover: *Jub.* 18:18, and *Jub.* 49. In the latter passage the reader learns the legislation governing the Passover preparation and celebration. The Passover is to be sacrificed “on the fourteenth of the first month,” and is to be eaten “at night on the evening of the fifteenth from the time of sunset” (*Jub.* 49:1).⁴ As in the Pentateuch, Passover in this passage commemorates the night of liberation from bondage in Egypt, the night when “all the forces of Mastema were sent to kill every first born in the land of Egypt” (*Jub.* 49:2).⁵ In *Jub.* 18 the occasion for the festival is somewhat different. It is celebrated in the context of Abraham’s return from Mount Zion to Beersheba, and seems to follow immediately after Isaac’s *Aqedah*

⁴ The day reckoning here seems to be from sunset-to-sunset. But see 49:10 “The Israelites are to come and celebrate the passover on its specific day—on the fourteenth of the first month—between the evenings, from the third part of the day until the third part of the night. For two parts of the day have been given for light and its third part for the evening.” The reference, first, to the day part, and second, to the night part of the fourteenth of the first month seems to contradict the dating of the festival presented at the beginning of *Jub.* 49. The day reckoning seems now to be from sunrise to sunrise. For a treatment of an sunset-to-sunset reckoning of the day in the *Book of Jubilees*, see J.M. Baumgarten, *Studies in Qumran Law* (SJLA 24; Leiden: Brill, 1977), 124 ff.

⁵ Mastema stands here for Satan. Cf. J.C. VanderKam, “Passover,” in *EDSS, Vol. 2* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 637–8.

and God's promise to Abraham that his descendants would be like stars (18:15). The festival is here neither named nor dated. The only indication is that Abraham "used to celebrate this festival joyfully for seven days during all the years" (*Jub.* 18:18). The festival is most likely that of Unleavened Bread because in *Jub.* 17:15 the events leading up to Isaac's *Aqedah* are dated to "the first month—on the twelfth of this month." The travel from Beersheba back to Beersheba started "in the morning," i.e., the thirteenth of the first month, and took six days, with the *Aqedah* taking place on the third day, i.e., the fifteenth of the first month.⁶

There is no provision in the *Book of Jubilees* for a second Passover. This may not be surprising on first consideration, as *Jubilees* only concerns itself with the biblical narrative from Genesis 1 to Exodus 12.⁷ As this narrative does not include the second Passover, the author simply ignored it. This is a plausible explanation. Yet, there are plenty of instances when the author of the *Book of Jubilees* supplements the Genesis-Exodus account. For example, there is no systematic treatment of the cycle of festivals in this portion of the biblical text, and one must read on to Num 28 and 29, Lev 23 and Deut 16 in order to have an indication of how this cycle is to be articulated. The legislation concerning the second Passover only appears in Num 9. In the *Book of Jubilees*, however, the cycle of festival is sewn into the narrative of the Patriarchs, especially in the context of their religious activities.⁸ So it is that Noah (6:17, 20–21) and Abraham (15:1) celebrated in the third month the festival of Weeks, associated with the Covenant. Abraham was the first to keep the festival of Tabernacles in the seventh month (16:21). The *Aqedah* of Isaac took place in the first month, on the fifteenth, and coincided with a seven-day festival observed by Abraham (18:18), most likely, as argued above, that of Unleavened Bread. His son Isaac also observed the festival of Tabernacles, on the fifteenth of the

⁶ See Jaubert's reconstruction of the Patriarchs' journeys, *date de la cène*, 25. There appears to be a difficulty with Jaubert's reconstruction and the dating of the festival on the fifteenth. The festival is admittedly that of Unleavened Bread, and the problem here is whether the festival started on the twelfth and lasted until the eighteenth, or whether it reflected common practice and started on the fifteenth of the first month and lasted seven days. The difficulty will be more or less accentuated whether one posits a sunset-to-sunset or a sunrise-to-sunrise day reckoning. This difficulty will here be left open.

⁷ J.C. VanderKam, op. cit., v.

⁸ Halpern-Amaru, "Joy as Piety in the 'Book of Jubilees,'" *JJS* 56 (2005): 187, rightly argues that the author of the *Book of Jubilees* carefully selected the "contexts where there is either a reference to altar building or to sacrifice" to expand on the festivals as observed by the Patriarchs (cf. Gen 8:20–22/*Jub.* 6:17–18; Gen 15:9–11/*Jub.* 14:20; Gen 21:33/*Jub.* 16:20ff.; Gen 22:13/*Jub.* 18:18–19; Gen 31:54/*Jub.* 29:7–8; Gen 35:7/*Jub.* 32:7; Gen 46:1/*Jub.* 44:4).

seventh month (32:4). The first day of the first month was the day on which Noah made “atonement through it for himself and for his sons” (7:3), while Moses was given the ordinances for the festival of Passover/Unleavened Bread (*Jub.* 49). Of the entire festival calendar only the Raising of the Sheaf does not receive this particular treatment by the author of the *Book of Jubilees*.⁹

The *Book of Jubilees* supplemented the Genesis—Exod 12 narrative in that it added to its content the festivals of the calendar. In this regard one may note that the author of the *Book of Jubilees* time and again indicates that festivals were celebrated “joyfully.”¹⁰ The Genesis—Exod 12 narrative all but stresses the joyful aspect of the festivals, and this is another addition of the author of the *Book of Jubilees* in his reworking of the biblical narrative.¹¹ This *joyful* aspect does appear in other places in the narrative of the Pentateuch however,¹² and is also a strong component of the Ezra-Nehemiah material and of Chronicles.¹³ Yet, *joy* is nowhere explicitly connected with the Passover in the Pentateuch narrative. There is only an indirect connection in Num 10:10, where וַיְבִיֹם שְׂמֵחַתְכֶם—“and on the day of your (plural) joy”—is associated with וּבְמוֹעֲדֵיכֶם וּבִרְאֵשֵׁי חֳדָשֵׁיכֶם—“and on your fixed festivals and the beginnings of your months.”¹⁴ There is

⁹ As was shown by Barthélemy, *op. cit.*, and by Jaubert, *date de la cène*, 21–4.

¹⁰ In *Jub.* 18:18 Abraham observed the festival (of Passover) joyfully for seven days; Moses was commanded to give the Israelites the statutes concerning these “seven joyful days” (49:22; cf. the first day of the festival as “the beginning of joy” in 49:2); the festival of Tabernacles is the setting for much rejoicing for Abraham (*Jub.* 16) and for Jacob at Bethel (*Jub.* 32); the festival of Weeks is also the setting for “a joyful feast” for Isaac and Ishmael not long before the death of their father Abraham (*Jub.* 22:4). It has been shown recently that the *joy* motif—שמחה—is used extensively by the author of the *Book of Jubilees* to stress the piety of the Patriarchs, an interesting point when one considers that *joy* does not appear as a motif, or a requirement, in the biblical narrative covered by the author of the *Book of Jubilees*.

¹¹ See Halpern-Amaru, *op. cit.*, esp. 186, esp. 186, for the *joy* motif in Genesis—Exodus 12.

¹² Halpern-Amaru, *op. cit.*, 186. The author notes that the motif of *joy* appears quite significantly in Deuteronomy in the command to “rejoice before the Lord.” This motif is also connected to tithing, and votive and free-will offerings (Deut 12:7, 12); to firstfruits offerings (Deut 26:11); and to specific festivals that are connected with the fruits of the land (cf. Lev 23:40; Deut 16:11, 14, 15).

¹³ Halpern-Amaru, *op. cit.*, 186. See especially Ezra 6:19–22; Neh 8:9–12, 17; 12:43. In Chronicles the *joy* motif is especially developed: 1 Chr 12:40–41; 29:21–22; 2 Chr 7:9–10; 15:11–15; 30:21–26). See also S. Japhet, *The Ideology of the Book of Chronicles and Its Place in Biblical Thought* (Frankfurt: Peter Lang, 1989), 253–4, referenced by Halpern-Amaru, *op. cit.*, 186 notes 7 and 8.

¹⁴ Halpern-Amaru, *op. cit.*, 188, renders וּבִרְאֵשֵׁי חֳדָשֵׁיכֶם as “new moon days.” The translation “beginning of your months” is here preferred in acknowledgement that there were probably several ways to reckon the beginning of the month, only one of those related to the “new moon.” The LXX is very close to the Hebrew text and translates: ‘καὶ ἐν ταῖς ἡμέραις τῆς εὐφροσύνης ὑμῶν καὶ ἐν ταῖς ἑορταῖς ὑμῶν καὶ ἐν ταῖς νοσημερίαις’.

no doubt that the author of the *Book of Jubilees* counted Passover among those, and prescribed *joy* on its celebration, a prescription that fulfills the command given in Num 10:10 concerning fixed festivals.¹⁵ In fact, as will be shown below, it is highly probable that the author of the *Book of Jubilees* knew and engaged with Num 9:1–14 when he expounded the commandment to “Remember . . . the Passover” in 49:1–10.

First, the *Jubilees* passage under consideration is almost identical to Num 9:1–14 in both structure and content, as the following table illustrates. Both texts begin with the command to keep/remember the Passover (Num 9:1–3 // *Jub.* 49:1). This is followed by a brief summary of the events which took place in Egypt (Num 9:4–5 // *Jub.* 49:2–6).¹⁶ The biblical passage then introduces what is possibly a particular incident which probably found its way into the larger Law code and became the basis for the addition of the second Passover to the cultic calendar (Num 9:6–8).¹⁷ *Jubilees* however is resoundingly silent as to the second Passover, and ignores—purposefully I would argue—the incident recorded in Numbers involving the unclean people and the institution of the second Passover. Rather, and very tellingly, the author of the *Book of Jubilees* expounds at this particular place the reason why the Passover should be remembered once a year, every year:

[T]hen you will not change a day from the day or from month to month. For it is an eternal statute and it is engraved on the heavenly tablets regarding the Israelites that they are to celebrate it each and every year on its day, once a year, throughout their entire history. There is no temporal limit because it is ordained forever. (49:7–8)

Numbers proceeds to explain, in the context of this second Passover, how the Passover should be kept (Num 9:9–12). *Jubilees*, again ignoring material which treats of the second Passover, defers until the end of the passage the exposition of the statutes governing the Passover (49:12–14, with another emphasis on the date in the first month). This is an editorial change on the part of the author of the *Book of Jubilees*, who wanted to avoid any mention of the second Passover, thus displaying his prejudice towards the festival.

¹⁵ Cf. *Jub.* 49:2 “ . . . it was the beginning of the festival and the beginning of joy.”

¹⁶ It would appear that the author of Num 9:4–5 is content with giving a very brief summary of Exodus 12, echoing Ex 12:28. The much longer treatment in *Jub.* 49:2–6 is to be explained by the particular stance the author is taking to explain the origins of the Passover.

¹⁷ Milgrom, *Numbers* בַּמִּדְבָּר, 68. The introduction of this incident by the verb יָהִי, a common practice to introduce a somewhat independent pericope in the Biblical text, supports the proposition.

Numbers 9:1–14

vv. 1–3 [ordinance to keep the Passover, with indication of the date]

¹The Lord spoke to Moses in the wilderness of Sinai, in the first month of the second year after they had come out of the land of Egypt, saying: ²let the Israelites keep the Passover at its appointed time. ³On the fourteenth day of this month, at twilight, you shall keep it at its appointed time; according to all its statutes and all its regulations you shall keep it.

vv. 4–5 [brief summary of the first Passover (Num. 9:5b // Ex. 12:28)]

⁴So Moses told the Israelites that they should keep the Passover. ⁵They kept the Passover in the first month, on the fourteenth day of the month, at twilight, in the wilderness of Sinai. Just as the Lord had commanded Moses, so the Israelites did.

Jubilees 49:1–14

v. 1 [ordinance to keep the Passover, with indication of the date]

¹Remember the commandments which the Lord gave you regarding the Passover so that you may celebrate it at its time on the fourteenth of the first month, that you may sacrifice it before evening, and so that they may eat it at night on the evening of the fifteenth from the time of sunset.

vv. 2–6 [*Jubilees'* own summary of the first Passover.]

²For on this night—it was the beginning of the festival and the beginning of joy—you were eating the Passover in Egypt when all the forces of Mastema were sent to kill every first-born in the land of Egypt—from the pharaoh's first-born to the first-born of the captive slave-girl at the millstone and to the cattle as well. ³This is that which the Lord gave them: into each house on whose door they saw the blood of a year-old lamb, they were not to enter that house to kill but were to pass over (it) in order to save all who were in the house because the sign of the blood was on its door. ⁴The Lord's forces did everything that the Lord ordered them. They passed over all the Israelites. The plague did not come on them to destroy any of them—from cattle to mankind to dogs. ⁵The plague on Egypt was very great. There was no house in Egypt in which there was no corpse, crying, and mourning. ⁶All Israel was eating paschal meat, drinking the wine, and glorifying, blessing, and praising the Lord God of their fathers. They were ready to leave the Egyptian yoke and evil slavery.

Table (*cont.*)**Numbers 9:1–14****vv. 6–8 [the incident of the unclean people]**

⁶Now there were certain people who were unclean through touching a corpse, so that they could not keep the Passover on that day. They came before Moses and Aaron on that day, ⁷and said to him, ‘Although we are unclean through touching a corpse, why must we be kept from presenting the Lord’s offering at its appointed time among the Israelites?’ ⁸Moses spoke to them, ‘Wait, so that I may hear what the Lord will command concerning you.’

vv. 9–12 [institution of the second Passover; how the Passover is to be kept]

⁹The Lord spoke to Moses, saying:

¹⁰Speak to the Israelites, saying: anyone of you or your descendants who is unclean through touching a corpse, or is away on a journey shall still keep the Passover to the Lord. ¹¹In the second month, on the fourteenth day, at twilight, they shall keep it; they shall eat it with unleavened bread and bitter herbs. ¹²They shall leave none of it until morning, nor break a bone of it; according to all the statute for the Passover they shall keep it.

v. 13 [cases generating penalty]

¹³But anyone who is clean *and is not on a journey*, and yet refrains from keeping the Passover, shall be cut off from the people for not presenting the Lord’s offering at its appointed time; such a one shall bear the consequences for the sin.

Jubilees 49:1–14**vv. 7–8 [command to observe Passover once a year, on its day]**

⁷Now you remember this day throughout all your lifetime. Celebrate it from year to year throughout all your lifetime, once a year on its day in accord with all of its law. *Then you will not change a day from the day or from month to month.* ⁸For it is an eternal statute and it is engraved on the heavenly tablets regarding the Israelites that they are to celebrate it each and every year on its day, once a year, throughout their entire history. There is no temporal limit because it is ordained forever.

v. 9 [cases generating penalty]

⁹The man who is pure but does not come to celebrate it on its prescribed day—to bring a sacrifice that is pleasing before the Lord and to eat and drink before the Lord on the day of his festival—that man who is pure and nearby is to be uprooted because he did not bring the Lord’s sacrifice at its time. That man will bear responsibility for his own sin.

Table (*cont.*)

Numbers 9:1–14

v. 14 [one Passover statute for both the alien and the native]

¹⁴Any alien residing among you who wishes to keep the Passover to the Lord shall do so according to the statute of the Passover and according to its regulation; you shall have one statute for both the resident alien and the native.

Jubilees 49:1–14

vv. 10–11 [the statute is for the Israelites only—explanation of ‘between the evenings’]

¹⁰The Israelites are to come and celebrate the Passover on its specific day—on the fourteenth of the first month—between the evenings, from the third part of the day until the third part of the night. For two parts of the day have been given for light and its third part for the evening. ¹¹This is what the Lord commanded you—to celebrate it between the evenings.

vv. 12–14 [How—and when—the Passover is to be kept]

¹²It is not to be sacrificed at any hour of the daylight but in the hour of the boundary of the evening. They will eat it during the evening hour(s) until the third part of the night. Any of its meat that is left over from the third part of the night and beyond is to be burnt. ¹³They are not to boil it in water nor eat it raw but roasted on a fire, cooked with care on a fire—the head with its internal parts and feet. They are to roast it on a fire. There will be no breaking of any bone in it because no bone of the Israelites will be broken.

¹⁴Therefore the Lord ordered the Israelites to celebrate the Passover on its specific day. No bone of it is to be broken because it is a festal day and a day which has been commanded. *From it there is to be no passing over a day from the day or a month from the month because it is to be celebrated on its festal day.*¹⁸

¹⁸ J.C. VanderKam, *op. cit.*, 315–20.

The very close correspondence between Num 9:13 and *Jub.* 49:9, as illustrated in the table above, suggests that the author of the *Book of Jubilees* picks up with the text of Numbers when he finds himself again in agreement with it. Finally, by remaining silent about those “away on a journey” (Num 9:10) and the “alien residing among you” (Num 9:14), a redactional development probably introduced at a later stage of the compilation of the priestly traditions and which probably reflected a fifth century BCE *Sitz im Leben*,¹⁹ the author of the *Book of Jubilees* (cf. 49:10 “The Israelites . . .”) brings one last *correction* to the text of Numbers (9:14 “one statute only for both the resident alien and the native”), something which is to be expected once the particularist character of the work, and the not-so-distant upheavals of the Maccabean revolt (167–164 BCE) are taken into account: only those people who are *near* and *pure* are envisaged. The situation of one who is far from the land is not considered. Once again, there would be no need to see anything peculiar with this, had the author of the *Book of Jubilees* not inserted *at this particular point* the very specific command that the Passover be kept “once a year . . . on its day,” so as not to be delayed by a day or a month (*Jub.* 49:7).

From this perspective, the *Book of Jubilees*’ silence as to the second Passover is more significant than usually acknowledged. It may be motivated by something far more significant than a simple desire to limit oneself to the material treated in Genesis—Exod 12. It was argued above that there is agreement between Numbers and the *Book of Jubilees* concerning the joyful aspects of the festivals, a command that is absent from Genesis—Exod 12. One would expect this requirement, legislated for in Num 10, to be extended to the second Passover in the *Book of Jubilees*. Let us recall once more that the second Passover legislation is particular to the book of Numbers. Rather, the command in the *Book of Jubilees* concerning Passover is clear: it should be observed *once a year, on its day*, and by doing so “you will not change a day from the day or from month to month” (*Jub.* 49:7). It is difficult, from this perspective, not to see in this express command, if not a correction of the law concerning the Passover as it appears in

¹⁹ As suggested by P. Grelot, “La dernière étape de la rédaction sacerdotale,” *VT* 6 (1956): 174–89. Grelot dates this priestly development to after 419 BCE on the basis that the priestly legislation concerning purity is at a more developed stage than that which is found in the *Elephantine papyri*. Cf. P. Grelot, “Études sur le papyrus pascal d’Éléphantine,” *VT* 4 (1954): 348–84; P. Grelot, “Études sur le papyrus pascal d’Éléphantine,” *VT* 5 (1955): 252–3. See also J. de Vaulx, *Les Nombres* (SB; Paris: Gabalda, 1972), 124–6, who follows Grelot’s suggestion. It seems to the present writer that this is the most plausible way to account for the insertion in Numbers of the legislation concerning the second Passover.

Num 9, at least a declaration of intent that the content of this particular legislation does not apply to the audience of the *Book of Jubilees*.

There may be several possible explanations for this:

a) The author's audience is somewhat different from that of the book of Numbers, *Jubilees* addressing the *Israelites*, whereas Numbers contains ordinances concerning the *aliens* within their (the Israelites') ranks (Num 9:14). Clearly, the *Sitz im Leben* of the two works is quite different. Num 9 probably belongs to the Priestly Source and is better dated at the latest to the early post-exilic period.²⁰ Its reference to *aliens* in the land, and to people away on a journey—presumably far enough from Jerusalem that they were prevented from making the pilgrimage to the Holy City for the Passover—suggests a universalist perspective that fits well with the background of a Persian empire rather tolerant of religious diversity. The *Book of Jubilees*, however, was composed some two and a half centuries later, possibly between 161 and 152 BCE.²¹ The political landscape in Judaea had undergone some profound changes in the intervening period. The Seleucid overlords were rather partisan in their endorsement—or rejection—of particular religious groups. In any case, the events that surrounded the desecration of the Jerusalem Temple in 167 BCE, the ensuing struggle under Judas Maccabaeus and the rededication of the Temple in 164 BCE were very much in the memory of the community. From this perspective the absence of any reference to *aliens* in the land suggest a

²⁰ Although there are some arguments to date the Priestly material to the pre-exilic period. For discussions on the subject see Milgrom, "P" and bibliography. On page 459 Milgrom argues that P "is a product of the pre-exilic age," and dates it to ca. 750 BCE. An assessment of the pre-exilic dating of P is presented by Blenkinsopp, *op. cit.* A recent discussion of the dating of the Priestly material appears in Klawans, *Purity, Sacrifice, Temple*, who rejects the theories of Milgrom, *Leviticus 23–27*, and Israel Knohl, *Sanctuary of Silence*. In Klawans' understanding, "the central problem with most efforts of assigning dates to the priestly traditions is that they are evolutionist," and "they are posited on unsubstantiated assumptions about how things change over time." Cf. *Purity, Sacrifice, Temple*, 50–1. Rather, Klawans prefers the argument stressed by Blenkinsopp and followed by such scholars as R. Rendtorff, "Is It Possible to Read Leviticus as a Separate Book?" in *Reading Leviticus: A Conversation with Mary Douglas* (ed. J.F.A. Sawyer; JSOTSup 227; Sheffield: Sheffield Academic Press, 1996), 22–35 and M. Douglas, *Leviticus as Literature* (Oxford: Oxford University Press, 1999), that the Priestly material should be interpreted as an integral part of the Pentateuch. Again, although the remark remains valid, it is not particularly helpful in the present case, where the author of the *Book of Jubilees* clearly offers his own *evolutionist* (or conservative?) spin on the Priestly material, and in this respect, questions related to socio-political developments over time do have a significant impact.

²¹ J.C. VanderKam, *Jubilees*, 214–85.

particularist perspective. Further, the absence of any reference to a journey far away may suggest the audience's close vicinity to Jerusalem.

b) While all festivals in the *Book of Jubilees* fall on one of either Wednesday, Friday or Sunday, the second Passover, if celebrated according to the Numbers 9 legislation, would fall on a Thursday, something which perhaps was not acceptable to the author (cf. "on its day," i.e., day of the week).²² This would explain perhaps the rather laboured point in *Jub.* 49 that the Passover be observed "on its day . . . once a year." If this is correct, the argument can be advanced that one of the main reasons for the author of the *Book of Jubilees'* evacuation of the second Passover is the fact that this particular festival would not fall on either a Wednesday, a Friday, or a Sunday. If this is correct, the author's rewriting of Num. 9 would represent a solid argument in favor of Jaubert's hypothesis concerning the three Liturgical days (Wednesday, Friday, Sunday) and their significance in the calendar of the *Book of Jubilees*.

c) It may be the case that the question of ritual purity, which clearly is the motivation in Num 9 for the introduction of the second Passover legislation, did not apply in the eyes of the author of *Jubilees*.²³ This would explain the absence of the second Passover. In Num 9 it is the incident involving contact with dead bodies which is the catalyst for the introduction of the second Passover. The seriousness of defilement occasioned by such impurity is expounded in Num 19, which also stipulates the legislation for purification which must be followed by those who have been defiled through contact with a dead body. The defilement was considered unavoidable, and a purification ritual was provided for it. It is perhaps in

²² See, however, the article by Baumgarten, "Some Problems", who correctly pointed out that the text does not mention the day of the week but rather the date of the month. While this observation remains valid, it may be overstating the case to infer from it that the author of the *Book of Jubilees* was not aware of the days of the week upon which the festivals fell, nor that this mattered to him. At the outset this is an argument from silence. Also from the same author, *Qumran Law*, especially the chapter on "The Calendar of the Book of Jubilees and the Bible", 101–14. It is important to note that undeniably the second Passover was included in the rosters of festivals discovered at Qumran, as first indicated by Milik, *Dix Ans*. This is surprising if one considers that it has now been established that those documents follow the 364 day calendar of *Jubilees*. It will be shown below in the chapter on the Dead Sea Scrolls, however, that the *Temple Scroll*, arguably a foundational document of the Qumran Community, *also* ignores the second Passover.

²³ On the question of purity in the *Book of Jubilees*, see the recent debate between L. Ravid, "Purity and Impurity in the Book of Jubilees," *JSP* 13 (2002): 61–86, and J.C. VanderKam, "Viewed from Another Angle: Purity and Impurity in the Book of Jubilees," *JSP* 13 (2002): 209–15. For a recent treatment of the question of moral purity and ritual purity, see Klawans, *Purity, Sacrifice, Temple*.

the reference to the “holy seed” of Israel, a reference already found in the particularist perspective of Ezra-Nehemiah following some of the returns from Babylon, that one can best identify a paradigm shift in the self-perception of the community’s sense of identity, and its understanding of the notion of purity. Whereas in Numbers the legislation concerning ritual defilement for the case at hand was clearly expounded, suggesting that the community considered such defilement unavoidable, and ensuing ritual cleansing a necessity, the author of the *Book of Jubilees*, however, did not concern himself with such legislation. The book describes Isaac and Jacob having physical contact with Abraham’s dead body (*Jub.* 23:2–7). Whereas Jacob’s contact with his grandfather’s corpse was passive and took place while he was asleep on his grandfather’s bosom (23:2), Isaac’s contact with the dead body was the result of a deliberate action (23:5). The absence in the narrative of any indication that both Isaac and Jacob subsequently underwent—or even needed to undergo—any kind of ritual purification is a strong indication that the author of the *Book of Jubilees* did not consider the legislation expounded in Num 19 applicable.²⁴ As already pointed out, the author of the *Book of Jubilees* disregards the passage concerning the second Passover in his reworking of Num 9. He is adamant that there should be only one Passover celebration, at the right time of year, and does not consider even the possibility of a delayed Passover.

The insertion of the calendrical remark at this particular place instead of the second Passover legislation suggests that the author somehow might also have linked observance of the second Passover with calendrical difficulties. In other words, to celebrate the Passover at the wrong time would be a violation of the divine law which is engraved upon the heavenly tablets.²⁵ It is difficult to extrapolate with certainty on the reason(s) which might have motivated this move.

²⁴ This is the thesis put forward by Ravid, “Purity and Impurity in the Book of Jubilees”. The author goes further and claims that the author of the *Book of Jubilees* portrayed Abraham as *deliberately* defiling his grandson (23:1). Ravid interprets this verse as a deliberate attempt by the author of the *Book of Jubilees* to reject the Temple priesthood. By showing that the Patriarchs were not governed by the laws of ritual purity—the ritual for the Day of Atonement seems greatly downgraded in *Jubilees*, i.e., only one he-goat required; not performed by a priest—the author effectively removes any connection between the Temple priesthood, especially that which was in favour of the lunisolar calendar, and their claim to the High Priesthood. In other words, Ravid argues that the *Book of Jubilees* was written as a polemic *against* those high priests who were in favour of a lunisolar calendar in the Temple.

²⁵ This command to bring a “sacrifice that is pleasing before the Lord” is perhaps to be linked with the command to bring a one year old lamb, but the text is not specific. In

The suggestion above that the second Passover would introduce a calendrical anomaly is a valid proposition, which, to the present writer's knowledge, has not been noted in scholarship so far. On no less than nine occasions in the passage under consideration does the author stress explicitly that the Passover is to be kept "on its day . . . once a year . . . on its festal day" (vv. 1, 7, 8, 9[x3], 10, 14[x2]). The whole passage is articulated around the statement in verse 7:

then you will not change a day from the day or from month to month.

The statement is repeated quasi *verbatim* in verse 14:

. . . there is to be no passing over a day from the day or a month from the month because it is to be celebrated on its festal day.

When considering the *Book of Jubilees'* position on the religious calendar, any delaying of any festival is simply out of the question (*Jub.* 6:32–33):

Now you command the Israelites to keep the years in this number—364 days. Then the year will be complete and it will not disturb its time from its days or from its festivals because everything will happen in harmony with their testimony. They will neither omit a day nor disturb a festival. If they transgress and do not celebrate them in accord with this command, then all of them will disturb their times. The years will be moved from this; they will disturb the times and the years will be moved. They will transgress their prescribed pattern.

It is conceivable that the second Passover would delay the cycle of festivals by a month, resulting in the subsequent festivals being celebrated at the wrong time and being disconnected from the agricultural cycle. Thus, in the case of a general second Passover, the Raising of the Sheaf would also be delayed by a month, and likewise the festival of Weeks, and so on. The incident recorded in the previous chapter concerning the Passover of King Hezekiah in the second month (2 Chr 30), and the subsequent dissociation in the narrative between the festivals of Weeks and Tabernacles on the one hand, and the third and seventh months on the other hand, both associated with times of tithing (2 Chr 31),²⁶ may represent a

any case, we have here the memory of an offering being given to the Lord, perhaps the memory of an ancient festival celebrated by transient shepherds. For recent treatments of the origins of Passover, see Prosic, *op. cit.*; Wagenaar, "Passover".

²⁶ This is exactly the point why the festivals of Weeks and Tabernacles are not mentioned in the narrative: they are alluded to under the references to the third and the seventh months. See above for a consideration of 2 Chr 30–31.

precedent in which a general second Passover actually introduced a disconnection between the cultic cycle and the agricultural cycle. It is this precedent, perhaps, which led to the second Passover being associated with calendrical issues in some quarters of Second Temple Judaism.²⁷ Further, it is clear from the *Book of Jubilees* that the festival of Weeks held a significant place among the festivals as the festival of the renewal of the Covenant with Noah (*Jub.* 6:17). It is also on this occasion that Moses was convened to the mountain to receive the law (*Jub.* 1:1). One can only imagine how a possible delay of this particular festival occasioned by a delayed Passover—or a second Passover, to be precise—would have been accepted by a community for which appointed times had been revealed.

It is plausible that the second Passover was a remnant of a calendrical difficulty at some stage in antiquity associated with the cycle of seasons. At a time before the well-attested use of the lunisolar calendar and its cycle of intercalation, it may be the case that the lunar cycle brought about the Passover too early, and that, because of its association with the cycle of nature (lambing season, first fruit offerings on the *morrow after the sabbath*, etc.), it was celebrated a second time, or rather postponed to a month later to allow for a realignment of the festival with the season.²⁸ Admittedly, the remnants at our disposal are interpreted through the Chronicler's lense. The latter invoked ritual impurity as the reason for the second Passover (2 Chr 30:2), a move that betrayed a late theological development of the tradition. In *Jubilees* the theological development was taken a significant step further, following two important premises. First, the notion of *holy time* in terms of a cycle is clearly defined:

These are the words regarding the divisions of the times of the law and of the testimony, of the events of the years, of the weeks of their jubilees throughout all the years of eternity as he related (them) to Moses on Mt. Sinai when he went up to receive the stone tablets—the law and the

²⁷ It will be observed in the chapter dealing with the Qumran documents that the second Passover was recorded in some calendrical documents that were based on calculations, whereas a foundational document such as the *Temple Scroll*, interested in legislation concerning tithing and firstfruit offerings, that is, legislation which required the cycle of festivals to remain aligned to the agricultural season, leaves the second Passover out. In this discussion it will be shown that Yadin's suggestion that the second Passover must have been mentioned in a now missing part of the text is erroneous.

²⁸ It was the practice much later in Rabbinic Judaism to insert a thirteenth month if it was considered that the forthcoming festival of Passover was too early in comparison to the readiness of the crops and the lambs.

commandments—on the Lord’s orders as he had told him that he should come up to the summit of the mountain. (*Jub.* Prologue)²⁹

It represents the framework along which the entire book is articulated. Further, the author is clear that the 364 day calendar alone must be followed. The text itself informs us as to the significance of this:

Now you command the Israelites to keep the years in this number—364 days. Then the year will be complete and it will not disturb its time from its days or from its festivals because everything will happen in harmony with their testimony. They will neither omit a day nor disturb a festival. If they transgress and do not celebrate them in accord with this command, then all of them will disturb their times. (*Jub.* 6:32–33a)³⁰

Further, the strand of second century BCE Judaism epitomized by the *Book of Jubilees* understands itself to be the “holy seed of Israel/Jacob.”³¹ This is reminiscent of the self-definition used in Ezra 9:2—זָרַע הַקֹּדֶשׁ—some two centuries earlier, when Ezra lamented the “abominations”—תּוֹעֲבוֹת—of the people of the land (9:1), and the “pollutions of the peoples of the land, with their abominations”—בְּנִדַת עַמֵּי הָאָרְצוֹת בְּתוֹעֲבוֹתֵיהֶם—for rendering the land “unclean”—נִדָּה. Such terminology denotes *moral* rather than *ritual* impurity.³² It is through intermarriage that the holy seed became polluted. The lack of concern displayed by the *Book of Jubilees* for purification rituals is probably best understood from the perspective of a higher theological self-understanding than that which motivated the self-definition in Ezra 9. In any case, it is the opinion of the present writer that the particular stance displayed by the author of the *Book of Jubilees* regarding the cycle of festivals, especially the insistence that the Passover be celebrated once a year, on its day, and not delayed from month to

²⁹ J.C. VanderKam, *op. cit.*, 42.

³⁰ J.C. VanderKam, *op. cit.*, 42.

³¹ *Jub.* 16:17 “But one of Isaac’s sons would become a holy progeny and would not be numbered among the nations.” See also 16:26 “He [Abraham] blessed his Creator who had created him in his generation because he had created him for his pleasure, for he knew and ascertained that from him there would come a righteous plant for the history of eternity and (that) from him there would be holy descendants so that they should be like the one who had made everything.” Also, *Jub.* 22:27; 25:12, 18.

³² As shown by J. Klawans, “Idolatry, Incest, and Impurity: Moral Defilement in Ancient Judaism,” *JSJ* 29 (1998): 391–415. The article, reprinted with minor additions in “Impurity and Sin in Ancient Judaism,” Ph.D. diss. (Columbia: Columbia University, 1997), 43–60, engages the distinction between moral and ritual purity, and its significance for understanding the organic nature of the notion of sin in Second Temple Judaism. See also the more recent discussion concerning moral and ritual purity in the Hebrew Bible in Klawans, *Purity, Sacrifice, Temple*, 49–73.

month, belongs to the already significant corpus of textual passages that betray a calendrical polemic in Second Temple textual sources.³³

3. *The Festival of Unleavened Bread in Jubilees*

The consumption of unleavened bread is briefly stated in the context of the festival of Passover. The command is

Now you, Moses, order the Israelites to keep the statute of the Passover as it was commanded to you so that you may tell them its year each year, the time of the days, and the festival of unleavened bread so that they may eat unleavened bread for seven days to celebrate its festival, to bring its sacrifice before the Lord on the altar of your God each day during those seven joyful days. (*Jub.* 49:22)

The festival of Passover marks the occasion for the festival of Unleavened Bread. In this passage the festival of Unleavened Bread is not given a specific date, in contradistinction to other sources, where the festival is given a date distinct from that of Passover. Nowhere does the author of the *Book of Jubilees* distinguish between Passover and Unleavened Bread as two distinct festivals. Rather, the festival of Passover is to last seven days, during which unleavened bread is eaten each day (49:22). It is fair to infer that, by the time the *Book of Jubilees* was composed, Unleavened Bread and Passover had become one festival. This was the case, at the very least, for the proponents of the *Book of Jubilees*' brand of Judaism and their followers. It will be seen that the Calendrical Scrolls recording the festival dates present a different position, as they do record Passover and Unleavened Bread on different dates.³⁴ This is probably due to a different way of reckoning the start of the day.³⁵

³³ The issue of purity and impurity in the *Book of Jubilees* is significant in this discussion. Liora Ravid recently argued that the author of the *Book of Jubilees* “intended to write a polemical work against the temple priesthood [and] he . . . elected to demonstrate that the Patriarchs, who were also priests, did not avoid the most serious category of impurity—contact with a dead body . . .” Cf. Ravid, “Purity and Impurity in the Book of Jubilees,” 85–6. In “Viewed from Another Angle: Purity and Impurity in the Book of Jubilees,” VanderKam questions Ravid’s assertion that the author of the *Book of Jubilees* was motivated by an anti-temple priesthood stance.

³⁴ See Chapter 4.

³⁵ This argument will be developed in Chapter 7.

4. *The Festival of Weeks in Jubilees*³⁶

The command to observe the festival of Weeks (Shavu'ot) is given in *Jub.* 6:20, embedded in the narrative of the covenant with Noah: "one day in the year, during this month, they are to celebrate the festival." The month in question is the third month (cf. *Jub.* 6:1). A more precise dating occurs in *Jub.* 15:1, "in the third month, in the middle of the month, Abram celebrated the festival of the first fruits of the wheat harvest." This *middle of the month* was positively identified by Jaubert as the fifteenth of the third month.³⁷ The festival is given two names: "the festival of Weeks and it is the festival of First fruits" (*Jub.* 6:21; cf. 16:13). The mention of first fruits suggests that the festival was also intrinsically linked to the agricultural cycle, and is an indication that the author of the book understood it this way. After all, the author presents Abraham making an offering of first fruits. Israel/Jacob is said to have observed the festival of the first fruits of the land from old wheat "because in all the land of Canaan there was not even a handful of seed in the land since the famine affected all the animals, the cattle, the birds, and mankind as well" (44:4).

³⁶ B. Ego, "Heilige Zeit—heiliger Raum—heiliger Mensch. Beobachtungen zur Struktur der Gesetzesbegründung in der Schöpfungs—und Paradiesgeschichte des Jubiläenbuchs," in *Studies in the Book of Jubilees* (eds M. Albani, J. Frey, and A. Lange; TSAJ 65; Tübingen: Mohr (Siebeck), 1997), 207–20; W. Eiss, "Das Wochenfest im Jubiläenbuch und im antiken Judentum," in *Studies in the Book of Jubilees* (eds M. Albani, J. Frey, and A. Lange; TSAJ 65; Tübingen: Mohr (Siebeck), 1997), 165–78.

³⁷ See Jaubert, "Calendrier des Jubilés: origines"; and before Jaubert, Barthélemy, op. cit., 200, who stated: "on sait en effet que la fête des Semaines devait, selon les Jubilés, être célébrée le 15 Siwan [cf. *Jub.* 15,1 and 44:4–5]. Si l'on admet des mois de 30 jours, cela placerait l'offrande de la gerbe le 26 Nisan, c'est-à-dire le lendemain du sabbat *qui suit* la semaine des Azymes." Their identification of the dating of the festival of Weeks in the calendar of the *Book of Jubilees* to the fifteenth of the third month has been accepted by most scholars. In a recent treatment of this calendar, L. Ravid, "The Book of Jubilees and Its Calendar—A Reexamination," *DSD* 10 (2003): 371–94, also dates the festival of Shavu'ot/First-fruits to the fifteenth of the third month. However, this date is retrievable once one considers that the flood chronology in *Jub.* 5:27, which indicates that five months numbered one hundred and fifty days. The year is, therefore, one made up of twelve months of thirty days each, which allows one to determine the date of the festival "in the middle of the third month" as the fifteenth of the month (see esp. 389). For discussions on the chronology of the flood, see F.H. Cryer, "The 360-Day Calendar Year and Early Judaic Sectarianism," *Scandinavian Journal for the Study of the Old Testament* 1 (1987): 116–22; T. Lim, "The Chronology of the Flood Story in a Qumran Text (4Q252)," *JJS* 43 (1992): 288–98; S. Najm and P. Guillaume, "Jubilee Calendar Rescued from the Flood Narrative," *JHS* 5 (2004); S. Shariv, "The Polytheistic Origins of the Biblical Flood Narrative," *VT* 54 (2004): 527–48.

If one considers the express command that Passover should be observed once a year in the first month, the mention of Abraham's offering of first grain is a powerful argument suggesting that the cycle of festivals was indeed attached to the agricultural cycle, just as was the case in the biblical calendar. Indeed, it is perhaps for this very reason that the author of the *Book of Jubilees* omitted the second Passover, as its celebration in the second month, on the fourteenth of the month, would have dissociated it, and the subsequent festivals, from the agricultural season.³⁸

5. *The Raising of the Sheaf in Jubilees*

The date for this festival is not given explicitly in the composition. It can, however, be identified from the argument above concerning the date of the festival of Weeks.³⁹ The biblical legislation indicates that this day marks the "day after the sabbath, the day on which you bring the sheaf of the elevation offering, you shall count off seven weeks . . ." (Lev 23:15–16). The festival of Weeks being dated to the fifteenth day of the third month, counting back fifty days gives a date of the twenty-sixth day of the first month for the Raising of the Sheaf, a Sunday.

6. *The Festival of Tabernacles in Jubilees*⁴⁰

In the *Jubilees* fashion, the festival is connected with one of the Patriarchs. According to the author it is Abraham who is the first to have observed the festival on earth (16:21). It was for him a festival of rejoicing which lasted seven days, an occasion to be "happy with his whole heart and all his being" (v. 25, cf. 27, 29). The author connects Abraham and Sarah's joy to the revelation concerning the sons of their son, the promise that they "would become nations" (16:17).⁴¹ In this narrative, the festival is located only in the seventh month, with no indication about the day on which the festival must be observed.

³⁸ It makes sense, from this perspective, that 4Q329a, which deals with the occurrence of the Passover *sacrifice*, does not record the second Passover in the second month. On the second Passover at Qumran, see Chapter 4.

³⁹ As demonstrated by Jaubert, *date de la cène*.

⁴⁰ J.C. VanderKam, *Calendars in the DSS*.

⁴¹ The *joy* of the festival is stressed greatly (*Jub.* 16:19, 20, 25, 27, 29, 31). Cf. J.C. VanderKam, "Sukkot," in *EDSS, Vol. 2* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 903–5.

It is in the narrative about Jacob's tithe and sacrifice at Bethel (*Jub.* 32; cf. Gen 28) that one learns the exact time when the festival occurred: "On the first of the seventh month he went up to Bethel" (31:3). After this Jacob visited his father Isaac. It is during this stay that Isaac recovered his sight and blessed Levi and Judah. On the fourteenth of that month (the seventh month, cf. 31:3), Jacob offered a tithe of all he owned (32:2); and "on the fifteenth of this month" (32:4) Jacob made an offering of several kinds of animals, a tithe he had vowed to offer with the fruit offerings and the libations (32:5). The joyful celebration lasted seven days, during which "he was eating happily there—he, all his sons, and his men—for the seven days" (32:7). It is in this context that the law of the second tithe is "ordained as a law on the heavenly tablets to tithe a second time, to eat it before the Lord—year by year—in the place which has been chosen (as the site) where his name will reside" (32:10). It is also in this context that the command is given concerning the first fruits: they should be eaten before the new season.

¹²For the seed is to be eaten in its year until the time for harvesting the seed of the year; the wine (will be drunk) until the time for wine; and the olive (will be used) until the proper time of its season. ¹³Any of it that is left over and grows old is to be (considered) contaminated; it is to be burned up because it has become impure.

Here again the author demonstrates his clearly dualistic understanding of the world. The demarcation between sacred and profane is asserted every year through the agricultural cycle. Every year the new grain heralds purity, while the old becomes impure. This suggests that in the understanding of the author the sanctification of the land was not merely associated with the agricultural cycle, rather it depended entirely upon it. The author's world was kept holy on account of the seasonal cycle, delivering its fruits for the sustenance of the inhabitants. The command to "eat it at the same time in the sanctuary; they are not to let it grow old" (32:14) was given as a protection for the community for which the book was first written. This command had to be observed year after year; its decree was inscribed in the heavenly tablets, and had "no temporal limits forever" (32:10). Thus the agricultural aspect of the seventh month was acknowledged by the author. From this perspective, the *Book of Jubilees'* dating of Noah's first harvest of the fruit of the vine on the seventh month takes on added significance (7:1–2a):

¹During the seventh week, in the first year, in this Jubilee Noah planted a vine at the mountain (whose name was Lubar, one of the mountains of

Ararat) on which the ark had come to rest. It produced fruit in the fourth year. He guarded its fruit and picked it that year during the seventh month. ²He made wine from it, put it in a container, and kept it until the fifth year—until the first day at the beginning of the first month.⁴²

It also is significant, in the view of the present writer, that the law regarding the second tithe in was introduced in the context of the seventh month. In the Biblical narrative concerning King Hezekiah (2 Chr 30–31), the third and the seventh months were identified as the times for tithe offerings: “in the third month they began to pile up the heaps, and finished them in the seventh month” (2 Chr 31:7).⁴³ The legislation in the Pentateuch concerning the tithe did not state explicitly when the tithe had to be given.⁴⁴ There are some indications, however, that the tithe was to be brought, as one might expect, at times of agricultural significance. The Israelites were not to “delay to make offerings from the fullness of your harvest and from the outflow of your presses” (Exod 22:29).

⁴² J.C. VanderKam, op. cit. J.C. Reeves, “The Feast of the First Fruits of Wine and the Ancient Canaanite Calendar,” *VT* 42 (1992): 350–61, has noted that this marked, for the author of the *Book of Jubilees*, “the initial appearance of this substance in sacred history, and hence the actions which Noah performs in connection with this novel occupation assume paradigmatic importance for future generations” (p. 354). The same author draws attention to the discrepancies concerning the dating of the festival of wine in the *Book of Jubilees* and in *nQTemple*. In the former it is celebrated on the first day of the first month of the year (7:2), whereas in *nQTemple* it is to take place on the third day of the fifth month. Reeves suggests that a consideration of five ritual Tablets from Ugarit brings light on the issue. More specifically, *KTU* 1.41 states: 1. *b yrh. riš yn. b ym. hdt 2. šmtr. utkl. l il. šlmm = 1*. In the month “First of the Wine” on the day of the new moon 2. Cut (or present) a grape-cluster for El as a *šlmm*-offering. See Reeves, op. cit., 357–8, and bibliographical references.

⁴³ See Chapter 2.

⁴⁴ According to D (Deuteronomist source), “the tithe of your grain, your wine and your oil, as well as the firstlings of your herd and flock” were to be consumed “in the presence of the Lord your God, in the place that he will choose as a dwelling for his name” (Deut 14:22–3). Following Josiah’s reform and centralization of worship, this is likely to have been in Jerusalem. The indication that “Every third year you shall bring out the full tithe of your produce for that year, and store it within your towns” for “the Levites . . . the resident aliens, the orphans and the widows in your towns” (Deut 14:28–9 and 26:12) betrays the social perspective of the Deuteronomist. It also suggests that the tithe of the first and second year was consumed in Jerusalem. For P (Priestly source), however, the tithe, from the seeds of the land, the fruits of the trees, and every tenth animal of the herds and flocks (Lev 27:30–33), is to be given every year, and not just the third year, to the Levites (cf. Num 18:21). It is to be eaten “in any place” (Num 18:31). From this tithe, the Levites are to “set apart an offering to the Lord from all the tithes that [you] receive from the Israelites; and from them you shall give the Lord’s offering to the priest Aaron” (Num 18:28). For a short article treating of the main passages in the Old Testament dealing with the tithe, see J.C. Wilson, “Tithe,” in *ABD*, Vol. 6 (ed. D.N. Freedman; New York: Doubleday, 1992), 578–80.

The above perhaps must be understood in the sense that the produce of the land had to be offered at its proper season on two accounts. First, economically the bulk of the harvest had to be released at the most adequate time so that the community, and those associated to it, could renew its livelihood. Second, orthopraxy would ensure that the community remained in a state of purity. Failure to observe this command would be a sin and would jeopardise divine clemency upon the community. The community would, just like the seed, become impure and contaminated. The author of the *Book of Jubilees*, admittedly, does not explicitly state what the consequences of the sin might be. There is, however, a Jewish composition contemporaneous with the *Book of Jubilees* which links sin to the cycle of the season in a particular way. In the *Book of Enoch* one reads:

In the days of the sinners the years will grow shorter, their seed will be late on their land and in their fields. Everything on the earth will change and will not appear at their times . . . at those times the fruit of the earth will be late and will not grow at its (normal) time.⁴⁵ (*1 En* 80:2–6)

The end result is destruction for all (cf. 80:8). The passage has an eschatological feel to it and somewhat stands out in the *Book of Luminaries*.⁴⁶ There emanates from this passage, however, a sense of experienced reality. What the author/editor is describing is a discrepancy between the calendar, and its expected seasonal periods on the one hand, and an experienced reality on the other.⁴⁷ The starting point is different in both: in the *1 Enoch* passage it is a wrong calendrical practice that is condemned. A similar condemnation occurs in *Jub.* 6. What the command concerning the tithe and second tithe reveals, however, is that the 364-day calendar, advocated by the author, was crucially reckoned by the same author to be attached to the seasons. This is significant.

The Deuteronomist indicated that “every third year you shall bring out the full tithe of your produce for that year” (Deut 14:28). Presumably, the Deuteronomist envisaged the end of the year, so that grain, wine and oil could be included (cf. Deut 14:22–3).⁴⁸ In the Priestly code, the tithe was to be “reckoned to the Levites as produce of the threshing floor, and as

⁴⁵ G.W.E. Nickelsburg and J.C. VanderKam, *1 Enoch: A New Translation* (Minneapolis: Fortress, 2004).

⁴⁶ Nickelsburg and VanderKam, op. cit., 7.

⁴⁷ This is also Beckwith’s understanding. Cf. Beckwith, “Modern Attempt,” 392–3.

⁴⁸ The KJV version translates: “At the end of three years thou shalt bring forth all the tithe of thine increase the same year, and shall lay it up within thy gates” (Deut 14:28).

produce of the wine press” (Num 18:30). This particular event was dated precisely in the priestly calendar of festivals to the “fifteenth day of the seventh month” (Lev 23:39). The evidence gathered here would suggest that, for the Deuteronomist, the Priestly source, and the Chronicler, the end of the agricultural year coincided with the period of gathering of the fruit from the wine press, the seventh month. Significantly, the narrative in *Jub.* 7, according to which Noah was the first to gather the first fruit of the vine, dates this event to the seventh month, the very month which the author suggests was to mark the time of the tithe.

7. *Summary: Festivals in Jubilees*

As indicated in its Prologue, the *Book of Jubilees* expounds “the times of the law and of the testimony, of the events of the years, of the weeks of their *Jubilees* . . .” This it does by weaving the different festivals into the narrative of the Patriarchs’ lives, and in this it departs from the Genesis-Exod 12 narrative. The *Jubilees*’ cultic cycle contains the same festivals as that expounded in the Pentateuch, bar the second Passover. The festival of Passover and Unleavened Bread is dated to the first month, on the fourteenth (sacrifice) and fifteenth (eating), and is characterized by the consumption of unleavened bread for seven days (49:22). The festival of Weeks is dated to “the middle of the third month” (15:1), a date which has been positively identified with the fifteenth of the third month. From this date, one is able to determine the date of the Sheaf offering. This takes place on the 26th day of the first month, a clear indication that the author/editor of the book interpreted “the morrow after the sabbath” (Lev 23:15) as the day following the first Sabbath taking place *after* the seven days of the festival of Passover/Unleavened Bread. Finally, the festival of Tabernacles, observed by Abraham (*Jub.* 16:21) and Jacob (*Jub.* 32) takes place in the seventh month, on the fifteenth day.

Whereas the biblical texts are somewhat silent concerning the length in days of the cultic calendar, the *Book of Jubilees* vehemently argues for a 364-day year: “Now you command the Israelites to keep the years in this number—364 days” (6:32). As pointed out by Jaubert some fifty years ago, the sabbatical framework of the calendar ensures that festivals fall on the same day of the week, every year.⁴⁹ It is also very clear

⁴⁹ Jaubert, “Calendrier des Jubilés: jours liturgiques”.

in our understanding, that the author of the *Book of Jubilees* understood the cycle of festivals to be in line with the seasons. First, the festival of Weeks is called “the feast of the first fruits” (16:13) and is the occasion on which “Abram made a feast of the first fruits of the harvest of grain” (15:1). Second, the festival of Tabernacles marks the occasion for two very significant laws: the first is the law which stipulates that seed, wine and olives must be eaten or used before the time of their harvest. This is critical for the author because failure to do so will result in contamination of the elements, and thus render them unfit for consumption (cf. 32:12–13). The second is the law of the second tithe, which, in effect, is governed by the former. It takes place in the context of the seventh month, which is traditionally associated with agricultural activity.

The absence of the second Passover from the cycle of festivals in the *Book of Jubilees* was no accident. If the arguments developed in the present chapter concerning the textual dependence of *Jub.* 49:1–14 upon Num 9:1–14 are correct it would appear that the author clearly modelled its account of the Passover on Num 9, the only passage in the Pentateuch to make any reference to the second Passover. It was shown that, where the passage in Numbers expounds the law of the second Passover on grounds of purity (Num 9:9–12), *Jubilees* remains silent. Where Numbers relates the incident of the unclean people that resulted in the observation of the Passover in the second month (Num 9:6–8), *Jubilees* insists that the Passover should be observed once a year, on its day, so that “you will not change a day from the day or from month to month” (*Jub.* 49:7–8). This is so important for the author of the *Book of Jubilees* that he appeals to the binding character of the statute: “it is an eternal statute and it is engraved on the heavenly tablets... they are to celebrate it each and every year on its day, once a year... it is ordained for ever” (*Jub.* 49:8). The author rewrote the Numbers account of the Passover, evacuating the references to the incident that lead to the institution of the second Passover, and in its place inserting its own legal ruling concerning the Passover. It is very difficult not to see some calendrically motivated concerns behind the action of the author. Indeed the textual evidence is so clear that there is no other interpretation that fits so well the overall world view of the *Book of Jubilees*.

The previous chapter was introduced with Jaubert’s remark: “la question cruciale est évidemment de savoir si ce calendrier est vécu ou fictif.” Was this calendar utopian or practical? The explicit references linking the festivals of Weeks and Tabernacles to the agricultural cycle, together with the legal pronouncement governing the second tithe at a specific time

of the year, militate for the view that the author of the *Book of Jubilees* considered its calendar to be anything but utopian. The law of the second tithe was to be observed “year by year” (32:11). Clearly this would have been impossible if the 364-day year had not been kept in line with the true solar year of 365.25 days. The same can be said of every single festival that required an offering of first fruits. It is possible, of course, that the 364-day calendar was adhered to for a while, until such time as its followers could no longer sustain it with the seasons. In the face of an un-bridgeable difference with the agricultural cycle, they had to abandon the practical aspect of the 364-day year. This argument holds that the proponents of the 364-day year—in its *Jubilees* tradition—then used the calendar for purely theoretical purposes.⁵⁰ This argument, however, flies in the face of the textual evidence available from the Qumran library, which spans some 200 years, and kept the association between the cultic calendar and the agricultural cycle, as will be shown in the following section.

⁵⁰ This is Beckwith’s position, “Modern Attempt”. Beckwith argued that the 364-day calendar saw the light of day in a proto-essene milieu sometime around 251 BCE, and that by 200 BCE it had become obvious (cf. *1 En* 80:2–6) that the calendar could simply not be kept in line with the seasons. See “The Earliest Enoch Literature and Its Calendar: Marks of Their Origin, Date and Motivation,” *RevQ* 10 (1979–81a): 365–403, reprinted in *Calendar, Chronology and Worship*, 16–53.

CHAPTER FOUR

THE CYCLE OF FESTIVALS IN THE DEAD SEA SCROLLS

1. *Introduction*¹

When preparing her book *La Date de la Cène*, Jaubert had only limited access to the now important body of literature discovered by the Dead Sea in the Qumran vicinity. She depended upon J.T. Milik's early contributions on the subject of cultic calendars for her assertion that "la découverte toute récente d'un calendrier liturgique fragmentaire dans le lot de la grotte 4Q identifie définitivement le calendrier des Jubilés à celui de la secte."² As is now well established, the body of literature from Qumran has yielded several documents, which deal in some part with the cycle of festivals.³ This cycle is based on the 364-day-year of *Jubilees*.⁴ 11QPs^a (David's Compositions) Col. xxvii mentions that David was responsible for the composition of a certain number of songs:

4. לו רוח נבונה ואורה ויכתוב תהלים
5. שלושת אלפים ושש מאות ושיר לשורר לפני המזבח על עולת
6. התמיד לכול יום ויום לכול ימי השנה ארבעה וששים ושלוש
7. מאות ולקורבן השבתות שנים וחמשים שיר ולקורבן ראשי
8. החודשים ולכול ימי המועדות ולים הכפורים שלושים שיר⁵

¹ For a good introduction on the topic, see J.C. VanderKam, "Festivals". From the same author, the following can also be consulted: "Passover"; "Shavu'Ot," in *EDSS, Vol. 2* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 871–2; "Sukkot".

² Jaubert, *date de la cène*, 15, and note 1 on the same page. Milik's contribution was from the Strasbourg congress, published later in Milik, "Le travail d'édition des manuscrits du désert de Juda".

³ S. Talmon, U. Glessmer, and J. Ben-Dov, eds, *Qumran Cave 4 XVI Calendrical Texts* (DJD XXI; Oxford: Clarendon, 2001). On the *Temple Scroll*, see especially Y. Yadin, *The Temple Scroll, Vol. 1. Introduction* (Jerusalem: Israel Exploration Society, the Institute of Archeology of the Hebrew University, the Shrine of the Book, 1983 revised edition); Y. Yadin, *The Temple Scroll, Vol. 2. Text and Commentary* (Jerusalem: Israel Exploration Society, 1983 revised edition). A recent study of the calendar of the *Temple Scroll* can be found in Beckwith, "Temple Scroll".

⁴ All the Scrolls that deal with calendrical issues, or that expound the cycle of festivals, accept as their base calendar the 364-day calendar. They stand, therefore, in the 364-day year tradition that is already present (in some form) in 1 *En* 72–82 and in the *Book of Jubilees*. These documents include: a) 4Q317—4Q330, 4Q335—4Q337, 6Q317 (Calendrical Documents); 4Q394, CD, 11QpHab, 11QPs^a, 4Q400–407, 11Q17, and 11Q19/20 (Foundation Documents); 4Q319, 4Q252 (other Documents). Cf. Talmon, "What's in a Calendar?" 460.

⁵ D.W. Pary and E. Tov, eds, *Poetic and Liturgical Texts* (DSSR 5; Leiden: Brill, 2005), 196.

4. him a brilliant and discerning spirit, so that he wrote: psalms,
5. 3,600; songs to sing before the altar accompanying the daily
6. perpetual burnt-offering, for all the days of the year: 364;⁶
7. for the sabbath offerings, 52 so'ngs; and for the *offerings of the start of the month*,⁸
8. all the festival days and the Day of Atonement, 30 songs.⁹

⁶ Some scholars have argued that the liturgy at Qumran followed the rythm (four quarters) of the calendar, repeating itself every quarter (or every 13 weeks). So, it is argued, the songs for the first 13 sabbaths of the year, which have partly survived in 4Q400—4Q407, were probably duplicated in the subsequent three quarters of the year. See, for instance, B. Nitzan, "The Dead Sea Scrolls and the Jewish Liturgy," in *The Dead Sea Scrolls as Background to Postbiblical Judaism and Early Christianity. Papers from an International Conference at St. Andrews in 2001* (ed. J.R. Davila; STDJ 46; Leiden: Brill, 2003), 206, who states: "the dates of the four seasons of the year are parallel, these songs may have been repeated on the equivalent sabbaths of each of the four seasons". Nitzan follows J. Maier, "shîrê Ôlat hash-Shabbat. Some Observations on their Calendrical Implications and on their Style," in *The Madrid Qumran Congress: Proceedings of the International Congress on the Dead Sea Scrolls. Madrid 18–21 March 1991. Vol. 2* (eds J. Treballe Barrera and L. Vegas Montaner; STDJ 11.1–2; Leiden: Brill, 1992), 543–60. Surprisingly, Nitzan, "DSS and Liturgy," 216, goes on to say, when comparing the Qumran liturgy with that of the rabbinical sabbath liturgy: "[the rabbinical sabbath liturgy] used the same liturgy for all the sabbaths of the year, whereas the *Daily Prayers* and the *Songs of the Sabbath Sacrifice* from Qumran indicate a different text for each sabbath, according to the 364-day calendar held by the community." G.W. Lorein and E. van Staalduin-Sulman, "A Song of David for Each Day. The Provenance of the *Songs of David*," *RevQ* 22 (2005): 58–9, slightly overstep the mark when they confidently state: "There is no need for the existence of exactly 364 Psalms; after all the Tales of the Arabian Nights do not amount to 1001 and the Qumran community worked with cycles—namely in the Songs of the Sabbath Sacrifice . . . in order to limit the total number." Although it remains a possibility, the point has *not* been proven. The Syriac letter from 800 CE does indeed mention two hundred psalms from David, probably referring to the haul of manuscripts discovered at Qumran ca. 798 CE, which the letter mentions. Can we infer anything more from this? After all, no one today would venture to claim that the totality of the find from the caves at the Qumran site since 1947 represents the exact totality of the manuscripts that ever were there, and that no other manuscripts will ever be found. There is no way such a claim can be substantiated. In fact, there is no need either to doubt the claim that 11QPs^a makes: "songs to sing before the altar accompanying the daily perpetual burnt-offering, for all the days of the year: 364." Likewise with the 52 songs of the sabbath offerings. For discussions on the liturgical system at Qumran, see the bibliographical references in Nitzan, *op. cit.*, 197 note 9. The Syriac letter referring to the documents from Qumran is treated in detail by O. Braun, "Ein Brief des Katholikos Timotheos I. über biblische Studien des 9. Jahrhunderts," *OrChr* 1 (1901): 299–313, as indicated by Lorein and van Staalduin-Sulman, *op. cit.*, 58, note 160.

⁷ Lorein and van Staalduin-Sulman, *op. cit.*, 58–9.

⁸ My translation in italics. Parry and Tov, *op. cit.*, 197 has "New Moon offerings." In the framework of a 364-day calendar ראשי החודשים—is better translated as "start of the month" to reflect the dissociation between the monthly reckoning and the lunations, which traditionally regulate the lunisolar calendar.

⁹ Parry and Tov, *op. cit.*, 197. S. Talmon, S. Talmon, "A Calendrical Document from Qumran Cave IV (Mišmarot D, 4Q325)," in *Solving Riddles and Untying Knots: Biblical, Epigraphic and Semitic Studies in Honor of Jonas C. Greenfield* (ed. Z. Zevit, S. Gitin, and M. Sokoloff; Winona Lake, IN: Eisenbrauns, 1995), 344 note 44, suggests that "the itemized

Following the methodology used in the previous two chapters, the festivals, as expounded in the Temple Scroll and in the Calendrical Documents, are considered in turn.¹⁰ The most complete treatment of this cycle is found in *Temple Scroll^a* (11Q19).¹¹ The Calendrical Documents also contribute some information about the festivals, especially the dates on which they were celebrated in the framework of the 364-day calendar.¹² It will be pointed out that the Dead Sea Scrolls' festal calendars included the biblical festivals, which above have been shown to have been connected, either explicitly or implicitly, with the agricultural cycle.¹³ In addition, the Dead Sea Scrolls also observed key first fruits festivals which, perhaps surprisingly, were not included in the biblical festival calendars. From this it will be deduced that the cycle of festivals, within its 364-day framework, was punctuated by the agricultural cycle, just as was the case for the biblical cycle of festivals.

2. *The Festivals of Passover, Unleavened Bread, and Second Passover*

As already pointed out, the festivals at Qumran were articulated in a 364-day year. There is little doubt that this 364-day year stands in the same tradition as the 364-day year expounded in the *Book of Jubilees*. Yet, if the calendrical framework is similar, there were marked differences between the calendar in the *Book of Jubilees* and the calendar evidenced in the Qumran (mainly Cave 4) manuscripts mainly interested with calendrical issues. The festivals of Passover, Unleavened Bread and second Passover are illustrative of these differences.

roster of 'David's Compositions' (J.A. Sanders, *The Psalms Scroll of Qumran Cave 11* [DJD4; Leiden, 1965] 48, 91–93 [11QPs^a XVI]) in an indirect way comes closest to a comprehensive presentation of the 364-day calendar."

¹⁰ Other documents such as 4QMMT, 4Q400–407 (Songs of the Sabbath Sacrifice), and 4Q252, on the chronology of the Flood, although dealing to some extent with the calendar, will be treated as part of a later project.

¹¹ On the Temple Scroll, see primarily the two-volume study by Yadin, mentioned above. Studies focussing on the Temple Scroll calendar were published by: J.M. Baumgarten, "The Calendar of the Book of Jubilees and the Temple Scroll," *VT* 37 (1987): 71–8; Beckwith, "Temple Scroll".

¹² The Calendrical Scrolls were published in the official edition, by: Talmon, Glessmer, and Ben-Dov, *op. cit.*

¹³ The festivals of Hanukkah and Purim are neither mentioned nor observed in the scrolls.

2.1. *The Passover*

The date of the festival of Passover is explicitly mentioned in 11Q19 col. xvii 6–9:

6. [ועש]ו [בארב]עָה עשר בחודש הראישון [בין הערבים]
 7. [פסח ליהוה] וזבחו לפני מנחת הערב וזבחון [במועדו(?)]
 8. מִבֶּן עֶשְׂרִים [שָׁנָה ומעלה יעשו אותו ואכלוהו בלילה
 9. בַּחצרות [ה]קודש והשכימו והלכו איש לאוהלו

6. [and let] them [keep] on [the four]teenth of the first month, [in the evening,]
 7. [the Lord's Passover;] and they shall sacrifice וזבחו before the evening sacrifice. And they shall sacrifice [(it) at its appointed time(?)]
 8. from twent[y] years old(?) and upwards and they shall keep it; and let them eat it at night
 9. in the courts of [the] ho[1]y (place). And they shall rise early, and every man shall go to its tent [...]¹⁵

Like the biblical text, the Calendrical Documents date the Passover to the fourteenth of the first month. It, however, adds that the festival falls on the same third day of the week every year. This is identifiable through its occurrence on the third day of a specific priestly service, a Tuesday, as the following extract from 4Q326 illustrates:

2. בא /> בו שִׁבְתָּת ב /> בו הפסח יום שלישי ב /> בו

2. on the eleventh in it Sabba[th, on the 14th in it the Passah on the third day (of the week)]

The festival of Passover may have enjoyed a particular status at Qumran as it is the only festival of the cycle to have an extant document (4Q329a)

¹⁴ Qimron, *The Temple Scroll: A Critical Edition with Extensive Reconstructions* (Beer Sheva—Jerusalem: Ben-Gurion University of the Negev Press and Israel Exploration Society, 1996), 27, suggests the following reconstruction for line 7: [פסח ליהוה] וזבחו לפני מנחת הערב וזבחון [הו כול זכר]

¹⁵ Yadin, *Temple Scroll* 2, 73–4.

¹⁶ Talmon, Glessmer, and Ben-Dov, op. cit., 134. For a complete explanation of the textual basis for the slashes, see Comments to L. 2 in Talmon, Glessmer, and Ben-Dov, op. cit., 137, together with notes 11 to 15 for bibliographical details. The practice reflects that also found in “inscriptions and weights of the First Temple period, the Elephantine Papyri, and some ostraca of unknown provenance.” The siglum is here amended to the use of “/” to indicate the number of units, and “>” to indicate the number of tens, so that /// = 3, and >> = 20, and ///>> = 23. The technique of indicating units by a combination of slashes, with a reversed last slash in some of the combinations, was also found at Masada. That which is rendered > here appears in the extant text as a hook for ten, and two superimposed hooks, or a double hook, for twenty. In such documents as 4Q318 and 4Q326 the numeral 30 is indicated by a double hook (20) followed by a single hook (10), whereas there does not seem to be a strict order rule in 4Q320.

entirely dedicated to itself, and recording its occurrence in a specific priestly week of service, year after year in the six-year cycle. This passage illustrates the point:

- .1 [השנה הרשונה מעדיה] ב[שלשה ב] שבת
- .2 [מעזיה הפסח השני] ת מ[עד] יה [בש] לשה
- .3 [בשערים הפסח השלי] ת מעדיה ב[שלשה]
- .4 [באביה הפס] ה ברבעית מעדיה
- .5 [בשלשה ביקים ה] סח החמשיית מעדיה

and written vertically in the left margin:

- .6 בשלשה באם] ר הפסח הששית מעדיה...¹⁷

1. [The first year, its festivals,]o[n the third (day) in (the service)] week
2. [of Ma'aziah (falls) the Passah; the seco]nd (year), its fest[iva]ls, [on the th]ird (day)
3. [in (the service week of) Se'orim (falls) the Passah; the thi]rd (year), its festivals, on the third (day)
4. [in (the service week of) Abiah (falls) the Pass]ah; in the fourth (year), its festivals,
5. [on the third (day) in (the service week of) Jaqim (falls) the Pas]sah; the fifth (year), its festivals
6. on the third (day) in (the service week of) Imm[er (falls) the Passah; the sixth (year), its festivals¹⁸

2.2. The Festival of Unleavened Bread

The festival of Unleavened Bread, on the other hand, is, in comparison to the Passover, recorded far less often in the extant manuscripts. Its date is given in 11Q19 col. xvii 10–11:

- .10 ובחמשה עשר לחודש הזה מקרא קו[דש]
- .11 כול מלאכת עבודה לוא תעשו בו חג מצות שבעת ימים

¹⁷ Talmon, Glessmer, and Ben-Dov, op. cit., 149.

¹⁸ As indicated by Talmon, it is the recurrence of [בש] לשה—"the third day"—in lines 2, 3 and 6 that allows the identification of the festival as Passover. It is intriguing that this document does not compute the second Passover in the Mišmarot service schedule, especially if one considers that the second Passover is duly recorded in 4Q319 [fig. 12 and fig. 13, cf. Talmon, Glessmer, and Ben-Dov, op. cit., 225–6]; 4Q320 [fig. 4 iii 4 (1st year) and 14 (2nd year); fig. 4 iv 9 (3rd year); fig. 4 v 3 (4th year) and 12 (5th year); fig. 4 vi 8 (6th year), cf. Talmon, Glessmer, and Ben-Dov, op. cit., 54–9]; 4Q321 [col. iv (fig. 4) 9 (first year); col. v (fig. 4) 4–5 (2nd year) and 9 (3rd year); col. vi (fig. 4, 5) 4 (4th year), 7–8 (5th year); and finally in col. vii (fig. 5) 2 (6th year), cf. Talmon, Glessmer, and Ben-Dov, op. cit., 74–9]. Rather, 4Q329a seems to be closer to 4Q325 and 4Q326, in which the second Passover is conspicuous by its absence. For 4Q325 and 4Q326, see Talmon, Glessmer, and Ben-Dov, op. cit., 123–38.

10. And on the fifteenth of this month (there shall be) a ho[ly] convocation;
11. You shall do no laborious work on it; a feast of Unleavened Bread, seven days¹⁹

In the Calendrical Documents it is extant only in 4Q326 l. 3, where it is also dated to the fifteenth of the month, the day following Passover:

.2 בא /> בו שב[ת] ב > בּו הפסח יום שלישי ב > בּו
 .3 חג המצות יום רביעי ב > בּו שבת ב > בּו

2. on the eleventh in it Sabba[th, on the 14th in it Passah on the third day (of the week), on the 15th in it]
3. the Feast of Unleavened Bread on the four[th day (of the week), on the 18th in it sabbath, on the 25th in it]²¹

There is no ambiguity in the mind of the authors behind 4Q326 that the festival of Unleavened Bread was to be dated to the fourth day of the week, the day following the day upon which Passover was to be celebrated. In this respect, the festival of Unleavened Bread at Qumran was clearly distinguished from the festival of Passover, a position that differs from the one adopted by the author of the *Book of Jubilees*, for whom the Unleavened Bread celebration was wholly incorporated with Passover, a seven day festival. This discrepancy in dating may be explained in part by different practices of day reckoning. According to *Jub.* 49:1 the Passover is sacrificed on the fourteenth, and eaten in the evening on the fifteenth.

It is doubtful whether the followers of the *Book of Jubilees* would have waited twenty four hours after the sacrifice of the Passover before eating it. After all, the Passover was to be eaten in haste, in remembrance of the events recorded in Exod 12–13. The only inference possible is that in the *Book of Jubilees* the sacrifice took place on the fourteenth “between the evenings,” or just before sunset, while its eating took place at nighttime, as the fifteenth day started. Several scholars have argued, correctly in the opinion of the present writer, that the day reckoning at Qumran was from sunrise to sunrise. This is confirmed by the manner of dating X and *dwq*, the lunar phenomena recorded in 4Q320, 4Q321 and 4Q321a.²² It follows that the third day and the fourth day of the third week in the first month at Qumran were dated differently, from morning to evening.

¹⁹ Yadin, *Temple Scroll* 2, 74.

²⁰ Talmon, Glessmer, and Ben-Dov, op. cit., 134.

²¹ Talmon, Glessmer, and Ben-Dov, op. cit., 135–6.

²² See Chapter 6 for a suggestion of the meaning of X and *dwq*.

This suggests a clear distinction between Passover, sacrificed and eaten on the fourteenth, and the festival of Unleavened Bread, starting on the fifteenth.

2.3. *The Second Passover*

The second Passover—פסח שני—is mentioned in 4Q321. In an extant part of Frg. 4 Col. V. 5 one reads:

5. בּוֹא הַפֶּסַח הַשֵּׁנִי הַשְּׁלִישִׁי בְּאֵלֵינוּ [לְיִשְׁבִּיב] וּבְחֹזֶן [פֶּה] בּוֹא חֹזֶן הַשְּׁבֹעִים
[הַרְבִּיעִי [בב] לְגֵאָה הַחֲמִישִׁי בְּפֶתַח] חֵיה

5. in it (falls) the Second Passover. The (first day of the) [third (month falls) in (the week of) E]l[iashib]; and in (the week of) H[u]l[ppah] in it (falls) the festival of Weeks. [The] (first day of the) fourth (month falls) [in (the week of) Bi]lgah. The (first day of the) fifth (month falls) in (the week of) Pe[ta]hia.²³

The second Passover is mentioned after the Raising of the Sheaf (v. 4) and before the festival of Weeks. This is to be expected, as the festival would take place on the fourteenth day of the second month, intervening between the Sheaf offering and the festival of Weeks. One would expect this chronological order to be duplicated in the *Temple Scroll*. From this perspective it is perhaps significant that פסח שני is not mentioned in the preserved text of 11Q19 col. xviii 10–14. The text goes:

10. [אחת] ביום הניפת העומר וספרתה
11. [לכמה] שבע שבתות תמימות מיום הביאכמה את העומר
12. [התנופה תס]פורו עד ממוחרת השבת השביעית תספורו
13. [חמשים] יום והביאותמה מנחה חדשה ליהוה ממושבותיכמה
14. [לחם סו]ל[ת] חמץ חדש בכורים ליהוה לחם חטים שטים²⁴

10. on the day of the waving of the Sheaf. And you shall count
11. seven(?) full sabbaths from the day that you brought the sheaf
12. [of the wave offering; you shall c]ount to the morrow after the seventh sabbath, counting

²³ Talmon, Glessmer, and Ben-Dov, op. cit., 75–6. See also 4Q321 Frg. 4 col. iv 9; Frg. 4 col. v 9; Frg. 4.5 col. vi 3–4, 7–8; Frg. 5 col. vii 2, Talmon, Glessmer, and Ben-Dov, op. cit., 74–9.

²⁴ Yadin, *Temple Scroll* 2, 78–9. Qimron, op. cit., 28, proposes some slightly different reconstructions. Line 10: starts ביום ה[בשנ] instead of Yadin's ביום [אחת]; Line 11: [לכם] שבע instead of Yadin's שבע [לכמה]; Line 12: התנופה תספורו instead of Yadin's התנופה תספורו; Line 14: לחם סו[ל]ת, to reflect Lev 7:13, in place of Yadin's [לחם סו]ל[ת] חמץ.

13. [fifty] days; and you shall bring a new cereal offering to the Lord from your dwellings,
14. [a bread of fine] f[lour,] new leavened, first fruits to the Lord, bread of wheat; twel[ve(?)]²⁵

Admittedly the early lines of Col. xviii are damaged. This brought Yadin to conjecture that “it seems likely that the missing part at the top of the column contained a short comment about ‘second Passover’ (פסח שני).”²⁶ This is a natural inference when faced with such extensive lacunae in the early lines. One, however, should note that if this were the case this would mark a departure from the way the authors of the Scrolls favored a chronological order whenever treating of the festivals, as the present document and the Calendrical Documents testify.²⁷ There is no mention of פסח שני between the two festivals, nor is there any indication from the extant text that the second Passover was mentioned at the start of Col. xviii.²⁸

²⁵ Yadin, *Temple Scroll* 2, 78–9.

²⁶ Yadin, *Temple Scroll* 2, 76. Also Yadin, *Temple Scroll* 1, 99. Interestingly Qimron, op. cit., 28, does not offer any additional reconstruction that would substantiate Yadin’s suggestion. J. Maier, *The Temple Scroll* (translated by R.T. White; JSOTSup 34; Sheffield: JSOT Press, 1985), 25, 79–80, does not address the issue of the missing second Passover. M.O. Wise, *A Critical Study of the Temple Scroll from Qumran Cave 11* (SAOC 49; Chicago: The Oriental Institute of the University of Chicago, 1990), 216, in his Appendix on the Compositional Analysis of the Temple Scroll, simply indicates concerning col. 18 that lines 1 and 3 are “too fragmentary,” while the remainder of the col. parallels passages from Num 28–29 and Lev. 16, 23. Wise offers no explanation for the absence of the second Passover, although he does dispute Yadin’s suggestion that “all the missing festivals were once there” [in the lacunae of col. 43]. Cf. *A Critical Study of the Temple Scroll from Qumran Cave 11*, 131. D.D. Swanson, *The Temple Scroll and the Bible. The Methodology of nQT* (STDJ XIV; Leiden: Brill, 1995), 18–31, draws attention to the literary sources of this passage: Lev. 23:10–15 as the primary text, and Num 28:26–30 as secondary text. It is interesting to see from Swanson’s results that Numbers 15 forms the basis for what the author terms the “supplementary” text, the role of which is to provide key terms that are significant to understand the passage. Swanson does not mention the second passover at all. It is the indication that Numbers 15 plays a key role in the understanding of the passage at hand that is relevant here. The author had access to the text of Numbers and must have known Numbers’ regulation concerning its observance. Yet, as we have seen above, it is conspicuously absent from the text.

²⁷ So it is that the author of 11Q19 treats the festivals of the first month, starting in l. 9 with “the first day of the month”—וּבְאַחַד לַחֹדֶשׁ—followed by the treatment of the Day of Ordination (col. xv 3—col. xvii), and the Eighth Day (col. xvii 1–5); the Passover (col. xvii 6–9) and the festival of Unleavened Bread (col. xvii 10–16). col. xviii mentions two festivals: “on the day of the waving of the sheaf—בְּיוֹם הַנִּיפַת הָעֹמֵר—(line 10), followed by “a new cereal offering” (line 13). The latter, fifty days after the Sheaf offering, can only be the Pentecost, here named not after its connection with Israel’s Exodus from Egypt, but rather in connection with the agricultural cycle which it follows.

²⁸ When mentioned in the Calendrical Scrolls the second Passover is recorded chronologically: 4Q320, a roster of the festivals in the sexennial cycle, records the second Passover in the following fragments: Frg. 4 col. iii 4 (first year—partly reconstructed); Frg. 4 col. iv

One must consider the possibility that the lacunae was voluntary, and that the authors of the Scrolls, adopting partly the *Book of Jubilees'* stance against the second Passover, simply left it out when expounding the cycle of festivals *in its agricultural context*. On the other hand, they included it when drawing a roster of the occurrences of festivals in the sexennial cycle.²⁹ Thus it would appear that the authors of the Scrolls acknowledged the potential problem the second Passover could introduce in the cultic calendar and its intrinsic connection to the agricultural year. This problematic aspect possibly dated back to the aborted attempts at synchronizing the calendars of the Northern and Southern Kingdoms. By leaving the second Passover out they ensured that, from their Judean perspective, there would be no dichotomy between agricultural cycle and festivals.³⁰ It

9 (second year—partly reconstructed but certain because of the extant “passover” in line 7); Frg. 4 col. v 3 (fourth year—extant); Frg. 4 col. v 12 (extant—fifth year); Frg. 4 col. vi 8 (sixth year—partly reconstructed but certain because of the extant “passover” in line 6). See Talmon, Glessmer, and Ben-Dov, *op. cit.*, 44–49. The second Passover is also recorded in 4Q321, a roster of festivals and first days of the months in the sexennial cycle: Frg. 4 col. v 5 (second year—extant); Frg. 4 col. v 9 (third year—partly reconstructed but certain). See Talmon, Glessmer, and Ben-Dov, *op. cit.*, 75–6. Lastly, the second Passover is recorded also in 4Q319, a roster of festivals in the sexennial cycle: Frg. 13 line 1 (fifth year—partly reconstructed); Frg. 13 line 4 (sixth year—partly reconstructed). See Talmon, Glessmer, and Ben-Dov, *op. cit.*, 225–6. Oddly, 4Q329a, a roster of the festival of Passover and its occurrence on the third day in such and such priestly service through the course of the sexennial cycle does not record the second Passover. See Talmon, Glessmer, and Ben-Dov, *op. cit.*, 147–50. P.R. Callaway, “The 364–Day Calendar Traditions at Qumran,” in *Mogilany 1989. Papers on the Dead Sea Scrolls Offered in Memory of Jean Carmignac. Part I: General Research on the Dead Sea Scrolls—Qumran and the New Testament—The Present State of Qumranology*. (ed. Z.J. Kapera; Kraków: Enigma, 1993), 28, had already expressed doubts concerning the presence of the second Passover in the *Temple Scroll* when he remarked: “whereas one mishmarot fragment refers to the second Passover, it remains uncertain whether the *Temple Scroll* does, as Yadin surmised.”

²⁹ As observed by Milik, *Dix Ans*, 72, “avant la Fête des Semaines on célébrait encore la seconde Pâque (jeudi, le soir du 14 du 2^e mois), qui dans la Bible n’était prévue que pour des cas particuliers.”

³⁰ See in Chapter 2 above the section on 2 Chr 30–31 and King Hezekiah’s Passover in the second month. The second month from a Judean standpoint probably coincided with the first month in the Northern Kingdom. In other words, Hezekiah’s attempt at synchronizing the two cultic calendars meant that the festivals in the Southern (Judean) calendar had to be postponed by a full month so that they would coincide with those of the northern calendar and its agricultural cycle, a concession necessary in order to attract those Jews from the Northern Kingdom. This resulted in Jerusalem in tithes and second tithes being heaped up at a time which, although in the third and seventh months, was somehow disconnected from the festivals of Weeks and of Tabernacles. Talmon, “What’s in a Calendar?”, rehearses the arguments he already suggested long ago, cf. Talmon, “Divergences,” 53–8, and correctly suggests that two calendars following the same festivals were in place, one in the north and one in the south, with a discrepancy of a month, reflecting the different agricultural conditions between north and south. Talmon does not comment, however,

was outlined above that the legislation concerning Passover is very strict in the *Book of Jubilees*: it is to be celebrated once a year, not delaying its day nor its month. 11Q19 would appear to fit this position with, perhaps, a somewhat less polemical standpoint. Support for this view may be drawn from 4Q329a, which, although it records solely the Passover occurrences on the third day of the week of such and such priestly cycle through the sexennial cycle, oddly does not record the second Passover.

3. *The Raising of the Sheaf*

This is termed the Waving of the Sheaf—*הנף / הניפת העומר / עומר*. 4Q320 frg. 4 iii, which deals with the festivals in the first and the second year of the sexennial cycle, states:

1. השנה הרישונה מועדיה
 2. ב // בשבת בני מעוזיה הפסח
 3. ב / [ב] ידע[יה] הנף ה[עמר]
 ...
 13. [ב-] במי[מ]ן הנף ה[עמר]³¹

1. the first year its festivals
2. on the 3rd (day) in the week of the sons of Ma'oziah (falls) the Passah
3. on the first (day) [in] Jeda[‘iah] (falls) the Waving of the[Omer]
- ...
13. [on the first (day)] in Mija[mi]n (falls) the Waving of the[Omer]³²

The relatively well-preserved state of line 2 *ב // בשבת בני מעוזיה הפסח*³³—indicating the day in the priestly service of Jeda‘iah in the first month of the first year, upon which the festival was celebrated, allows one to deduce its exact date.³⁴ It took place on the twenty-sixth day of the first month, a Sunday, just as it did in the 364-day calendar of the *Book of Jubilees*.³⁵ There is agreement between the *Book of Jubilees* and the Qumran documents as to the date of the festival. The dating of the Sheaf

on the absence of the festivals of Weeks and Tabernacles, nor does he perceive any veiled reference to them in the mention of the tithes in the third and seventh months.

³¹ Talmon, Glessmer, and Ben-Dov, op. cit., 54–5.

³² *DJD XXI Calendrical Texts*, 55.

³³ The Hebrew text is taken from Talmon, Glessmer, and Ben-Dov, op. cit., 54.

³⁴ J.C. VanderKam, “Festivals”. See also 4Q320 frg. 4 iv 8 (in the 3rd year); 4 v 2 (in the 4th year), 11 (in the 5th year); 4 vi 7 (in 6th year). Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 56–60. Also in 4Q321 col. iv (frg. 4) 9 (the first year, “in the week of Jeda‘iah”—no day is indicated); col. v (frg. 4) 4 (2nd year), 9 (3rd year); col. vi (frg. 4, 5) 3 (year 4), 7 (year 5); and col. vii (frg. 5) 2 (year 6). Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 74–9.

³⁵ Yadin, *Temple Scroll* 1, 102–3.

Offering to the twenty sixth of the first month indicates that the authors of the Dead Sea Scrolls interpreted Lev 23:15 just as the author of the *Book of Jubilees* did. In their view the *morrow after the sabbath* was the day following the sabbath, which occurred immediately after, and not during, the seven-day long festival of unleavened bread.³⁶

The festival is also called the festival of First Grain in 4Q325 frg. 1 3. That this should be the first grain of Barley seems evident and is confirmed by the specification in 11Q19 Col. xliii 6 that the grain discussed in this passage is that of wheat.

6. מחג הבכורים לדגן החטים יהיו אוכלים את הדגן³⁷

6. from the feast of the first fruits of the grain of wheat they shall eat the grain.³⁸

The author of the *Temple Scroll* must have felt it was necessary to specify that this was the first fruit of the grain of wheat as opposed to the first fruit of the first grain, i.e., barley. Evidently, this is a strong indication that the authors of the documents, just like any other Jewish group of the second Temple period, understood the cultic year to be punctuated by the agricultural cycle. In 4Q325 frg. 1 3, the document considered here, the festival is dated to the twenty sixth of the first month, on the day after the sabbath:

3. [מוע]ד³⁹ שעורים בעשרים וששה בו אחר שבת רוש החודש ה[ש]ני³⁹

3. [the festiv]al of (First) Grain (falls) on the twenty-six[th] in it after the sabbath; the beginning of the second mon[th]⁴⁰

With regard to the above, the dating of the *morrow after the sabbath* to the twenty-sixth day of the first month, and not to the sixteenth day, as was the rabbinic custom, ensured the occurrence of the festival of Weeks/Pentecost on a Sunday. It also ensured that the subsequent festivals of first fruits, following a pentecontad sequence after the festival of Weeks, would take place occasionally before, but more often after their occurrence in the Jewish cycle of festivals according to the lunar calendar.⁴¹ Consequently,

³⁶ J.C. VanderKam, "Festivals".

³⁷ Yadin, *Temple Scroll* 2, 182.

³⁸ Yadin, *Temple Scroll* 2, 182.

³⁹ Talmon, Glessmer, and Ben-Dov, op. cit., 126.

⁴⁰ Talmon, Glessmer, and Ben-Dov, op. cit., 127. See also 4Q326 4: "Sabbath, on the 26th in it the Feast of (the First) G[rain after the Sabbath; the first month." Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 136.

⁴¹ M.A. Daise, "The Days of Sukkot of the Month of Kislev: The Festival of Dedication and the Delay of Feasts in 1QS 1:13–15," in *Enoch and Qumran Origins: New Light on a*

the first fruit festivals were less likely, in the 364-day-year, to be subjected to the difficulties associated with the (very) occasional adverse weather conditions which would have affected the readiness of crops in Judaea.⁴² The silence of the sources from the Dead Sea as regards the possibility of a dichotomy between the festival cycle and the agricultural cycle can be interpreted to mean that the calendar was not made to be in line with the seasons.⁴³ Equally, it can be interpreted to suggest that what appears to be a difficulty to the mind of today's interpreter was not considered as such by the ancient author. Many scholars have argued that the witness of the Dead Sea Scrolls, copied over a period of well beyond two hundred years, demonstrates that the 364-day calendar and its festival cycle attached to the seasons, remained in use, most probably to the satisfaction of its followers. In any case, its exposition in such diverse documents (calendrical, foundational, legal, liturgical, etc.) certainly militates for a calendar that was more than just theoretical. Suffice to reiterate at this stage that the silence of the sources under consideration as regards the method used to keep the cultic year in line with the agricultural season cannot be interpreted conclusively to mean that there was no such method in use.

4. *The Festival of Weeks*

The festival of Weeks—חג השבועות / עים—also called the festival of First Wheat—מועד ביכורי החטים / דגן החטים. The legislation to fix its date is expressed thus in 11Q19 Col. xviii:

Forgotten Connection (ed. G. Boccaccini; Grand Rapids, MI: Eerdmans, 2005), 119–28, esp 120–22, seems to suggest that the festivals following that of the Sheaf offering in the lunisolar calendar would fall before—“precede”—their appointed time. This is not strictly correct. First, while he assumes the calendar was kept in line with the seasons, the author does not consider *how* this was done. Although the assumption may be correct, without proper argumentation this remains an assumption. Second, the intercalation of the 354-day calendar itself would have caused, possibly as often as every two or three years, its festivals to fall after their appointed times, while in the vast majority of the remaining instances they would have fallen before. Daise's suggestion that 2 Macc 9:10 is a reference to the festival of Tabernacles taking place in Kislev that year, some two months after its appointed time (126) is too speculative. It is perhaps more likely that the author of 1QS 1:13–15 had a particular calendrical practice rather than a singular event in mind when he commanded “all those who devote themselves freely to His truth” to be “neither early nor late for *any* of their appointed times.” The translation used here is from Vermes, *op. cit.*, 99.

⁴² There would have been differences between Galilee in the north and Judaea in the south. Cf. Talmon, “Divergences,” 56 note 2.

⁴³ It was and remains the main stumbling block for many scholars.

- .10 [אחת] ביום הניפת העומר וספרתה
 .11 [לכמה] שבע שבתות תמימות מיום הביאכמה את העומר
 .12 [התנופה תס] פורו עד ממוחרת השבת השביעית תספורו
 .13 [חמשים] יום והביאותמה מנחה חדשה ליהוה ממושבותיכמה⁴⁴

10. on the day of waving the sheaf. And you shall count
 11. [for yourselves] seven full sabbaths from the day that you brought the sheaf
 12. [of the wave offering, you shall c]ount to the morrow after the seventh sabbath, counting
 13. [fifty] days; and you shall bring a new cereal offering to the Lord from your dwellings,⁴⁵

As illustrated above, the Waving of the Sheaf takes place on I/26. Consequently, the festival of Weeks occurs on III/15, as in the calendar of the *Book of Jubilees*. The above passage goes on:

- .14 [לחם סו]ל[ת] חמץ חדש בכורים ליהוה לחם חטים שטים
 .15 [עשרה(?) חלות שני] עשרונים סולת תה[יה] [החלה האחת
 .16 [והביאומה ראושי ה]מט[ו]ת לשבטי ישראל ויקריבו⁴⁶

14. [cakes of] new leavened bread, first-fruits for YHWH: wheaten bread, two
 15. [cakes of bread,] each cake will b[e] of [two] tenths of finest flour.
 16. [The heads of the] clans of the tribes of Israel [will bring them] and offer⁴⁷

The mention in the immediate context of “new bread from freshly ripened ears” dispels any doubt that the specific ritual offering is connected to an agricultural event, which takes place in the third month of the 364-day calendar in use at Qumran. This is the same calendar expounded in the *Book of Jubilees* and originally presented in the *Astronomical Book of Enoch*.

In the Qumran Scrolls, the festival is dated to the first day of the week of the priestly course on which it falls. 4Q320 frg. 4 iii 5, rehearsing the festivals in the first year of the sexennial cycle, states:

.5 ב/ בישוע חג השבועים⁴⁸

5. on the 1st (day) in Jeshu'a (falls) the festival of Weeks⁴⁹

⁴⁴ Yadin, *Temple Scroll* 2, 78–9.

⁴⁵ Yadin, *Temple Scroll* 2, 78–9.

⁴⁶ Yadin, *Temple Scroll* 2, 79.

⁴⁷ Yadin, *Temple Scroll* 2, 79.

⁴⁸ Talmon, Glessmer, and Ben-Dov, op. cit., 54.

⁴⁹ Talmon, Glessmer, and Ben-Dov, op. cit., 55.

In fact, the Calendrical Documents always attach the first day of the festival of Weeks to the first day of the week in a given priestly rotation.⁵⁰ This is due to the occurrence of the festival fifty days after the festival of the Sheaf waving, which itself took place on a Sunday. The Sabbatical character of the 364-day calendar ensures that the festivals remained attached to the same day of the week, year after year.

5. *The Festival of Tabernacles*

Also called the festival of Booths—*חג הסוכות*. 11Q19 Col. xxvii deals with what appears to be the legislation for the Day of Atonement, the festival just prior to the festival of Tabernacles. Line 10 records the date of what would be the festival of Tabernacles:

10. [...] ובחמשה עשר יום לחודש הזה

10. [...] on the fifteenth day of the month⁵¹

11Q19 Col. xxviii–xxix give the law concerning the sacrifices of the seven-day festival. There is no explicit connection to the agricultural cycle here. Rather, the festival is attached to the story of the exodus from Egypt.⁵² The occurrence of this festival in such and such week of priestly service, in such and such year of the sexennial cycle, is recorded in Calendrical scrolls 4Q320 and 4Q321.⁵³

⁵⁰ Cf. also 4Q320 frg. 4 iv 1 (1st day in Huppah—second year), 9 (1st day in Hezir—third year); frg. 4 v 4 (1st day in Jakin—4th year), 13 (1st day in Joiarib—fifth year); frg. 4 vi 9 (1st day in Malkiah—sixth year). In Talmon, Glessmer, and Ben-Dov, op. cit., 54–9. The dating of the festival of Weeks on the first day of a specific priestly rotation is also recorded in 4Q319 frg. 12 2 (1st of Jeshu'a); frg. 13 1 (1st of Joiarib—fifth year), 4–5 (1st of Malkiah—sixth year). Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 225–6. This is true also in 4Q321, especially in the later part of the scroll, which records the occurrence of the biblical festivals in the weekly priestly service on duty. See especially col. v (frg. 4) 1 (in Jeshu'a—first year), 5 (in Huppah—second year). Column v breaks off just before the mention of the festival of Weeks in the third year. See Talmon, Glessmer, and Ben-Dov, op. cit., 75–6.

⁵¹ Yadin, *Temple Scroll* 2, 120.

⁵² Cf. *Reworked Pentateuch* (4QRP^c) / 4Q365 frg. 23 1–2: “You shall live [in hu]ts for seven days; all who are natives of Israel shall stay in huts, so th[at your] gen[erations may know] ² how I made your fathers live [in hu]ts when I took them out of the Land of Egypt. I am YHWH your God!”, in F. García Martínez and E.J.C. Tigchelaar, *The Dead Sea Scrolls. Study Edition. Volume 2, 4Q274–11Q31* (Leiden: Brill, 1998), Heb 720, 722, trans. 721, 723. Compare Lev 23:42–3 “You shall live in booths for seven days; all that are citizens in Israel shall live in booths, so that your generations may know that I made the people of Israel dwell in booths when I brought them out of the land of Egypt: I am the Lord your God.”

⁵³ 4Q320 frg. 4 iii 9 (in the first year); iv 4 (second year); v 7 (fourth year); and vi 2 (fifth year), in Talmon, Glessmer, and Ben-Dov, op. cit., 54–9. 4Q321 frg. 4 col. v 2 (first year);

6. *Additional First-fruit Festivals in the Dead Sea Scrolls*

The first two first fruits festivals were those of barley, on the occasion of the Raising of the Sheaf, and of the grain of wheat, on the occasion of the festival of Weeks.⁵⁴ Additional first fruit festivals were celebrated at Qumran: the first fruit of New Wine, the first fruit of New Oil, and the Wood Offering.

6.1. *The Festival of New Wine*—מועד היין / התירוש

The legislation for this festival is recorded in 11Q19 Col. xix 11–16:

11. [וספר]תמה לכמה מיום הביאכמה את המנחה חדש ליהו[ה]
 12. [את] לחם הבכורים שבעה שבועות שבע שבתות תמימות
 13. [תהינה ע]ד ממוחרת השבת השביעית תספורו חמשים יום
 14. ו[הביאות]מה יין חדש לנסך ארבעה הינים מכול מטות ישראל
 15. שלישיית ההין על המטה ויקריבו על היין {הזה} ביום הזה
 16. ליהוה שנים עשר אלים כול ראשי אלפי ישראל⁵⁵

11. [And] you shall [count] from the day that you brought the new cereal offering to the Lo[rd,]
12. [th]e bread of new fruits, seven weeks; seven full sabbaths
13. [there shall be un]til you count fifty days to the morrow of the seventh sabbath.
14. And you sh[all bring] new wine for drink offering: four hins, from all the tribes of Israel,
15. a th*ird* of a hin for each tribe; and they shall offer with the {this} wine that day
16. *to the Lord twel*ve r[a]ms, all the heads of the clans of Israel⁵⁶

Thus, the festival of New Wine took place on the day after the (seventh) sabbath, a Sunday. In the 364-day calendar this took place on the 3rd

col. vi (fig. 4, 5) 2 (third year); and col. vii (fig. 5) 4 (sixth year), in Talmon, Glessmer, and Ben-Dov, *op. cit.*, 75–9.

⁵⁴ Yadin, *Temple Scroll* 1, 102–3. Yadin provides a passage from Sa'adiah Gaon, who quotes Judah the Alexandrian: כמא כאן בין בכורי השעורים ובכורי חטים נ' יומא—as there are fifty days between the firstfruits of barley and the firstfruits of wheat." Yadin, *Temple Scroll* 1, 102.

⁵⁵ Yadin, *Temple Scroll* 2, 83–4. In a note to line 16 Yadin commented: "שנים עשר א[י]לים: the scribe first wrote אלים, and suspended the *yod* afterwards." Qimron, Qimron, *op. cit.*, 29, indicates that 11QT^b 6 has אלים. Changes introduced by Qimron to the reconstruction of the text remain minimal: line 11: [ו]ספרתמה לכמה; line 12: לחם הבכורים שבעה; line 13–14: the 11QT^b 6 recension places the word בתמה [ה]ק[ר] straight after חמשים, partly in the margin, and the missing יום was possibly "extant in the lacuna above בתמה [ה]ק[ר] בתמה."

⁵⁶ Yadin, *Temple Scroll* 2, 83–4.

(day) of the fifth month.⁵⁷ 11Q19 Col. xxi elaborates on the commands for the festival of New Wine. The text indicates that on this occasion, the priests, the Levites, and the people “shall go to drink new wine”:

7. יחלו לשתות יין חדש [ולוא יאכל]ל[ו] כול ענב פר[י] ב[ו]סר מן הגפנים כל
8. [ביו]ם הזה יכפרו על התירוש וישמחו בני ישראל לה[ני] יהוה⁵⁸

7. *shall go to drink a new wine (יין),* [and they shall not ea]t any s[o]u[r] grapes from the vines, *for*
8. [on] *this* [da]*y they shall atone (יכפרו) on the* wine (תירוש). And the children of Israel shall rejoice beff[ore] the Lord,⁵⁹

Yadin posited that this portion of the text was influenced by the laws concerning the Nazarites, contained in Num 6:3–4.⁶⁰ The biblical text reads:

³They shall separate themselves from wine and strong drink (מיין וּשְׁכָר יִזְיֹר); they shall drink no wine vinegar or other vinegar, they shall not drink any grape juice or eat grapes, fresh or dried. ⁴All their days as nazirites they shall eat nothing that is produced by the grape vine, not even the seeds or the skin.

Although logical, Yadin’s proposal is problematic. First, 11Q19 xxi 7 says “shall begin to drink new wine”—יחלו לשתות יין חדש. There is no question of drinking wine, new or otherwise, in Numbers 6. Rather, “they shall separate themselves from wine and strong drink”—מיין וּשְׁכָר יִזְיֹר. Second, although the prohibition to eat in the respective passages is concerned with the fruit of the vine, it does not apply to the same stage of development of the grapes. In 11Q19 xxi 7 it applies to the unripe grapes—ענב פרי בוסר. The root בסר is used in the biblical text of unripe or sour grapes, i.e., not yet ready for consumption (cf. Is 18:5; Job 15:33). In Num 6:3 the prohibition to eat is applied to fresh and dried grapes—(1) עֲנָבִים לְחִים—fruits that are now ready to be eaten. Third, the prohibition to eat in 11Q19 xxi 7 is applicable “on that day”—ביום—whereas in Numbers it applies to “all the days”—כל ימי (plural construct form). In sum, the passage in 11Q19 col. xxi is concerned with a specific day on

⁵⁷ Callaway, op. cit., 27–8; Reeves, op. cit., 350–1.

⁵⁸ Yadin, *Temple Scroll* 2, 94, 336–8.

⁵⁹ Yadin, *Temple Scroll* 2, 94, 337–9. Vermes, op. cit., 196, renders the text: “They [shall not e]a[t] any un[r]ipe grapes from the vines, for [on] this [da]y they shall expiate for the *tirosh*.”

⁶⁰ Yadin, *Temple Scroll* 2, 94.

which grapes that are ready must be consumed, and the use of unripe grapes is prohibited for the occasion.

It has been suggested to reconstruct line 7 as follows:

7. [יחלו לשותות יין חדש] ולאכול ענבים ובוסר מן הגפנים [כי]
8. [ביום הזה יכפרו על ה[תירוש...]]⁶¹

7. [shall begin to drink new wine] and to eat grapes and the unripe fruit from the vines, [because]

8. [on this day they shall atone for the] new wine...⁶²

However, the omission of the negative before “unripe grapes” introduces a difficulty. For the text to make sense without the negative, one must envisage that the calendar followed in the *Temple Scroll* was based on what M. Albani, in an informed discussion on the question of intercalation of the 364-day year, called a *Wandeljahr*,⁶³ i.e., a 364-day year not kept in line with the agricultural cycle. This (hypothetical) year slowly moved back through the seasons, falling in arrears of the cycle of seasons by roughly 1.25 days per year. After a while it is evident that in this kind of wandering calendar year the various festivals would not have been aligned with the seasons anymore, eventually to come back—for a short time—to alignment, and so on. Within such framework it is true that the particular indication, that “they shall begin to eat the grapes and the unripe fruits from the vine” would apply most of the time as, apart from the few years

⁶¹ F. García Martínez and E.J.C. Tigchelaar, *The Dead Sea Scrolls. Study Edition. Volume 2, 4Q274–11Q31* (Leiden: Brill, 2000), 1243.

⁶² García Martínez and Tigchelaar, *The Dead Sea Scrolls Vol. 2*, 1243.

⁶³ Albani defines the *Wandeljahrmodell* as opposed to the *Theoriemodell* and the *Interkalationsmodell*. The *Wandeljahrmodell* is based on the thesis by H. Stegemann, *Die Essener, Qumran, Johannes der Täufer und Jesus: Ein Sachbuch* (Freiburg: Verlag Herder, 1993). The most recent scholarly approach of what Albani terms the *Theoriemodell* is that of B.Z. Wacholder and S. Wacholder, “Patterns of Biblical Dates and Qumran Calendar: The Fallacy of Jaubert’s Hypothesis,” *HUCA* 66 (1995): esp. 29, where the authors state: “Intercalation of the sectarian calendar is a modern invention. For example, 4Q320, Mishmarot A, synchronies the lunisolar reckoning without any awareness of intercalation. . . Neither Milik nor anyone else has devised an intercalation scheme satisfying the demands of the Qumranic community. An analysis of the recently released Mishmarot texts demonstrates this premise”; cf. Albani, “Zur Rekonstruktion eines verdrängten Konzepts: Der 364-Tage-Kalender in der gegenwärtigen Forschung,” 105 note 90. Albani’s *Interkalationsmodell* has been championed by U. Glessmer in several publications from 1991: “Der 364-Tage-Kalender und die Sabbatstruktur seiner Schaltungen in ihrer Bedeutung für den Kult,” in *Ernten, was man sät: Festschrift Klaus Koch zu seinem 65. Geburtstag* (eds D.R. Daniels, U. Glessmer, and M. Rösel; Neukirchen-Vluyn: Neukirchener Verlag, 1991), 379–98; and more recently Glessmer, “4Q319 and Intercalations”. Further bibliographical references on the question of intercalation of the 364-day year are given above, chapter 1 note 132.

within which the third day of the fifth month would coincide roughly with the grape harvest, the cultic year and the agricultural cycle would not be synchronized, and more often than not there would be no ripe grapes on the vines at the time of the festival. Consequently there would be a few instances when “that day” would occur only once all grapes and fruits of the vine were ripe, creating a somewhat unusual situation: on the day of the festival of New Wine the adherents to the *Temple Scroll's* regulation would be unable to consume unripe fruit of the vine because the fruit would be ripe! Clearly this does not make sense, and the textual reconstruction that omits the negative must now be abandoned. This interpretation does not quite tally with the viewpoint that festivals were divinely ordained and inscribed in the Heavenly Tablets.⁶⁴

Rather, the reconstruction that posits the prohibition of consuming unripe fruit of the vine on the occasion of the offering of the first fruits of the wine makes more sense. Reconstructed thus the text suggests a clear correlation between the festival and the actual agricultural season. This is clear in the understanding of the author of 11Q19, who stipulates in the legislation regulating the consumption of first fruits (col. xliii 3–11) that:

- .3 [ובימי הבכורים לדגן לת]ירוש וליצהר]
- .4 [ובמועד קורבן ה]עצים באלה הימים יאכל ולוא יג[חו]
- .5 ממנו שנה לשנה אחרת כי ככה יהיו אוכלים אותו
- .6 מחג הבכורים לדגן החטים יהיו אוכלים את הדגן
- .7 עד השנה השנית עד יום חג הבכורים והיין מיום
- .8 מועד התירוש עד השנה השנית עד יום מועד
- .9 התירוש והיצהר מיום מועדו עד השנה השנית
- .10 למועד יום הקרב שמן חדש עלהמזבח וכול אשר
- .11 נותר ממועדיהמה יקדש באש ישרף לוא יאכל עוד
- .12 כי קדש⁶⁵

⁶⁴ Cf. In the *Book of Jubilees* the title of the work; also *Jub.* 49 concerning the Passover and the Unleavened Bread; *Jub.* 6: 20–22 concerning the festival of Weeks; *Jub.* 32:10 concerning the festival of Tabernacles. Not all festivals, however, enjoy the same privilege, or status. The festival of the Sheaf offering, or waving of the Omer, implicitly dated to 1/26 in the *Book of Jubilees*, does not appear to be “engraved on the Heavenly Tablets.” The same can be said of the second Passover, which is altogether absent from the *Book of Jubilees*. Yet, concerning the Raising of the Sheaf, the festival was clearly celebrated. Its omission from the Heavenly Tablets may have been motivated by an acknowledgement that Lev 23:15 מִמָּחֳרַת הַשַּׁבָּת “the morrow after the sabbath” could be, as in fact it was by different groups in second Temple Judaism, interpreted in different ways.

⁶⁵ Yadin, *Temple Scroll* 2, 182–3, 377.

3. [] and on the days of the first fruits of the grain, of the wi[ne and of oil]
4. [and at the feast of the] wood [offering.] On these days it shall be eaten; and let [them] not leave
5. of it from one year to another year. For thus they shall eat it:
6. from the feast of the first fruits of the grain of wheat they shall eat the grain
7. up the following year, until the feast of the first fruits; and the wine, from the day
8. of the feast of the wine, until the day of the feast
9. of the wine of the following year; and the oil, from the day of its feast to the following year,
10. until the feast, the day of offering of new oil [o]n [the] altar. And all that
11. remains of their feasts shall be consecrated and burnt; it shall never again be eaten,
12. for it is holy.⁶⁶

This passage is strongly reminiscent of the passage from the *Book of Jubilees* alluded to above and which deals with the law of tithing.⁶⁷ The textual dependence is perhaps too strong to be ignored, and it is most likely that the passage from the *Book of Jubilees* is the source behind the *Temple Scroll* passage.⁶⁸

The New Wine festival is, perhaps surprisingly, conspicuously absent from the Calendrical Documents from Qumran.⁶⁹ It is mentioned only in 4Q394 1–2 col. iii 1–16:

[ש]ב[ת] בע[שתי עשר] בו שבת בשסונה עשר בו שבת בעשרים
 וחסה בו שבת בשנים בחסעי[ש]ב[ת]
 בשלושה בו מועד היין אחר השבת⁷⁰

⁶⁶ Yadin, *Temple Scroll* 2, 182–3, 377.

⁶⁷ See *Jub.* 32:12–13. For the author of the *Book of Jubilees*, the newly acquired state of impurity, which befell the old firstfruit once the new festival had taken place, required the burning of all leftovers (cf. 32:14). For the author of the *Temple Scroll*, the burning of the leftovers was considered a stage of sanctification, and not the result of a state of impurity. It is this newly acquired state of holiness—and not impurity—which precluded the old firstfruits from being eaten after the festival of the new firstfruits. Cf. 11Q19 xliii 11–12. This is indicative of the growing halakhic interpretation and perhaps is significant and representative of a less polemical stance adopted in the *Temple Scroll* as to the lunisolar calendar. It fits well with the testimony of the Qumran calendrical scrolls, which do record lunar phases within the triennial and sexennial cycles, and is a marked contrast with the position in *Jubilees* 6, where the moon is explicitly condemned.

⁶⁸ A position already articulated by Wise, *A Critical Study of the Temple Scroll from Qumran Cave 11*.

⁶⁹ As indicated by VanderKam: “the wine festival is never mentioned in the *preserved* sections of the calendrical texts” (emphasis mine). Cf. J.C. VanderKam, “Festivals”.

⁷⁰ Talmon, Glessmer, and Ben-Dov, *op. cit.*, 162.

iii. [Sa]bba[th, on the ele[venth] in it sabbath, on the eighteenth in it sabbath, on the twenty-fifth in it sabbath. On the second in the fif[th] (month) Sa]bba[th, on the third in it the festival of the (New) Wine (on the day) after the sabbath].⁷¹

6.2. *The Festival of New Oil*—היצהר / מועד השמן

In addition to the legislation for the festival of Wine, the law regulating the festival of New Oil is recorded in 11Q19 col. xxi 12–16:

12. וספר[תם]ה [לכם]ה מיום הזה שבעה שבעות שבע פעמים תשעה
 13. וארבעים יום שבע שבתות תמימות תהינה עד ממוחרת השבת
 14. השביעית תספורו חמשים יום והקרבתמה שמן חדש ממשבות
 15. [מ]טות ב[ני יש]ראל מחצית ההין אחד מן המטה שמן חדש כתית
 16. [יצהר על מזבח העולה בכורים לפני יהוה]⁷²
12. And [you sha]ll from that day on seven weeks seven times, nine
 13. and forty days, seven full sabbaths there shall be, until the morrow of the seventh
 14. sabbath you shall count fifty days. Then you shall offer new oil from the dwellings
 15. of the [tr]ibes of the peo[ple of Is]rael, half a hin from each tribe, new beaten oil
 16. [] oil on the altar of the burnt offering, first fruits before the Lord.⁷³

The festival took place on the twenty second day of the sixth month, a Sunday, and was subject to the same legislation concerning the consumption of first fruits as the festival of New Wine.⁷⁴ The festival seems to be referred to in 4Q394 1–2 col. v:

[ואח]ד ב[ו] שבת בעשרים ושנים בו מועד השמן אח[ר] הש[בת] אה[ר]י
 קרב[ן] העצים בעשרים ושמונה בו שבת]

first] in it sabbath, on the twenty-second in it the festival of the (New) Oil, (on the day) aft[er the Sa]bbath, aft[er it the Wood] Offeri[ng], on the twenty-eight in it sabbath].⁷⁵

⁷¹ Admittedly, this translation relies on a reconstruction of the fragment, as the brackets indicate. The preserved reference to the New Oil festival in the same fragment, col. v line 7: “on the twenty-second in it the festival of the (New) Oil, (on the day) aft[er the Sa]bbath, aft[er it the Wood] Offeri[ng], on the twenty-eight in it Sabbath,” strongly suggests that Talmon’s reconstruction of the text is correct. Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 162–3, for the Hebrew text and translation, and specifically p. 164 for Talmon’s comments on the reconstruction suggested.

⁷² Yadin, *Temple Scroll* 2, 95–6, 338–9.

⁷³ Yadin, *Temple Scroll* 2, 95–6, 337.

⁷⁴ J.C. VanderKam, “Festivals,” 191.

⁷⁵ Cf. Talmon, Glessmer, and Ben-Dov, op. cit., 163. J.C. VanderKam, “Festivals,” 292, points out that the word used for oil—השמן—attested in Hebrew Scriptures—here is different

6.3. *The Festival of the Wood Offering*—קרבן העצים (מועד)

This festival is not recorded in the biblical books, although there is in Nehemiah a reference to “appointed times” every year concerning the wood offering at the altar.⁷⁶ In the Dead Sea Scrolls, however, the furnishing of wood to the temple, for the purpose of the sacrificial cult, was regulated and equally shared among the twelve tribes. This seems to have taken place once a year, over a period of six days. There are indications from the Dead Sea Scrolls that this was the occasion for a festival. 11Q19 col. xliii 4 contains the word עצים—“wood” in the extant text. This allows the following reconstruction:

4. ול[יצהר ובימי ה]עצים באלה הימים יאכל ולוא וני[חו]

4. and of [oil on the days of the] wood. It shall be eaten on these days and they shall not leave [over]⁷⁷

11Q20 col. vi (Frgs. 10 II, 12) suggests that the festival of wood took place after the festival of the New Oil, and lasted over six days:

- 11 [And after the festival of the virgin oil, they shall bring,]
 12 [the twelve tribes of the Israelites, the woo]d to the alta[r as an offering.
 And they shall offer: on the first day]
 13 the tribes [of Levi] and Judah; and on [the second day Benjamin and the
 sons of Joseph, and on the third day Reuben and Simeon;]
 14 and on the fourth day Issachar [and Ze]bulun; and [on the fifth day Gad
 and Asher; and on the sixth day Dan]
 15 and Naphtali. *Blank* [And they shall offer on the festival]
 16 of the wood a burnt-offering for יח[WH he-]⁷⁸

The reconstruction of 4Q325 frg 2 6–7 would suggest that the festival started on the 23rd day of the sixth month:

from the one used in 11Q19 col. xliii 3, 9–10,—היצהר—not attested in Hebrew Scriptures—but still considers both documents to refer to the same festival of Oil. VanderKam considers the passage at hand under the siglum Calendrical Document Eⁿ4Q327 1. ii.4–7. This position is not shared by the editors of DJD xxi, who reject the ascription of the document to the Mišmarot texts, but accept the original registration of the document as a separate document (4Q327). See Talmon, Glessmer, and Ben-Dov, op. cit., 157.

⁷⁶ Beckwith, “Temple Scroll,” 16.

⁷⁷ García Martínez and Tigchelaar, *The Dead Sea Scrolls Vol. 2*, hebrew 1260, trans. 1261. See also: Yadin, *Temple Scroll 2*, 182.

⁷⁸ García Martínez and Tigchelaar, *The Dead Sea Scrolls Vol. 2*, Heb 1296, trans. 1297. Temple Scroll^a/ 11Q19 col. xi 11–12 probably described those festivals: “[...] and on the feast of] the first-fruits for the offering of wheat ¹² [...] and on the festival of new oil and on the six days’. The “six days” most probably refer to the festival of wood-offering.

- .6 [בו שבת גמול בעשרים ואחד בו שבת דליה בעשרים ו]שנים
 .7 [בו מועד השמן אחד שבת על דליה אחריו מועד (?) קרבן הע]צים⁷⁹

6. [in it sabbath Gamul. On the twenty-first in it sabbath Delaiah. On the twenty]- second
 7. [in it the Feast of the (First) Oil after the sabbath (on which) entered Delaiah. After it the (Feast[?] of the) W]ood-Offering.⁸⁰

Further, the occurrence on the first day of the seventh month of the next festival suggests that the wood festival took place between the twenty third and the twenty ninth of the sixth month. It would appear that the twenty eighth, a sabbath in the sixth month, was left out of the celebration.⁸¹

7. *Festivals and the Seasons in the Dead Sea Scrolls: Summary*

A review of the sources discovered in the vicinity of Qumran, by the Dead Sea, shows that the cycle of festivals followed therein, based on a 364-day calendar of 1 *Enoch* and of the *Book of Jubilees*' tradition, was intrinsically connected to the cycle of seasons. The dates ascribed to the festivals are the same as those exemplified in the *Book of Jubilees*. However, the day reckoning seems to be different, and seems to operate from morning to evening, as the clear dating of Passover (killing and eating) to the fourteenth day of the first month, and that of Unleavened Bread to the fifteenth, suggest.

There were three additional festivals celebrated at Qumran: the festival of New Wine, that of New Oil, and the festival of Wood.⁸² Their connection to the seasons is demonstrated by the laws governing the tithe of the first fruits, expounded in 11Q19 xliii 3–11. This passage is a quasi verbatim reproduction of the law governing the seed, the wine and the olive

⁷⁹ Talmon, Glessmer, and Ben-Dov, op. cit., 129.

⁸⁰ Talmon, Glessmer, and Ben-Dov, op. cit., 129.

⁸¹ Cf. Yadin, *Temple Scroll* 1, 123, for this suggestion. See further J.C. VanderKam, "Festivals," 292. 4Q394 1–2, a similar document to 4Q325 in that it records the sabbaths, the epagomenal days and festival days, presumably in each month, would have recorded that the twenty eighth of the sixth month was a sabbath. Following Yadin, Talmon, in Talmon, Glessmer, and Ben-Dov, op. cit., 166, suggests that the festival would have been interrupted for the sabbath, and would have resumed on the twenty ninth day. Talmon, in Talmon, Glessmer, and Ben-Dov, op. cit., 166 note 25, points out that a similar practice of excluding the sabbath from a seven day celebration is recorded in the Karaite halakha on the consecration of the Tabernacle (Lev 8). On this, see in particular Y. Erder, "The First Date in Megillath Ta'Anit in Light of the Karaite Commentary on the Tabernacle Dedication," *JQR* 82 (1992): 263–83.

⁸² Yadin refers to these as additional festivals of weeks. Cf. Yadin, *Temple Scroll* 1, 108.

in *Jub.* 32:12–13. There is, moreover, no indication that these laws were not adhered to. They dealt with a very important aspect of the life of the community, ensuring its economic survival as well as its spiritual renewal, thus displaying the kind of emphasis found in the Priestly sources. Just as the festival of Weeks was the occasion for the renewal of the covenant with God, so the occasions for the offering and tithes of first fruits were the occasions for releasing the produce of the land for the coming year, in other words, until the next crop was available. These were serious practical matters, as important and relevant to the community as the celebration of the festivals at the right time of the year was (cf. *Jub.* 6:32ff; *Jubilees* Prologue). What was at stake was the preservation of the land's holiness and the protection of the "holy seed" of Israel. There is no doubt that the above presupposes a real connection between the cycle of festivals and the agricultural cycle, and there is a high degree of possibility that these laws were actually observed at the time the 364-day year was in effect.

Last, we may recall the possible connection between the *Temple Scroll* and the *Book of Jubilees* with regard to the omission of the second Passover. It was argued above that the second Passover was probably not mentioned in the *Temple Scroll*, a document which, among other things, is primarily interested in the real connection between the cycle of festivals and the seasons. Biblical sources testify to incidents involving the second Passover, which, it was argued above, were probably the reason for calendrical disputes. It may be the case that, in Judah, King Hezekiah's Passover was remembered as an occasion which introduced a disconnection between calendar and agricultural cycle. By keeping the second Passover from those documents that legislated for the agriculturally linked festivals, first fruit offerings and tithes, the covenanters merely avoided any potentially serious problem. This did not, of course, preclude them from recording it within their rosters of festivals expounded in their triennial and sexennial cycles. The purpose of those documents was not to legislate for the offerings and observances within the cultic cycle, but was simply to record the date of the festival. This is an additional indication that the 364-day calendar observed by the covenanters was attached to the agricultural cycle.

CHAPTER FIVE

THE CYCLE OF FESTIVALS IN OTHER RELEVANT JEWISH SOURCES

1. *Introduction*

The previous three chapters explored respectively the cycle of festivals in the Hebrew Bible, the *Book of Jubilees*, and in some of the Dead Sea Scrolls. There are a number of additional sources from other relevant periods, which shed some light on this particular issue. The present chapter focuses on some of those sources and considers in turn the *Gezer* calendar (First Temple), the Elephantine Papyri, the writings of Flavius Josephus,¹ the works of Philo Judaeus (Second Temple),² and the *Bar Kokhba* Letters (second century CE).³ It will be shown that in all these sources, which admittedly witness to different strands of Judaism spanning a millennium, the cycle of festivals remained strongly anchored to the agricultural cycle.⁴ This point contributes to one of the key argument with which the present thesis is concerned, i.e., that the cultic calendar, whether following the 364-day year tradition or the lunisolar tradition, remained attached to the agricultural cycle.

2. *The Gezer Calendar*

This calendar is preserved on a tenth century BCE stone tablet, and thus pre-dates the Second Temple period by some four centuries. It is named

¹ W. Whiston, trans., *The Works of Josephus: Complete and Unabridged* (Peabody, Massachusetts: Hendrickson, 1987).

² C.D. Yonge, trans., *The Works of Philo. Complete and Unabridged* (Peabody, Massachusetts: Hendrickson, 1995).

³ On the *Bar Kokhba* letters, see especially M.O. Wise, "Bar Kokhba Letters," in *ABD*, Vol. 1 (ed. D.N. Freedman; New York: Doubleday, 1992), 601–6, with the bibliography.

⁴ It will not be possible in the scope of this study to cover every single reference to the festivals found in these documents. However, those deemed relevant to the discussion at hand will be considered.

after the place where it was discovered.⁵ The original is here reproduced from Albright's article:⁶

- | | |
|----------------------------|----------------------------------|
| 1. <i>yrhw'sp / yrhw z</i> | <i>yarhêw 'asîp / yarhêw ze-</i> |
| 2. <i>r' / yrhw lqš</i> | <i>ra' / yarhêw l-q-š</i> |
| 3. <i>yrh 'šd pšt</i> | <i>yarhō 'š-d pištā</i> |
| 4. <i>yrh qsr š'rm</i> | <i>yarhō q'šîr š'orîm</i> |
| 5. <i>yrh qsr wgl</i> | <i>yarhō qašîr wa-gûl</i> |
| 6. <i>yrhw zmr</i> | <i>yarhêw zamûr</i> |
| 7. <i>yrh qš yarhō qêš</i> | |

As the following translation illustrates, it expounds the farming season in its chronological/seasonal order:⁷

His two months are (olive) harvest; his two months are
grain-planting; his two months are late planting;
His month is hoeing up of flax,⁸
his month is barley harvest,
his month is harvest and festivity;
his two months are vine-tending;⁹
his month is summer-fruit.

⁵ The stone tablet has been dated to ca. 925 BCE by Albright, J.B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (3d ed.; Princeton: Princeton University Press, 1969); cf. J.C. VanderKam, "Calendars, Ancient Israelite and Early Jewish," in *ABD*, Vol. 1 (ed. D.N. Freedman; New York: Doubleday, 1992), 814–20. Talmon, S. Talmon, "The Gezer Calendar and the Seasonal Cycle of Ancient Canaan," *JAOS* 83 (1963): 177, dates it to the 10th century, first because of its similarities "with a Phoenician inscription from Byblus" (cf. 177, note 2, for bibliographical details) on paleographical and orthographical grounds; second, on "archeological and historical considerations," which indicate that "in all probability the writing of this document did not precede the rebuilding of Gezer as an Israelite fortress by Solomon in the latter part of his reign (1 Kgs 9:15, 17), and it cannot be dated later than the destruction of that city by Pharaoh Shishak in the fifth year of Rehoboam's reign (1 Kgs 14:25–26; and esp. 2 Chr 12:2–3), ca. 918 BC" (177, note 3). A. Lemaire, "Zamir dans la tablette de Gezer et le Cantique des Cantiques," *VT* 25 (1975): 20 note 4, is also in favour of a 950–918 BCE bracket on the grounds that the paleographical evidence pertains more to the second part of the 10th century BCE.

⁶ W.F. Albright, "The Gezer Calendar," *BASOR* 92 (1943): 22–3.

⁷ Albright's translation, Albright, *op. cit.*, 22–3.

⁸ Talmon, "The Gezer Calendar," 177, rejects Albright's translation of *פשת עצד פשת* as "the season of flax hoeing" and prefers the translation "the season of green-fodder [or 'grass'] cropping" (cf. 186).

⁹ For a good treatment of the preferred meaning of *yrhw zmr*, see Lemaire, *op. cit.* As noted by Lemaire (p. 15), the main difficulty lies with the final letter *waw* in *yrhw*, and with the exact meaning of the root *zmr*, which only occurs here and in the Song of Songs 2:12. Lemaire interprets the final *š* as "une forme archaïque de l'état construit du duel," and translates *yrhw* "les deux mois de," "the two months of." As to *zmr*, Lemaire makes the valid point that from a philological point of view both meanings of "pruning" and "wine harvest" are possibilities; only the location in the sequence of the tablet, and a consideration of the geographical location, allow the identification of *zmr* as "wine harvest." For a discussion of the style of Hebrew used in the Gezer calendar, see I. Young, "The Style of the Gezer

It is difficult to discern the exact status and purpose of this calendar.¹⁰ What seems to be clear, however, is that this stone tablet describes a twelve-month sequence of the agricultural cycle, starting in the autumn—"olive harvest"—and ending in the summer—"summer-fruit." This suggests that sometime in the tenth century BCE—and possibly earlier—the rhythm of the agricultural cycle in Canaan was identified as significant enough to be recorded on a stone tablet.¹¹

3. *The Elephantine Papyri*¹²

Some documents composed in Aramaic and dated from the fifth century BCE were discovered in the 19th–20th centuries CE. They originate from Elephantine, an island on the Nile river, off the town of Aswan—ancient Syene—in Egypt.¹³ Of key historical importance is a group of ten letters

Calendar and Some 'Archaic Biblical Hebrew' Passages," *VT* 42 (1992): 362–75, and the bibliographical references therein.

¹⁰ With J.C. VanderKam, "Calendars, Ancient Israelite and Early Jewish". Several possibilities have been proposed: Talmon, "The Gezer Calendar," 177, suggests that it may have been "drawn up for the purpose of tax collection on behalf of the royal administration." Albright suggests that it was a "kind of mnemonic ditty for children," while Wirgin (*Eretz Israel* 6, 1960, 9–12) sees in it a cultic formula for the protection of the seasons. Cf. Cohen, *op. cit.*

¹¹ Whether it can be inferred from this evidence that the calendrical year started in the autumn is a different matter, and cannot be treated here. Cf. J.C. VanderKam, "Calendars, Ancient Israelite and Early Jewish", who follows Clines, D.J.A. Clines, "The Evidence for an Autumnal New Year in Pre-Exilic Israel Reconsidered," in *On the Way to the Postmodern: Old Testament Essays 1967–1998*, vol. Volume 1 (JSOTSup 292; Sheffield: Sheffield Academic Press, 1998), 365–88. For a recent identification of the *Gezer* calendar as representative of a calendar which starts at the time of the Autumn equinox, see Wagenaar, "Post-Exilic Calendar Innovations," 14.

¹² J.C. VanderKam, "Sukkot". B. Porten, "The Calendar of Aramaic Texts from Achaemenid and Ptolemaic Egypt," in *Irano-Judaica II* (eds S. Shaked and A. Netzer; Jerusalem: Ben-Zvi Institute, 1990), 13–32. See also from the same author: B. Porten, "Elephantine Papyri," in *ABD*, Vol. 2 (ed. D.N. Freedman; New York: Doubleday, 1992), 445–55; B. Porten, *The Elephantine Papyri in English: Three Millennia of Cross-Cultural Continuity and Changes* (SNEAC 22; Leiden: Brill, 1996).

¹³ For a good description of and summary on the Elephantine Papyri, see Porten, "Elephantine Papyri"; "Elephantine Texts," in *EDSS*, Vol. 1 (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 241–6. Over the last century these documents have captured the interest of scholars, particularly because of their historical relevance. The discussion by Talmon, "Divergences," 71–3, is interesting in that it discusses the importance of these documents as extra-biblical witnesses of Jewish calendrical reckoning in the fifth century BCE. Particularly, scholars have focussed on the double-datings recorded in the documents, using Persian and Egyptian reckonings, to ascertain the character of the Jewish calendar at the time. Cf. S.H. Horn and L.H. Wood, "The Fifth-Century Jewish Calendar of Elephantine," *JNES* 13 (1954): 1–20, and its useful summary of previous scholarly research on the subject. Sacha Stern, S. Stern, "The Babylonian Calendar

which belong to the communal archive of Jedaniah b. Gemariah, a character believed to have been the leader, and perhaps the chief priest, of the community there.¹⁴ The letter of interest to us, *TAD* A4.1, was written ca. 419–18 BCE.¹⁵ It records instructions concerning the date of Passover given by a certain Hananiah to Jedaniah b. Gemariah:

³ [...]...Now, you, must count four[teen ⁴days of Nisan and on the 14th at twilight the Passover ob]serve ... and from day 15 until day 21 of [Nisan the festival ⁵of Unleavened Bread observe. Seven days unleavened bread eat. Now], be pure and take heed. Work [do] n[ot do] ⁶[on day 15 and on day 21 of Nisan. Any fermented drink] do not drink.¹⁶ And anything of leaven do not [eat ⁷ and do not let it be seen in your houses from day 14 of Nisan at] sunset until day 21 of Nisa[n at sun⁸set. And any leaven which you have in your houses b]ring into your chambers and seal (them) up during [these] days. ⁹[...]...¹⁷

at Elephantine,” *ZPE* 130 (2000): 159–71, reconsiders the meaning and significance of the double-dating found in the Elephantine Papyri. Stern concludes that the calendar used at Elephantine, beside the civil Egyptian calendar, “was undoubtedly Babylonian” (171). However, because of its geographical location it could only “estimate” matters such as the beginnings of the Babylonian months or the occasional intercalation of a thirteenth month. These estimations explain why many of the double dates in the Elephantine documents diverge from what would have been expected to be the *true* Babylonian dates. The Passover Papyrus identified Passover to take place between the 15th and 21st of the Babylonian month of Nisan. In Lev 23:5–8 Passover is dated to the “first month” 15 to 21. Thus at Elephantine Nisan was taken to be the first month of the year (170). This is significant because, whereas in the Bible the festivals seem to follow the agricultural season (cf. Exod 23:15–16, 34:18–22), the adoption of the Babylonian Nisan as the first month of the year would have introduced a discrepancy with the agricultural season. First Nisan would mostly fall after the equinox, which means that Passover and unleavened bread would always fall 2 to 6 weeks after the equinox, later than the biblical אֲבִיבִי. This, for Stern, is the indication that the introduction of the Babylonian reckoning brought a slow disengagement of the festivals from the agricultural season (170–1).

¹⁴ Here the sigla from B. Porten and A. Yardeni, *Textbook of Aramaic Documents from Ancient Egypt, Newly Copied, Edited, and Translated Into Hebrew and English*, 3 Vols. (Jerusalem: The Hebrew University, 1986–99), where the ten letters are recorded as *TAD* A4.1–10, are followed.

¹⁵ Porten, “Elephantine Papyri”.

¹⁶ This prohibition is probably aimed at Egyptian beer, and not at wine. See Grelot, “Études sur le papyrus pascal d’Éléphantine,” 362.

¹⁷ Porten, *Elephantine Papyri in English*, 125–6, 125–6. Pierre Grelot has also suggested a reconstruction and a translation of the letter, first based on the hypothesis that the letter had been folded in two, and therefore was missing only a small portion of text on the left. See Grelot, “Études sur le papyrus pascal d’Éléphantine,” 375. The author changed his position, following the suggestion by E.G. Kraeling, *The Brooklyn Museum Aramaic Papyri* (New Haven: Yale University Press, 1953), that “from a comparison with epistolary papyri it seems certain that 10 cm. or about one third of the papyrus or 23 letter spaces in each line is broken off.” Thus Grelot proposed a new reconstruction of the aramaic text in P. Grelot, “Le papyrus pascal d’Éléphantine: essai de restauration,” *VT* 17 (1967b): 201–7. Grelot,

Admittedly, the date “fourteenth . . . of Nisan” in the original fragment has to be reconstructed.¹⁸ In any case, the mention of days 15 to 21, together with the command not to eat anything leavened, strongly suggests that the festival(s) mentioned are Passover and Unleavened Bread.¹⁹ It is interesting to note here that, if the textual reconstruction is correct, the festival of Unleavened Bread is distinguished from the Passover, and is given a specific date which is distinct from that attributed to Passover. This points to the suggestion that, at some stages in the fifth century BCE, in some quarters of Judaism, Passover and Unleavened Bread were considered two distinct festivals, a position that is also found some centuries later in some documents from Qumran.²⁰ Further, the mention in the extant text of the number 15 (and not 14), in connection with day 21 and the eating of unleavened food, suggests that the day reckoning referred to is from sunset to sunset.

In addition to the above there is an inscription found on an ostracum and dated to the fifth century BCE, so contemporary to the *Elephantine*

however, reverted to his initial conclusions in the light of newly published fifth century BCE aramaic documents from Hermopolis, and which represented evidence that in the fifth century BCE some personal letters were folded in two. For Grelot, “cela montre que l’hypothèse d’une seule pliure au milieu n’est pas chimérique.” See P. Grelot, “Le papyrus pascal d’Éléphantine et les lettres d’Hermopolis,” *VT* 17 (1967c): 483. Grelot published a translation of the Passover letter in P. Grelot, *Les documents Araméens d’Égypte* (LAP; Paris: Cerf, 1972). See also P. Grelot, “Sur le ‘papyrus pascal’ d’Éléphantine,” in *Mélanges Bibliques et Orientaux en l’Honneur de H. Cazelles* (eds A. Caquot and M. Delcor; 1981), 163–72. In Appendix III of B. Porten, *Archives from Elephantine: The Life of an Ancient Jewish Military Colony* (Berkeley: University of California Press, 1968), Porten suggests the following reconstruction of the Aramaic text:

- .1 [אל את] י
- .2 [יד] ניה וכנתה ח[ילא] הודיא אחוכם חנן[יה] שלם אחי אלהיא [ישאלו]
- .3 וכעת שנתא זא 5 דריוהוש מלכא מן מלכא שליח על ארש[ם] בר
- .4 ביתא לאמר רחיקין הוּ מן חילא יהוד[יא] כעת אנתם כן מנו ארב[ע] עשר
- .5 יומן מן יום 1 לנימן ופסחא עב[דו] ומן יום 15 עד יום 21 לניסן
- .6 חגא זי פטיריא עבדו . . . אנתם דבין הוּ ואודהרו עבידה א[ל] תעבדו
- .7 ביום 15 וביום 21 ואף שבר א[ל] תשתו וכל מנדעם זי חמיר א[ל] תאכלו
- .8 פטירן אכלו מן יום 14 לנימן ב[מערב] שמשא עד יום 21 לניסן במערב
- .9 שמשא וכל חמיר זי איתי לכם ה[נעלו] בתוניכם וחמתן בין יומי[א] אלה
- .10 מן טעם אלה שמיא ומן טעם דריוהוש מל[כא]
- .11 [אל] אחי ידניה וכנתה חילא יהודיא אחוכם חנניה

¹⁸ For the reconstruction of the day numeral, see the relevant section in J.C. VanderKam, *Calendars in the DSS*. For the reconstruction of Nisan as the month name in line 5, see Talmon, “Divergences,” 71. See previous note for the Aramaic text.

¹⁹ J.C. VanderKam, *Calendars in the DSS*, 16. For a differing opinion, see G. Widengren, “The Persian Period,” in *Israelite and Judean History* (eds J.H. Hayes and J.M. Miller; 1990), 533, who states: “contrary to what has been assumed, however, the Passover was probably not mentioned in the letter.” Cf. Glessner and Koch, *op. cit.*

²⁰ On this see above the section on Cycle of Festivals at Qumran.

Papyri. It reads: שלח לי אמת תעבדן פסחא, “Send me (note) at what time you will keep Passover.”²¹ This evidence would suggest that there was, around the fifth century BCE, and at least in the Elephantine quarter of the Diaspora, some kind of looseness or confusion concerning the date for the festival of Passover.²² The evidence from the ostrakon would suggest that, for the inquirer the date of Passover was not fixed in its month. Grelot interpreted this situation as reflecting “l’ancienne législation, qui précisait seulement le mois de la fête.”²³ Alternatively, the difficulty associated with the determination of the start of the months, accentuated by a *Sitz im Leben* where several differing calendars were practiced, may well be the motivation behind this directive. Whichever this may be, the allusion to the directive from Darius II to the Satrap of Egypt gives an official status to the document, which may fit the situation where the date of the festival had to be adjusted in order to comply to the now legal practice.²⁴

4. Festivals in Josephus

The nature of the present undertaking dictates that the treatment of the work by Josephus be limited to some of the references to the festivals of Passover, Weeks and Tabernacles.²⁵

²¹ Cf. Talmon, “Divergences,” 73. The translation is from E.L. Sukenik and J. Kutscher, “Kedem,” in *Studies in Jewish Archeology, Vol. I* (Jerusalem: Azriel Press, 1942), 53–6, who dated the inscription to ca. 500 BC. Cf. Talmon, “Divergences,” 73. Grelot, Grelot, *Les documents Araméens d’Égypte*, 94 note 57, suggests 440–430 BCE.

²² Talmon argues that the Passover letter was particular to the situation known at Elephantine, a Jewish garrison where many Jews originated from Israel, and as such had kept the Ephraimite calendrical practice evidenced by the calendrical ‘innovation’ introduced by Jeroboam sometime in the tenth century (cf. Talmon, “Divergences,” 71–3).

²³ Grelot, *Les documents Araméens d’Égypte*, 95 note 57. Cf. Glessmer and Koch, op. cit., 130 note 61, esp. p. 130 note 61.

²⁴ See Porten, “Elephantine Papyri,” for a reference to this now lost official directive.

²⁵ A possible post-70 date of composition or redaction is irrelevant to the present argument, as Josephus presents traditions, not innovations. On Josephus and his work the reader is referred to the extensive work of Louis H. Feldman. The following may serve as a starting point: L.H. Feldman, *Josephus and Modern Scholarship (1937–1980)* (Berlin: de Gruyter, 1984); L.H. Feldman, *Judaeae Antiquities 1–4* (ed. S. Mason; vol. Volume 3 of *Flavius Josephus. Translation and Commentary*; Leiden: Brill, 2000), with bibliography on pages xxxv–xxxvi. See also: C. Begg, *Judaeae Antiquities 5–7* (ed. S. Mason; vol. 4 of *Flavius Josephus. Translation and Commentary*; Leiden: Brill, 2000); C. Begg and P. Spilsbury, *Judaeae Antiquities 8–10* (ed. S. Mason; vol. 5 of *Flavius Josephus. Translation and Commentary*; Leiden: Brill, 2000). See also Etienne Nodet: Flavius Josephus, *Les Antiquités Juives*, vol. Vol. I: Livres I à III Texte (É. Nodet; Paris: Éditions du Cerf, 1990); *Les Antiquités Juives*, vol. Vol. II: Livres I à III. Traduction et notes (É. Nodet; Paris: Éditions du Cerf, 1990); *Les Antiquités Juives*, vol. Vol. II: Livres IV et V. Texte, Traduction et notes (É. Nodet; Paris: Éditions du Cerf, 1995);

4.1. *The Festivals of Passover and Unleavened Bread*

In the section in *Antiquities of the Jews* dealing with the festivals, Josephus confirms, as one would expect, that the Passover is to be celebrated on 14 Nisan:

Τῷ δὲ μηνὶ τῷ Ξανθικῷ ὃς Νισάν παρ' ἡμῖν καλεῖται καὶ τοῦ ἔτους ἐστὶν ἀρχή, τεσσαρεσκαίδεκάτῃ κατὰ σελήνην ἐν κριῷ τοῦ ἡλίου καθεστῶτος, τούτῳ γὰρ τῷ μηνὶ τῆς ὑπ' Αἰγυπτίους δουλείας ἠλευθερώθημεν, καὶ τὴν θυσίαν, ἣν τότε ἐξίόντας ἀπ' Αἰγύπτου θύσαι προεῖπον ἡμᾶς πάσχα λεγομένην, δι' ἔτους ἐκάστου θύειν ἐνόμισεν.²⁶ (*Ant.* 3.248)

In the month of Xanthicus, which is with us called Nisan and begins the year, on the fourteenth day by lunar reckoning, the sun being then in Aries, our lawgiver, seeing that in this month we were delivered from bondage to the Egyptians, ordained that we should year by year offer the same sacrifice which, as I have already said, we offered then on departure from Egypt—the sacrifice called Pascha.²⁷

Xanthicus is the Macedonian name of the first month in the Macedonian calendar.²⁸ By stipulating that Nisan was the first month “with us” Josephus indicated that he was following the calendar which is described as “for kings and for festivals” in the admittedly later *Mishnah* (*Rosh Hashanah* 1:1), and not the calendar for “the reckoning of the years.”²⁹ In the same passage Josephus also dates the festival of Unleavened Bread: “on the fifteenth the Passover is followed up by the festival of Unleavened Bread, lasting seven days.”³⁰ Whereas in this section it would appear that the two festivals are treated somewhat distinctively, Josephus, in several other places, equates the festival of Unleavened Bread with that of Passover, as the following passage demonstrates:

ὁ μὲν οὖν *Αρέτας ἐξῆς βαλόμενος στρατόπεδα τῶν *Αράβων καὶ τῶν *Ιουδαίων ἰσχυρῶς ἐνέκειτο τῇ πολιορκίᾳ. τούτων δὲ γινομένων κατὰ τὸν καιρὸν τῆς τῶν

Les Antiquités Juives, vol. Vol. III: Livres VI et VII. Texte, Traduction et notes (É. Nodet; Paris: Éditions du Cerf, 2001); *Les Antiquités Juives*, vol. Vol. IV: Livres VIII et IX. Texte, Traduction et notes (É. Nodet; Paris: Éditions du Cerf, 2005).

²⁶ H.S.J. Thackeray, *Jewish Antiquities, Books I-IV*, in *Josephus IV* (LCL; London: Heinemann, 1930, reprinted 1961).

²⁷ *Ant.* 3.248 Thackeray, op. cit., 437, esp. 437. See also *Ant.* 11.110 *Jewish War V* 99.

²⁸ L.H. Feldman, *Judaean Antiquities 1-4*, 302 note 706, esp. 302 note 706.

²⁹ Nodet's indication that 'FJ suit de fait l'année civile, et non l'année liturgique' is confusing. The *Mishnah* states clearly that Nisan is the start of the year 'for festivals'. Cf. Flavius Josephus, *Les Antiquités Juives*, 176 note 6.

³⁰ *Ant.* 3.249 πέμπτη δὲ καὶ δεκάτῃ διαδέχεται τὴν πάσχα ἢ τῶν ἀζύμων ἑορτὴ ἑπτὰ ἡμέρας οὔσα. See Thackeray, op. cit., 436, 436.

ἀζύμων ἑορτῆς, ἣ φάσκα λέγομεν, οἱ δοκιμώτατοι τῶν *Ιουδαίων ἐκλιπόντες τὴν χώραν εἰς Αἴγυπτον ἔφυγον.³¹ (*Ant.* 14.21)

And so Aretas placed the camps of the Arabs and Jews next to one another, and pressed the siege vigorously. But as this action took place at the time of observing the festival of Unleavened Bread, which we call *Phaska*, the Jews of best repute left the country and fled to Egypt.³²

It also occurs that Josephus calls the eight day festival “the feast of unleavened bread,” and makes no mention of the Passover:

ὄθεν εἰς μνήμην τῆς τότε ἐνδείας ἑορτὴν ἄγομεν ἐφ’ ἡμέρας ὀκτώ τὴν τῶν ἀζύμων λεγομένην.³³ (*Ant.* 3.17)

Whence it is that, in memory of that time of scarcity, we keep for eight days a feast called the feast of Unleavened Bread.³⁴

Confirmation that the denomination “feast of unleavened bread” had, by the time of Josephus, come to signify Passover and Unleavened Bread is perhaps found in Josephus’ account of King Hezekiah’s Passover. The Chronicler states that “Hezekiah sent word to all Israel and Judah . . . that they should come to the house of the Lord at Jerusalem, to keep the Passover to the Lord the God of Israel . . . for they had not kept it in great numbers as prescribed.”³⁵ Josephus sums up the passage: “Then the king sent messengers throughout his realm, summoning the people to Jerusalem to celebrate the festival of Unleavened Bread (*Azyma*), which had for a long time been allowed to lapse through the lawless actions of the kings previously mentioned.”³⁶ The festival that is specifically called Passover by the Chronicler, and in the context of which the seven days of unleavened bread are celebrated, has become the festival of Unleavened Bread, with no specific mention of Passover.

The partaking of the first fruits of the earth takes place, according to Josephus, “on the second day of unleavened bread, which is the sixteenth

³¹ R. Marcus, *Jewish Antiquities, Books XII–XIV*, in *Josephus VII* (LCL; London: Heinemann, 1943, reprinted 1961).

³² Marcus, *op. cit.*, 459, p. 459. See also *Ant.* 17.213; 18.29; *J.W.* 2.10.

³³ Thackeray, *op. cit.*, 302, 304, 302 and 304.

³⁴ Thackeray, *op. cit.*, 303 and 305. See also the bibliographical reference in L.H. Feldman, *Judaean Antiquities 1–4*, 303 note 715, 303, note 715, for the argument that Josephus writes from a Diaspora perspective. Compare Nodet, Flavius Josephus, *Les Antiquités Juives*, 124 note 9, for whom Josephus “suit la trad[ition] rab[inique] (cf. *BPesahim* 5a), qui a étendu la période des azymes au jour de la Pâque (14 Nisan).”

³⁵ 2 Chr 30:1, 5.

³⁶ *Ant.* 9.263.

day of the month . . . for before that day they do not touch them.”³⁷ Here, one or two remarks are in order. First, the same supposition that is implicitly expressed in *Jub.* 32:12–13 is also implicitly found in Josephus: the first fruit festival marks the time when new fruit may be consumed, and the time when the old fruit ceases to be consumed. Second, and unlike the practice in the *Book of Jubilees*, the “day after the sabbath” (Lev 23:15) falls on the sixteenth of the first month. In this regard, Josephus follows what will later be acknowledged as the rabbinic practice. In any case, it is significant that Josephus states in a matter of fact: “and after this it is that they may publicly or privately reap their harvest.”³⁸ There is no doubt for Josephus that the harvest takes place after this partaking of the first fruits of the earth. Josephus’ silence as to a possible disconnection between the festival date in the first month and the actual readiness of the harvest may militate in this direction.³⁹

4.2. *The Festival of Weeks*

On the fiftieth day after the aforementioned elevation offering, “they bring to God a loaf, made of wheat flour.”⁴⁰ The dating of the festival of Pentecost is the same as found in the Biblical legislation. Taking place on the fiftieth day after the sixteenth day of Nisan means that the festival takes place on the seventh of the third month. The mention of a loaf made of wheat flour suggests that the wheat harvest has taken place.

4.3. *The Festival of Tabernacles*

The festival is dated to “the fifteenth day of the (seventh) month, when the season of the year is changing for winter.”⁴¹ The dating is the same as that found in the biblical books, the *Book of Jubilees*, and the Calendrical Documents from Qumran. The specification “when the season of the year is changing for winter” is, however, peculiar to Josephus. It is possible that

³⁷ *Ant.* 3.250.

³⁸ *Ant.* 3.251.

³⁹ The episode recorded in *Ant.* 18.90, where Vitellius is said to have responded to the magnificent reception accorded him by releasing the inhabitants from the taxes upon the fruits bought and sold at the time of the festival which is called Passover, may also witness to the actual connection between the festal calendar and the agricultural season.

⁴⁰ *Ant.* 3.252.

⁴¹ *Ant.* 3.244. Josephus is here in agreement with Philo’s *Spec.* 2:204. Cf. L.H. Feldman, *Judaean Antiquities 1–4*, 300 note 688; Nodet, Flavius Josèphe, *Les Antiquités Juives*, 175 note 8.

Josephus makes here a reference to the autumnal equinox. This would be slightly peculiar considering that, due to the addition of an extra month seven times in a nineteen year cycle, the start of the festival of tabernacles would most likely not have coincided with the occurrence of the autumnal equinox. It is debatable whether Josephus would have attached to a specific day of the month an event that he would have considered to take place anytime in the seventh month.

4.4. *Festivals and Seasons in Josephus: Summary*

All the festivals are given the same dates as in the sources previously surveyed. Passover and Unleavened Bread are treated by Josephus either as two distinct yet linked festivals, or as a single festival which can be called either Passover or Unleavened Bread. The Raising of the Sheaf takes place on Nisan 16, and marks the day from which the new first fruit can be eaten and the harvest completed. This, together with the occurrence of the festivals of Weeks and Tabernacles at significant times of the agricultural cycle, demonstrates that the cycles of seasons and of festivals are linked. In addition to other sources considered so far, there may be a reference to the autumn equinox in Josephus.

5. *Festivals in Philo*⁴²

Philo of Alexandria, who lived in Egypt at the turn of the eras, ca. 20 BCE to ca. 50 CE, treats the Jewish festivals in his *De Specialibus Legibus* II.⁴³

5.1. *The Festivals of Passover and Unleavened Bread*

As has been the case for all sources consulted so far, the festival of Passover, Philo's fourth festival, is dated to the fourteenth of the first month,

⁴² On the work by Philo, see as a starting place the following: S. Belkin, *Philo and the Oral Law: The Philonic Interpretation of the Oral Law in Relation to the Palestinian Halakah* (HSS II; Cambridge, Mass.: Harvard University Press, 1940); H.A. Wolfson, *Philo, Foundations of Religious Philosophy in Judaism, Christianity and Islam* (New Haven: Harvard University Press, 1947); V. Nikiprowetzky, *Le Commentaire de l'Écriture chez Philon d'Alexandrie* (Leiden: Brill, 1977).

⁴³ More specifically on *Spec. 2*, see the contributions by: Belkin, op. cit; R.D. Hecht, "Preliminary Issues in the Analysis of Philo's *De Spec. Leg.*" (TU 80; Berlin: Akademie Verlag, 1962); S. Daniel, *De Specialibus Legibus I et II* (vol. 24 of *Les Oeuvres de Philon d'Alexandrie*; R. Arnaldez, J. Pouilloux, and C. Mondésert; Paris: Éditions du Cerf, 1975), with a brief introduction.

and is connected to the exodus of the Jewish people from Egypt.⁴⁴ There is no connection here between the festival and an agricultural season. Such a connection, however, comes with Philo's exposition of what he terms the "fifth festival," the festival of Unleavened Bread, "another festival combined with the festival of Passover."⁴⁵ In this respect, it is interesting that Philo uses neither the Babylonian names nor the Egyptian months names. Rather, Philo uses numerals. His indication that the festival takes place in the seventh month "in number and order," but which "in importance it is first, and therefore is described as first in the sacred books,"⁴⁶ shows that for Philo the sacred Jewish calendar is at odds with the secular lunar calendar starting in the autumn, probably close to the Babylonian calendar in use at the time of Philo.⁴⁷ This fifth festival is on account of the Exodus. It is also "universal, *following the lead of nature*, and in agreement with the general cosmic order."⁴⁸ In this respect, Philo clearly alludes to ancient practice linked with the vernal festival and the cycle of nature:

λέγεται δὲ κάκεινο τοῖς ἐξηγηταῖς τῶν ἱερῶν γραμμάτων, ὅτι ἡ μὲν ἄζυμος τροφή δῶρημα φύσεως ἐστίν, ἡ δ'*** ἐζυμωμένη τέχνης ἔργον· ἐπιτηδεύει γὰρ ἀνθρωποὶ τὰ ἡδέα τοῖς ἀναγκαιοῖς ἀναμιγνύναι σπεύδοντες τὸ αὐστηρὸν τῇ φύσει προσηγνῆς τέχνη κατεσκευάσαν. ἐπεὶ οὖν ἐστὶν ἡ ἑαρινὴ ἑορτή, καθάπερ ἐδίδαξα, τῆς τοῦ κόσμου γενέσεως ὑπόμνημα, τοὺς δὲ παλαιτάτους γηγενεῖς τε καὶ ἐκ γηγενῶν ἀναγκαῖον ἦν χρῆσασθαι ταῖς τοῦ κόσμου δωρεαῖς ἀδιαστρόφοις, μήπω τῆς ἡδονῆς παρενημεπούσης, οἰκειοτάτην τροφήν ἐνομοθέτησε τῷ καιρῷ, βουλόμενος ἀνὰ πᾶν ἔτος τὰ τῆς σεμνῆς καὶ αὐστηρᾶς διαίτης ἐμπυρέυματα ζωπυρεῖν καὶ ἅμα τὸν ἀρχαῖον βίον τῆς ὀλιγοδείας καὶ εὐτελείας θαυμάσαι τε καὶ τιμῆσαι πανηγύρεως ἐκεχειρίᾳ καὶ τὸν ἡμῶν καθ' ὅσον οἶόν τε ἦν ἐξομοίωσαι τῷ παλαιῷ. τὰ λεχθέντα πιστοῦται μάλιστα ἡ τῶν ἰσαριθμῶν ταῖς φυλαῖς ἐπὶ τῆς ἱεράς τραπέζης ἄρτων δώδεκα πρόθεσις.⁴⁹ (*Spec.* 2:159–161)

⁴⁴ *Spec.* 2:149. See also *De Vita Mosis* II 224, 228.

⁴⁵ *Spec.* 2:150. Philo's ten festivals are: 1) every day life (42); 2) the sacred seventh day (56); 3) the new moon (140); 4) Passover (145); 5) Unleavened Bread (150); 6) the Sheaf Offering (162); 7) Pentecost (176); 8) the festival of the sacred moon (188); 9) the Fast (193); 10) Tabernacles (204). Cf. *Spec.* 2. What Philo terms the fifth festival in his introduction is later developed as the sixth festival, and the sixth festival in the introduction becomes the fifth festival in the body of the text. The references recorded here are those of the body of the text, in F.H. Colson, *Philo X* (LCL; London: William Heinemann LTD, 1962). See also Daniel, *op. cit.*, esp. xxvii–xlii for a brief introduction to Philo's treatment of the festivals.

⁴⁶ See *Spec.* 2:150: ἔβδομος ὡ ὁ μὴν οὗτος ἀριθμῷ τε καὶ τάξει κατὰ τὸν ἡλιακὸν κύκλον δυνάμει πρῶτος ἐστὶ, διὸ καὶ πρῶτος ἐν ταῖς ἱεραῖς βίβλοις ἀναγράφεται. Colson, *Philo X*.

⁴⁷ *Spec.* 2:150–1. That the monthly reckoning envisaged here is lunar is made clear through Philo's exposition of the 'third festival', where he indicates the reasons for reckoning the month in such manner. Cf. *Spec.* 2:140–4.

⁴⁸ See *Spec.* 2:150. Colson, *Philo X*, 399, 399. My emphasis.

⁴⁹ Colson, *Philo X*, 404.

Another suggestion made by the interpreters of the holy scriptures is that food, when unleavened, is a gift of nature, when leavened is a work of art. For men in their eagerness to temper the barely necessary with the pleasant, have learned through practice to soften by art what nature has made hard. Since, then, the spring-time feast, as I have laid down, is a reminder of the creation of the world, and its earliest inhabitants, children of earth in the first or second generation, must have used the gifts of the universe in their un-perverted state before pleasure had got the mastery, he ordained for use on this occasion the food most fully in accordance with the season. He wished every year to rekindle the embers of the serious and ascetic mode of faring, and to employ the leisure of a festal assembly to confer admiration and honour on the old-time life of frugality and economy, and as far as possible to assimilate our present-day life to that of the distant past. These statements are especially guaranteed by the exposure of the twelve loaves corresponding in number to the tribes, on the holy table.⁵⁰

The festival is dated to the fifteenth of the month.⁵¹ This, in Philo's ephemeris, coincides with the spring equinox.⁵²

5.2. *The Raising of the Sheaf*

Ἑορτὴ δὲ ἐστὶν ἐν ἑορτῇ ἢ μετὰ τὴν πρώτην εὐθὺς ἡμέραν, ἣτις ἀπὸ τοῦ συμβεβηκότος ὀνομάζεται δράγμα· τοῦτο γὰρ ἀπαρχὴ προσάγεται τῷ βωμῷ καὶ τῆς χώρας, ἣν ἔλαχε τὸ ἔθνος οἰκεῖν, καὶ τῆς συμπάσης γῆς, ὡς εἶναι τὴν ἀπαρχὴν καὶ τοῦ ἔθνους ἰδίαν καὶ ὑπὲρ ἅπαντος ἀνθρώπων γένους κοινήν.⁵³ (*Spec.* 2:162)

But within the feast there is also another feast following directly after the first day. This is called the "Sheaf," a name given to it from the ceremony which consists in bringing to the altar a sheaf as a first-fruit, both of the land which has been given to the nation to dwell in and of the whole earth, so that it serves that purpose both to the nation in particular and for the whole human race in general.⁵⁴

The connection of the festival to the agricultural cycle is here again made explicit. The day of the festival of Sheaf is the sixteenth of the first month. In this respect, the dating of the festival agrees with the rabbinic interpretation of on the "morrow after the sabbath" (Lev 23:15).

⁵⁰ *Spec.* 2:159–161, Colson, *Philo X*, 405. Cf. Lev 24:5 ff.

⁵¹ *Spec.* 2:155.

⁵² Cf. *Spec.* 1:182.

⁵³ Colson, *Philo X*, 404, 406.

⁵⁴ Colson, *Philo X*, 405, 407.

5.3. *The Festival of Weeks*

The reckoning of the festival of Weeks, for which Philo uses the Greek terminology “Pentecost,” agrees with the rabbinic reckoning in that the fifty days are reckoned from the sixteenth of the first month, the day of the Raising of the Sheaf.⁵⁵ Philo clearly expounds the connection between Pentecost and the agricultural cycle:

Πρόσρησιν δ' ἔλαχεν ἡ κατὰ τὸν πεντηκοστὸν ἀριθμὸν ἐνισταμένη ἑορτὴ πρωτογεννημάτων, ἐν ἧ' δύο ἐζυμωμένους ἄρτους ἐκ πυροῦ γεγονότας ἕθως προσφέρειν ἀπαρχὴν σίτου, τῆς ἀρίστης τροφῆς. ὠνομάσθη δὲ πρωτογεννημάτων ἡ διότι, πρὶν εἰς τὴν ἀνθρώπων χρῆσιν ἐλθεῖν τὸν ἐπέτειον καρπὸν, τοῦ νέου σίτου τὸ πρῶτον γέννημα καὶ ὁ πρῶτος παραφανεὶς καρπὸς ἀπαρχὴ προσάγεται.⁵⁶ (*Spec.* 2:179)

The feast which is held when the number 50 is reached has acquired the title of “first-products”. On it it is the custom to bring two leavened loaves of wheaten bread for a sample offering of that kind of bread as the best form of food. One explanation of the name “feast of first-products,” is that the first produce of the young wheat and the earliest fruit to appear is brought as a sample offering before the year’s harvest comes to be used by men.⁵⁷

5.4. *The Festival of Tabernacles and “the Basket”⁵⁸*

The festival of Tabernacles “recurs at the autumn equinox.”⁵⁹ It is dated to the fifteenth day of the month “for the same reason as was given when we were speaking of the season of spring,” that is the equinox.⁶⁰ And as is the case for the start of the feast of Unleavened Bread in the first month, the festival in the seventh month is to coincide with the full moon.⁶¹ Philo

⁵⁵ See also *De Decalogo* 160.

⁵⁶ Colson, *Philo X*, 418.

⁵⁷ Colson, *Philo X*, 419. Cf. *Decal.* 160.

⁵⁸ For the latter, see *Spec.* 2:215. Philo describes this celebration as “not a feast, but a general ceremony of a festal character.” See Colson, *Philo X*, 440–1.

⁵⁹ *Spec.* 2:204. Cf. *Spec.* 1:189, where it is indicated that the fifteenth day of this month is the full moon.

⁶⁰ *Spec.* 2:210. Colson, *Philo X*, 438, suggests that the season of spring be understood on account of the presence of ὥρας in the text. However, the description of ἐκείνην τὴν ἡμέραν = “that day” as the day when “the sun and moon rise in succession to each other with no interval between their shining” may better fit the description of the actual time of the equinox.

⁶¹ *Spec.* 2:210. Cf. *Spec.* 2:255 for the festival of Unleavened Bread, on the fifteenth of the month, at the time of full moon.

connects the festival to the agricultural cycle by attaching to it the following reason:

καὶ τὸ προσήκειν μετὰ τὴν ἀπάντων καρπῶν τελείωσιν εὐχαριστεῖν τῷ τελεσφόρῳ θεῷ καὶ πάντων τῶν ἀγαθῶν αἰτίῳ. τὸ γὰρ μετόπωρον, ὡς καὶ αὐτὸ δῆπου δηλοῖ τοῦνομα, καιρὸς ὁ μετὰ τὴν ὀπώραν ἐστὶν ἤδη συγκεκομισμένην...⁶² (*Spec.* 2:204–5)

The second moral is, that after all the fruits are made perfect, it is our duty to thank God who brought them to perfection and is the source of all good things. For autumn, or after fruitage, is, as also the name clearly implies, the season after the ripe fruit has been gathered in, when the sown crops and the fruit-trees have paid their annual toll and bounden tribute...⁶³

It is clear, from the reason Philo gives of the necessity to inhabit tents during the festival, that he understands the festival as taking place once the harvest has occurred:

καὶ μὴν ἐν σκηναῖς προστέτακται διαιτᾶσθαι τὸν χρόνον τῆς ἐορτῆς, ἥτοι διὰ τὸ μηκέτι εἶναι χρεῖαν ἐν ὑπαίθρῳ διάγειν τὰ περὶ γεωργίαν ἐκπονούντας, οὐδενὸς μὲν ὑπολειφθέντος ἕξω, πάντων δὲ καρπῶν ἐναποκειμένων σιροῖς καὶ τοιοιυτρόποις χωρίοις διὰ τὰς εἰωθυίας βλάβας παρακολουθεῖν ἕκ τε φλογώσεως ἡλιακῆς καὶ φορᾶς ὑετῶν.⁶⁴ (*Spec.* 2:206)

Further, the people are commended, during the time of the feast, to dwell in tents. The reason for this may be that the labour of the husbandmen no longer requires that they should live in the open air, as nothing is now left unprotected but all the fruits are stored up in silos or similar places to escape the damage which often ensues through the blazing sunshine or storms of rain.⁶⁵

Lastly Philo describes what is “not a feast, but is a general ceremony of a festal character called the basket.”⁶⁶ It is sufficient for our purpose to point out the existence of this festal ceremony.

5.5. *The Number Seven and the Cycle of Festivals in Philo*

In the light of what has been outlined above it is significant to note that Philo starts and ends his treatment of the cultic calendar in *Spec. Leg.* II by

⁶² Colson, *Philo X*, 434.

⁶³ Colson, *Philo X*, 435.

⁶⁴ Colson, *Philo X*, 434.

⁶⁵ Colson, *Philo X*, 435.

⁶⁶ *Spec.* 2:215. See Deut 26:1–11 for the origins of this festival. The “basket” was not attached to a specific date, but rather wandered through the month, depending on the meteorological conditions and the readiness of the fruits from the trees. Cf. *Spec.* 2:216; 220–221.

a eulogy of the number seven. He introduces the actual cycle of festivals by stating:

ὅσα γὰρ τῶν ἐν αἰσθητοῖς ἄριστα, δι' ὧν αἱ ἐτήσιοι ὥραι καὶ τῶν καιρῶν αἱ περίοδοι τεταγμένως ἀποτελοῦνται, μετέσχηκεν ἑβδομάδος...⁶⁷ (*Spec.* 2:57)

For seven is a factor common to all the phenomena which stand highest in the world of sensible things and serve to consummate in due order transitions of the year and recurring seasons...⁶⁸

And to reinforce the point Philo closes his exposition of the festivals by stating:

Ταῦτα ἐπὶ πλέον ἐμήκυνα διὰ τὴν ἱερὰν ἑβδομήκην ἐπιδείξασθαι βουλόμενος, ὅτι πάσας τὰς ἐτησίους ἑορτὰς συμβέβηκεν ὡς ἂν ἀπογόνους ἑβδομάδος εἶναι μητρὸς λόγον ἐχούσης...⁶⁹ (*Spec.* 2:214)

All this long exposition is due to my regard for the sacred seventh day, and my wish to shew that all the yearly feasts prove to be as it were the children of that number which stands as a mother.⁷⁰

In Philo's understanding, the cultic year is constructed on a sabbatical framework, not unlike that evidenced by the 364-day-year traditions of the *Book of Jubilees* and the Qumran calendrical documents and other scrolls. It is true that nowhere, to the knowledge of the present writer, does Philo indicate the length of the cultic year he has in mind, and it would probably be overstepping the mark to state categorically that Philo had any knowledge of the 364-day year calendrical traditions. The fact that Philo, in the fashion of the rabbinical calendar, dates the "morrow after the sabbath" (Lev 23:15) to the day following immediately after the first day of the festival of Unleavened Bread would militate for a lunisolar calendar. There are, however, some clues that what Philo has in mind is not a straightforward lunisolar calendar but a calendar that displays some strong similarities with the 364-day calendar known in some circles of Second Temple Judaism.

⁶⁷ Colson, *Philo X*, 342.

⁶⁸ Colson, *Philo X*, 343.

⁶⁹ Colson, *Philo X*, 440.

⁷⁰ Colson, *Philo X*, 441. See also Philo's justification for the command given to the Israelites to keep the seventh year "fallow and untilled," which was: "that they may honour the number seven, or each period of days, and months, and years; for every seventh day is sacred... and the seventh month in every year has the greatest of the festivals allotted to it, so that very naturally the seventh year also has a share of the veneration paid to this number" (*Spec.* 2:210).

First, Philo certainly gives a strong calendrical significance to the sun. In his exposition of the High Priestly garments (*Spec.* 1.84 ff.) Philo elaborates on the appearance of the λογείον = “reason-seat” (*Spec.* 1.88 ff.). Upon this “reason-seat” are two pieces of woven work, called “Clear Shewing” and “Truth.” On the former are represented the heavenly bodies, which are responsible for the computation of time. It is they who “have shewn us nights and days and months and years and time in general.”⁷¹ The moon Philo calls “the handmaid and successor of the sun,”⁷² suggesting that the sun plays the primary role in matters calendrical.

Second, in his *De Vita Contemplativa* Philo shows his strong admiration for the Therapeutae.⁷³ The members of this religious group, which Philo most probably knew first hand,⁷⁴ followed a cultic calendar somewhat similar to the one followed at Qumran: like at Qumran they most probably followed a sunrise-to-sunrise day reckoning, praying twice a day, the first time “when the sun is rising...” ἡλίου ἀνίσχοντος.⁷⁵ Like at Qumran, they held the seventh day in great honour, looking upon it as “sacred and festal in the highest degree.”⁷⁶ Like at Qumran, they held their sacred assemblies at the end of seven weeks, demonstrating that they, like the Essenes, followed some kind of Pentecontad calendar.⁷⁷ These points already suggest

⁷¹ *Spec.* 1:90. Cf. *De Opificio Mundi* 58–62; *De Abrahamo* 158, 159. In the Loeb edition vol. VII p. 151, F.H. Colson suggests “all of them deriving originally from Plato, *Timaeus* 47.” M. Barker has recently argued in favour of an Israelite typology as the origin of Plato’s *Timaeus*. Cf. M. Barker, *The Great High Priest. The Temple Roots of Christian Liturgy* (London: T & T Clark, 2003), 262–93.

⁷² Cf. *Spec.* 1:16... σελήνην δ’ ὑπηρετῖν καὶ διάδοχον ἡλίου νύκτωρ... ‘the moon as handmaid and successor to the sun taking over at night.’ Colson, *Philo X*, 108–9. It is interesting to note here that in *Spec.* 1:19 Philo states regarding the sun and moon and the stars that they are not gods but rather ‘have received the rank of subordinate rulers, naturally liable to correction, though in virtue of their excellence never destined to undergo it’ (italics mine). It is possible that by the term ‘correction’ Philo is hinting at a practice of *ad hoc* intercalation.

⁷³ F.H. Colson, *Philo IX* (LCL; London: Heinemann, 1941, reprinted 1967).

⁷⁴ This is the position most often accepted by scholars. See P. Richardson, *Building Jewish in the Roman East* (JSJSup 92; Waco, Texas: Baylor University Press, 2004), who accepts the information recorded in Philo’s *De Vita Contemplativa* on the Therapeutae as reflecting reality. See also J. Taylor, *Jewish Women Philosophers of First-Century Alexandria: Philo’s “Therapeutae” Reconsidered* (Oxford: Oxford University Press, 2003), esp. 341–6, who dismisses the ‘utopian’ charge.

⁷⁵ Cf. *Contempl.* 27, Colson, *Philo IX*, 126–7.

⁷⁶ *Contempl.* 36, Colson, *Philo IX*, 132–3.

⁷⁷ Cf. *Contempl.* 65. G. Vermes, in his Excursus on The Therapeutae, E. Schürer, *The History of the Jewish People in the Age of Jesus Christ, Vol. 1–3* (eds Vermes, G., Millar, F.; Edinburgh: T. & T. Clark, 1973), Vol II, 591–7, argues that “the hypothesis that the Therapeutae were members of an Egyptian branch of the Palestinian Essene movement deserves serious

that the cultic calendar which Philo has in mind was based on a solar reckoning. Philo dates the first month of the (cultic) year to the beginning of the spring equinox.⁷⁸ Further, Philo indicates that, just as twelve loaves are set on the table before the altar in the Temple every seventh day, so the year counts twelve months.⁷⁹ The association of the festivals of Unleavened bread and Tabernacles with the equinoxes reinforces the point. Finally, Philo nowhere refers to a thirteenth month added at regular intervals in order to keep the calendrical year synchronized with the solar year.

5.6. *Festivals and Seasons in Philo: Summary*

First, Philo expounds a cultic calendar which celebrates the major festivals of the Jewish cultic year according to the lunisolar calendar. So Passover on the fourteenth of the first month, Unleavened Bread on the fifteenth of the same month, immediately followed by the Raising of the Sheaf (day sixteen). Fifty days later falls Pentecost. Tabernacles takes place on the fifteenth of the seventh month (following the cultic year). Second, the evidence reviewed demonstrates that each major festival is attached to the agricultural cycle. Both these characteristics are shared by the Jewish cultic year governed by the moon. Third, Philo's cultic calendar, however,

consideration." Vermes views the common adoption of a Pentecontad calendar as the most important element supporting the identification of the Therapeutae with the Essenes.

⁷⁸ Cf. *Mos.* 2:222: τὴν ἀρχὴν τῆς ἐαρινῆς ἰσημερίας. See F.H. Colson, *Philo VI* (LCL; London: Heinemann, 1935, reprinted 1966). In *Spec.* 2:150–1 Philo expounds the reason for calling the month of the spring equinox "the first month." In this respect it is worth noting that Philo's natural theology, or exposition of the beginnings, is based on the accounts of creation. The cycle of nature is, for Philo, a recurring portrayal in "a kind of likeness . . . of that first epoch in which this world was created;" it is "an image of the primal origin reproduced from it like the imprint from an archetypal seal." Cf. *Spec.* 2:152, Colson, *Philo VI*, 309, 309. In other words, Philo sees the recurring of the cycle of nature as the reenactment of the creation. In the Genesis accounts of the creation, days 1 and 4 reflect each other as days of the creation of light and the heavenly bodies which regulate it; days 2 and 5 pertain to the earth and the filling of it with plants. It is by appealing to the events of days 1, 2, 4 and 5 of creation that Philo argues the month of the spring equinox is the first in rank. Tabernacles is dated to the autumn equinox—τὸν μετοπωρινῆς ἰσημερίας Cf. *Spec.* 2:204, Colson, *Philo X*, 435.

⁷⁹ Cf. *Spec.* 1:171–2 "But on each seventh day loaves are exposed on the holy table equal in number to the months of the year in two layers of six each, each layer corresponding to the equinoxes. For there are two equinoxes in each year, in spring and autumn, with intervals the sum of which is six months." See F.H. Colson, *Philo VII* (LCL; London: Heinemann, 1937, reprinted 1958). Philo can hardly mean that each equinox lasts six months. It is more likely that each interval from one equinox to the next is six months, as the text clearly says. This would indicate perhaps that Philo understood the equinox to correspond to a specific day.

displays a strong inclination towards the sun: it anchors the festivals of Passover/Unleavened Bread and Tabernacles respectively to the spring and autumn equinoxes. Fourth, Philo insists that “seven” as a perfect number governs the seasons. This is more akin to the 364-day calendar and its sabbatical structure (52 weeks of seven days = 364 days exactly; four terms of 13 weeks each = 4 x 91 days = 364 days) than to the lunisolar 354 day year. In any case, the cultic year expounded in Philo’s treatment of the Therapeutae is reminiscent of the 364-day year. Last, Philo’s year counts twelve months. Nowhere does Philo refer to an extra (thirteenth) month added to the year. As surprising as this may be, this would eliminate the regular lunisolar year from the reckoning.

6. *The Bar Kokhba Letters*

In the early 1960s archaeologists recovered several collections of documents in the Wadi Ḥabra (Naḥal Ḥever). Among these was a group of fifteen letters, some of which were probably authored by Bar Kokhba, the leader of the second Jewish revolt against the Romans (132–35 CE).⁸⁰ Of these, two letters are of interest to us. The first letter, *Ḥev* 3, was written in Greek, possibly by Bar Kokhba himself.⁸¹ The letter reads:

Soumaios to Jonathan son of Baianos and to Masabala, greetings: I already sent Agrippa to you. Make haste to send me . . . and citrons. And he [Agrippa] will transport these things back to the headquarters of the Jews. And be sure you do so! It was written in Greek because no one was found [was able?] to write it in Hebrew. Dismiss him very speedily in view of the festival. And be sure you do so! Soumaios. Farewell.⁸²

The second letter, *Ḥev* 15, was composed in Aramaic, most probably again by Bar Kokhba himself.⁸³

⁸⁰ On the Bar Kokhba revolt, named after its leader to differentiate it from the first Jewish revolt, see B. Isaac and A. Oppenheimer, “Bar Kokhba Revolt,” in *ABD Vol. 1* (ed. D.N. Freedman; New York: Doubleday, 1992), 598–601. Also, A. Oppenheimer, “Bar Kokhba, Shim‘On,” in *Encyclopedia of the Dead Sea Scrolls, Vol. 1* (eds L.H. Schiffman and J.C. VanderKam; Oxford: Oxford University Press, 2000), 78–80.

⁸¹ For the arguments of Soumaios’ identity as Simon b. Kokhba, see Wise, “Bar Kokhba Letters”.

⁸² The translation is from Wise, “Bar Kokhba Letters”.

⁸³ Wise, “Bar Kokhba Letters”.

1. שמעון ליהודה בר מנשה לקרית ערביה שלחת לך תרי חמרין די תשלח
2. עמהן תר גכרין לות יהונתן בר בעין ולות מסבלה די יעמרן
3. וישלחן למחניה לותך ללבין וצתרגיל ואת שלח אחרנין מלותך
4. וימטון לך הדסין וערבין ותקן יתהן ושלח יתהן למחניה בדיל
5. די אכ*לס*ה סגי הוא שלם⁸⁴

'Shime'on to Yehudah son of Menashe, to Qiriyat 'rbyh. I have sent you two donkeys (in order) that you send ²with them two men of Yehonathan son of Ba'yan and to Masabalah, that they load up ³and send to the camp, to you, Lulabs (=palm branches) and Ethrogs (=citrons). And you (should) send others from you(r place) ⁴and (let) them bring you myrtle (branche)s and willows, and prepare them, and send them to the camp, because ⁵its population is large. Be well!⁸⁵

The references in both letters to "citrons," in *Hev* 3 to "the festival," and in *Hev* 15 to "myrtles and willows," suggest that the festival of Tabernacles was about to be celebrated, and some orders were being dispatched for its preparation. The commander of the forces was, it would seem, eager that enough branches and fruits be brought back for the numerous forces (cf. *Hev* 15). One would assume that the festival was taking place at a season when those fruits and branches needed for its observance were available and ready. There is no indication in the letters that allows one to state with confidence their date of composition, although 134 CE is a strong possibility.⁸⁶ Likewise, there is silence as to the exact calendrical reckoning followed, although it is very likely to be the rabbinic lunisolar calendar. In any case, these documents indicate that at the time of the second Jewish revolt, some 62–5 years after the destruction of the Temple

⁸⁴ A. Yardeni, *Textbook of Aramaic, Hebrew and Nabataean Documentary Texts from the Judaean Desert and Related Material, A: The Documents*. (Jerusalem: The Hebrew University, 2000a). Yardeni classifies the document as "Nahal Hever 57: Letter (132–135) (Aramaic)." See A. Yardeni, *Textbook of Aramaic, Hebrew and Nabataean Documentary Texts from the Judaean Desert and Related Material, B: Translation-Paleography-Concordance*. (Jerusalem: The Hebrew University, 2000b), with translation of the document on p. 68.

⁸⁵ Yardeni, *Textbook of Documentary Texts*, 68. Wise, "Bar Kokhba Letters," 604, proposes the following translation: "Shimon to Yehudah bar Manasseh, at Qiryat Arabayah. I have sent to you two donkeys that you should send with them two men to Yehonatan bar Bayan and Masabala. They are to load them with branches and citrons and send them to the camp, to you. As for you, send other men to bring to you myrtles and willows. Prepare them and send them to the camp, i.e., Shimon, because the men comprising the forces are numerous. Be well." See also Oppenheimer, op. cit.

⁸⁶ See the lengthy discussion in Wise, "Bar Kokhba Letters," 604ff, 604ff.

in Jerusalem, the correlation between the festival and the agricultural cycle was very much alive.⁸⁷

7. *Conclusions*

The *Gezer* stone tablet seems to expound a twelve-month sequence of the agricultural cycle, from “olive harvest” to “summer fruit.” The Passover letter of the Elephantine papyri, and several other inscriptions on ostraca, demonstrate that there was, at some stage in the fifth century BCE in the Elephantine quarter, some debate as to the exact moment the festival should be celebrated. The evidence suggests that, at the time and in that place, the festival was not yet celebrated on a fixed date in the first month. Likewise, it may suggest that there was some confusion in determining the date of the festival, due to the implementation of a new calendar. In any case, there is no indication that the festival was considered detached from the cycle of festivals.

The evidence from Josephus also confirms the hypothesis. Festival dates are the same, and are articulated according to the lunisolar calendar. The links with the agricultural cycle are very much present: the Raising of the Sheaf marks the day on which the new first fruits can be eaten; as expected, the festivals of Weeks and Tabernacles take place at significant times of the agricultural year. One finds in Josephus the additional reference to the autumnal equinox.

The evidence from Philo holds no surprises either: the festivals occur just as they have always been supposed to. However, some new elements are introduced. Of note is the major role given to the sun in the cycle of festivals as the festivals of Passover and Tabernacles are anchored to the spring and autumn equinoxes respectively. The moon is called the “handmaid and successor of the sun” (*Spec.* 1.16). The evidence surveyed here suggests that Philo knew, directly or indirectly, of a twelve-month year starting at the spring equinox, which remained attached to the agricultural cycle. It also suggests, however, that he was accustomed to the more conventional lunisolar year, as his dating of the “morrow after the sabbath” to Nisan 16 suggests. It is puzzling that there is no mention of

⁸⁷ It is difficult to ascertain whether by that time the pilgrim festivals of Passover, Pentecost and Tabernacles were still to be celebrated in Jerusalem. It is also difficult to ascertain when and to what extent Simon Bar Kokhba had control of the city. Cf. Wise, “Bar Kokhba Letters”.

a thirteenth month anywhere. One is left wondering how (not whether) the connection between cultic cycle and agricultural year was kept. More studies should be done to identify precisely what was the connection between the true solar year and the lunisolar year in Philo's calendrical scheme. It is clear from the above that it is not simply the rabbinic lunisolar cycle. Lastly, the references to "citron" in the Bar Kokhba letters suggests that the festival of tabernacles was still attached to the agricultural cycle in the second century CE.

The additional sources consulted in the present chapter, all dating from the First or Second Temple periods, confirm the trend identified so far: they, too, only envisaged a cycle of festivals anchored to the seasons.

PART III

SOME SPECIFIC CALENDRIAL ISSUES IN SECOND TEMPLE JUDAISM

CHAPTER SIX

CALENDARICAL ISSUES IN THE *BOOK OF LUMINARIES* (1 *ENOCH* 72–82)

1. *Introduction*

In the following particular attention is paid to the *Book of Luminaries* of Enoch.¹ The first part reviews the main arguments related to the dating of the *Book of Luminaries*, especially in the light of Milik's hypothesis. As with many past investigations on this particular question, it is argued that Milik's dating of late third to early second century BCE remains the best option. The second part briefly considers the antiquity of the 364-day year. The third part focuses on the particular issue of lunar reckoning in the *Book of Luminaries*. In this regard this chapter is somewhat less concerned with past scholarship (although this will be amply consulted) but rather focuses on parts of 1 *En* 73 and 1 *En* 74. It is contended that not one, but two lunar reckonings can be identified in the *Book of Luminaries*. It is further asserted that these *competing* lunar reckonings may possibly have been investigated against the background of the 364-day calendar, in order to identify that particular lunar reckoning which caused the triennial lunar cycle to "add up to one thousand thirty days, so that it falls behind by sixty-two days in three years" (1 *En* 74:14).²

¹ Following VanderKam in the Keynote address given at the First Graduate Enoch Seminar, held at the University of Michigan in 2006, I make the distinction between an Aramaic *Astronomical Book*, extant fragments of which may be preserved in 4Q208 to 4Q211, and an Ethiopic *Book of Luminaries*, for which there are to date some fifty extant mss or so, classified, following Flemming and Charles, between the α family (manuscripts dated between fourteenth and seventeenth centuries), and the β family (manuscripts dated eighteenth century and later).

² In this chapter the following translations are consulted: M. Knibb, *The Ethiopic Book of Enoch: A New Edition in the Light of the Aramaic Dead Sea Fragments. Vol. 2* (2 Vols.; Oxford: Clarendon, 1978); O. Neugebauer, "The 'Astronomical' Chapters of the Ethiopic Book of Enoch (72–82)," in *The Book of Enoch or 1 Enoch* (M. Black; Leiden: Brill, 1985), 386–419; E. Isaac, "1 (Ethiopic Apocalypse of) Enoch," in *OTP* (ed. J.H. Charlesworth; London: Darton, Longman and Todd, 1985), 5–89; and the more recent translation by Nickelsburg and VanderKam, *op. cit.*

2. Discussion of the Dating of the Book of Luminaries

It is a common assertion that the body of data at our disposal witnessing to the Second Temple period is rather scant, even more so for the early centuries of that era.³ One piece of evidence, however, which in some of its parts does shed light on this period is the composition commonly referred to as *1 Enoch*.⁴ The work is known to us in its entirety through its Ethiopic (Ge'ez) version.⁵ Until the discovery of the Scrolls in the Judaeen desert, a scholarly consensus dated the different compositions of the work from the early pre-Maccabean era to the late pre-Christian period.⁶ Following the publication of Milik's masterly contribution using the Dead Sea Scrolls, knowledge and understanding of this work has been significantly enhanced.⁷ Milik suggested a new categorization of the entire work along the following lines: 1. the *Book of Watchers* (ch. 1–36); 2. the *Book of Similitudes* (ch. 37–71); 3. the *Astronomical Book* (ch. 72–82); 4. the *Book of Dream Visions* (ch. 83–90); and 5. the *Book of the Epistle of Enoch* (ch. 91–107).

³ For a useful survey, see M.E. Stone, "Apocalyptic Literature," in *Jewish Writings of the Second Temple Period* (ed. M.E. Stone; CRINT 2.2; Philadelphia: Fortress, 1984), 396–406, as well as the other chapters in the book.

⁴ See, for instance, M. Barker's work on alternative orthodoxy in First and Second Temple Judaism in *The Older Testament: The Survival of Themes from the Ancient Royal Cult in Sectarian Judaism and Early Christianity* (Sheffield: Sheffield Phoenix, 2005). From the same author: *The Gate of Heaven: The History and Symbol of the Temple in Jerusalem* (Sheffield: Sheffield Phoenix, 1991, reprint 2008); *The Great Angel. A Study of Israel's Second God* (London: SPCK, 1992); *The Risen Lord: The Jesus of History and the Christ of Faith* (Edinburgh: Trinity Press, 1997); *The Revelation of Jesus Christ: Which God Gave to Him to Show to His Servants What Must Soon Take Place (Rev 1:1)* (Edinburgh: T & T Clark, 2000). Her more recent *The Great High Priest* brings to innovative conclusions more than a decade of research in this area.

⁵ There are at least forty extant manuscripts of Ethiopic Enoch. For a suggestion of the main Ethiopic manuscripts, see Isaac, op. cit., 6, with notes. Fragments of the work in Greek and Latin are also extant, as are some Aramaic fragments found among the Dead Sea Scrolls.

⁶ 1. *Apocalypse of Weeks* (91:12–17; 93:1–10) = early pre-Maccabean; 2. *Fragments of Enochic Visions* (12–16) = early pre-Maccabean; 3. *Fragments of the Book of Noah* (6–11; 106ff cf. 54:7–55:2; 60; 65–69:25) = late pre-Maccabean; 4. *Independent Fragment* (105) = pre-Maccabean; 5. *Dream Visions* (83–90) = ca. 165–161 BCE; 6. *Book of Luminaries* (72–82) = ca. 110 BCE; 7. *Similitudes* (37–71) = ca. 105–64 BCE; 8. *Later Additions to Dream Visions* (91:1–11, 18, 19; 92; 94–104) = ca. 105–104 BCE; 9. *Introductory Chapters* (1–5) = late pre-Christian period. See Isaac, op. cit., 7; R.H. Charles, *The Apocrypha and Pseudepigrapha of the Old Testament in English. Vol. II Pseudepigrapha* (Oxford: Clarendon, 1913), 170 ff.

⁷ Milik, *Books of Enoch*.

2.1. *Milik's Hypothesis*

An important aspect of Milik's contribution was the publication of part of the Enochic fragments found at the *Khirbet Qumran* site. Significantly, among those fragments were four copies which Milik identified as parts of the *Book of Luminaries*.⁸ These were dated on paleographical grounds to the later part of the third century BCE (for the oldest fragment 4QEnastr^a), to the early part of the first century CE (4QEnastr^d), thus suggesting that the *Book of Luminaries* was copied as early as ca. 200 BCE, and that this would represent the latest possible date of its composition. The work, or parts of it, seemed to have enjoyed a period of interest at Qumran of over two centuries.⁹ Furthermore, Milik indicated that, in his opinion, these fragments demonstrated the existence of the *Book of Luminaries* in a version significantly longer than the Ethiopic version, and seemed to have been copied on an individual scroll, suggesting that the *Book of Luminaries* must have been considered a distinct document at the time.

Milik did not confine himself to the paleographical evidence, and proceeded to propose that an astronomical work, under the name Enoch, may have been in circulation as early as the fifth century BCE. This he deduced from the age of Enoch recorded in Gen 5:23 "Thus all the days of Enoch were *three hundred and sixty-five* years." There was no doubt in Milik's understanding that the age of the Patriarch had been "corrected from 364 to 365 years in Gen 5:23."¹⁰ This amendment by the priestly redactor pointed to a specific concern of the period: "to find a more concrete reference to the year of 365 days, employed widely in Persian and Hellenistic times."¹¹ For Milik, therefore, the 364-day calendar was known as early as the fifth century BCE, in

astronomical works circulating under the name of Enoch. It is highly likely indeed, that the whole chronology of the Bible, in particular that of the Mosaic Pentateuch, was elaborated by priestly redactors of the Persian era, taking as their point of departure the calendar with fixed days and festivals composed of 364 days.¹²

⁸ These are 4QEnastr^{a, b, c and d}.

⁹ Other fragments pertaining to the Enochic literature were also recovered, among which 4QEn^a, identified as a part of the *Book of Watchers*, and dated to as early as the third century BCE. See Milik, *Books of Enoch*.

¹⁰ Milik, *Books of Enoch*, 8.

¹¹ Milik, *Books of Enoch*, 8.

¹² Milik, *Books of Enoch*, 8. As indicated in his note 1, Milik here follows Jaubert, "Calendrier des Jubilés: origines"; Jaubert, *date de la cène*, 13–75; and van Goudoever, op. cit.

As well as this calendrical reference ‘hidden’ behind Enoch’s age, Milik also referred to the ‘obvious allusion’ to the *Book of Luminaries* found in the writings of the Jewish historian Eupolemus who, by 158 BCE, had completed his *History of the Jews*.¹³ For Milik it was unmistakable that the extract from Eupolemus, quoted by Eusebius of Caesarea, ‘gives us a concise summary of the *Book of Luminaries*’.¹⁴ Due to the Samaritan character of Eupolemus’ narrative, Milik ventured to suggest that it was possible to detect an anonymous Samaritan tradition at the origin of the writing.¹⁵ This, together with what Milik understood to be in Gen 5:23 a reference to an astronomical work circulating under the name Enoch, compelled Milik to re-interpret the identity of the priestly milieu which gave birth to the *Book of Luminaries*, its 364-day calendar and its application to biblical chronology: the priestly authors were probably from a Samaritan background, possibly originating from Shechem.¹⁶

Before assessing Milik’s hypothesis, one may venture to propose that the evidence for the existence of the *Book of Luminaries*, or an astronomical work in Aramaic, connected to Enoch at such an early date, be it in the third century BCE or, as Milik suggested, as early as the fifth century BCE, is highly significant for the present thesis. It is one piece of evidence, not available to Jaubert, which allows us a quite specific anchor point in terms of calendrical matters in Jewish Palestinian milieu pertaining to that era from which a limited amount of data is available. As alluded to above, until the discovery—and dating—of the Qumran fragments known to be related directly or indirectly to the *Book of Luminaries*, the commonly accepted dating of the *Book of Luminaries* was 110 BCE. Milik’s dating of ca. 200 BCE is important in that it pushes back in time the claims one can make as to the information it contains and the light it sheds on the socio-religious context and milieu from which these writings emanated. In this manner it contributes greatly to the reconstruction of Judaism in the third century BCE.¹⁷

¹³ Milik, *Books of Enoch*, 8.

¹⁴ Milik, *Books of Enoch*, 9.

¹⁵ Milik, *Books of Enoch*, 9.

¹⁶ Milik, *Books of Enoch*, 9–10.

¹⁷ M.E. Stone, “The Book of Enoch and Judaism in the Third Century B.C.E.,” *CBQ* 40 (1978): 479–92. The author argues that these writings represent the oldest extra-biblical Jewish religious literature at our disposal. This is echoed by VanderKam, J.C. VanderKam, *Enoch and the Growth of an Apocalyptic Tradition* (CBQMS 16; Washington DC: Catholic Biblical Association of America, 1984), 90, who states, with regards to the 364-day calendar in Judaism, “the AB furnishes the earliest unequivocal reference in Jewish literature to a solar calendar of 364 days, and attributes its promulgation to Enoch, the original

2.2. Assessment of Milik's Hypothesis

So, what of Milik's suggested dating to at least as early as the third century BCE? It is fair to say that most scholars have accepted Milik's dating of 4QEnastr^a to the late third century BCE, and accept the view that there was in circulation in Palestine, at the latest around 200 BCE, an astronomical work under the name Enoch. As argued by M.E. Stone, such dating must be accepted on paleographical grounds.¹⁸ The recent edition and publication of 4QEnastr^a and 4QEnastr^b (respectively 4Q208 and 4Q209) confirms these dating on the grounds of radiocarbon dating.¹⁹

The relationship between 4QEnastr^a, 4QEnastr^b, an hypothetical Aramaic synchronistic calendar, and the existing Ethiopic version is not so simple to establish. Perhaps it is useful, with VanderKam, to posit an original Enochic astronomical work on the one hand, and the Aramaic *Astronomical Book* and the *Book of Luminaries* (1 En 72–82) on the other hand, the latter two being the only surviving witnesses of the earlier Enochic Astronomical work.²⁰ The difficulty comes chiefly from the lack of textual

astronomer." A valuable survey of the different attempts at reconstructing the socio-religious make-up of Palestinian Judaism of the Second Temple period can be found in Stone's article mentioned above. See also P. Sacchi, "History of the Earliest Enochic Texts," in *Enoch and Qumran Origins: New Light on a Forgotten Connection* (ed. G. Boccaccini; Grand Rapids, MI: Eerdmans, 2005), 401–7.

¹⁸ Stone, "The Book of Enoch and Judaism in the Third Century B.C.E." See also: J.C. Greenfield and M.E. Stone, "The Books of Enoch and the Traditions of Enoch," *Numen* 26 (1979): 89–103, esp. 92–95; Beckwith, "Earliest Enoch Literature"; J.C. VanderKam, "The 364-day Calendar in the Enochic Literature" (SBLSPS 22; Chico, California: Scholars Press, 1983), 157–8; *idem* J.C. VanderKam, *Enoch and Apocalyptic Tradition*, 87–8; *idem* J.C. VanderKam, "Some Major Issues in the Contemporary Study of 1 Enoch: Reflections on J.T. Milik's The Books of Enoch: Aramaic Fragments of Qumran Cave 4," in *From Revelation to Canon. Studies in Hebrew Bible and Second Temple Literature* (JSJSup 62; Leiden: Brill, 2000), 362–5. G. Boccaccini, "The Solar Calendars of Daniel and Enoch," in *The Book of Daniel: Composition and Reception* (eds J.J. Collins and P.W. Flint; VTSup 83; Leiden: Brill, 2001), 311–28 implicitly accepts a late third century BCE date.

¹⁹ E.J.C. Tigchelaar and F. García Martínez, "4QAstronomical Enoch^{a-b}," in *Volume XXVI: Cryptic Texts and Miscellanea, Part 1*, in *Qumran Cave 4 Miscellaneous Texts from Qumran XXVI: Cryptic Texts and Miscellanea* (eds S.J. Pfann and P. Alexander; DJD 36; Oxford: Clarendon, 2000), 106. They indicate that radiocarbon tests suggest "a ninety five per cent probability of a date between 186–92 BCE," which they regard as consistent with Milik's dating. On radiocarbon dating, see A.J.T. Jull, et al., "Radiocarbon Dating of Scrolls and Linen Fragments from the Judaean Desert," *Atiqot* 28 (1996): 85–91.

²⁰ J.C. VanderKam, "The Aramaic Astronomical Book and the Ethiopic Book of the Luminaries," Keynote address delivered at the First Graduate Enoch Seminar (Ann Arbor, MI, 2006), 1. I am thankful to Professor VanderKam for allowing access to the text of the address.

overlaps between the Aramaic fragments and the Ethiopic version.²¹ In his attempt to make sense of the evidence, VanderKam suggested that Milik, by adducing the evidence of *Eth. Ms. 64*, of the Bibliothèque Nationale in Paris, “was on the track of the correct solution but did not follow it through.”²² The Aramaic fragments of 4QENastr^a and 4QENastr^b contained a synchronistic calendar, while some fragments of 4QENastr^b in addition included other material treated in *1 En 72–82*.²³ Further, the Ethiopic material displayed a shorter, less detailed exposition of the synchronistic calendar.²⁴ A similar dichotomy was noticeable between *Eth. Ms 64* and the Ethiopic Ms of the *Book of Luminaries*, the former containing a fuller account of the movements of the moon.²⁵ This led VanderKam to conclude:

This last fact suggests the possibility that at some point in its transmission history some tabular data were separated from the other sections of the Enochic astronomical work, which was left with only a condensed version of the technical lists. Perhaps this opens up a new way of viewing the history of the text from Aramaic to Ethiopic: long, technical lists or tables were removed from the ancient text and stored in collections of such data as we find in *Eth. Ms. 64*. This rendered the process of copying the literary text much easier, while the full range of data was still accessible in other mss., should one need to consult them as some did. We could then regard the *Book of the Luminaries* as a faithful but purposely abbreviated version of the *Astronomical Book*. It retains essential features of the special Enochic system without the more painful lists that once made the text so very much longer.²⁶

VanderKam’s conclusions were somewhat similar to that reached by Milik: the *Book of Luminaries* was a short version of the (Aramaic) *Astronomical Book*.²⁷

Milik’s fifth century BCE proposed dating, however, has met strong and well-founded criticism. The main difficulty is the lack of evidence

²¹ VanderKam puts it this way: “My own comparative study of the texts, both for the translation Nickelsburg and I produced and for the commentary, has impressed me more strongly than ever before with how different the two versions really are.” He adduces examples to illustrate the point. See J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 3–6.

²² J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 16.

²³ J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 20–1.

²⁴ J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 21.

²⁵ J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 21.

²⁶ J.C. VanderKam, “Aramaic AB and Ethiopic BL,” 21. Reproduced with permission.

²⁷ Milik, Milik, *Books of Enoch*, 19, stated: “It can be seen now that the Egyptian Jews responsible for the translation from the Aramaic were at pains to shorten the voluminous, prolix, and terribly monotonous original.”

offered by the author to support the view that the amendment of the age of Enoch from 364 to 365 years in Gen 5:23 betrays a marked concern for reflecting contemporaneous astronomical knowledge common in Mesopotamia and Greece. There is, after all, no indication of Enoch's age in the *Book of Luminaries*. Even if it were so, and one may accept this possibility, there is simply nothing in Gen 5:23 that refers to an astronomical work circulating under the name Enoch. As pointed out by Greenfield and Stone, the amendment may reflect calendrical knowledge, but this is not sufficient to suggest that an astronomical work linked to Enoch was already in existence and in circulation in the fifth century BCE.²⁸ If it was so, it is suspicious that the very reason which generated the proposed amendment in Gen 5:23 from 364 to 365 did not also preclude the Essenes from adopting the 364-day calendar in their liturgical life.²⁹ After all, Milik himself suggested that the Essenes applied the 364-day calendar structure to their liturgical life.

So, it is reasonable to suggest that, based on the evidence put forward, Milik may have overstated the case in asserting that the *Book of Luminaries* was in existence in the fifth century BCE. This is not to say, however, that the work, or parts of the work, did not for certain exist at that stage. Rather, it is only to state that Milik did not offer enough evidence to support his claim. One may conclude, therefore, that the only undisputed evidence for the dating of the *Book of Luminaries* is the paleographical dating of 4QEnastr^a, which Milik suggested to point to the late third or early second century BCE, a dating corroborated by carbon testing.³⁰

There are arguments to support the view that there was in existence quite early on an Aramaic astronomical book, that contained material that later found its way into the *Book of Luminaries*.³¹ The first of these is the

²⁸ Greenfield and Stone, op. cit. Also, J.C. VanderKam, *Enoch and Apocalyptic Tradition*, 83.

²⁹ Greenfield and Stone, op. cit., 92–5.

³⁰ Milik, *Books of Enoch*, 273. There is no scholarly consensus as regards the evidence concerning the reference to the Aramaic astronomical work or the *Book of Luminaries* by the Jewish Historian Eupolemus. Greenfield and Stone, op. cit., 94, argue against the validity of this evidence. J.C. VanderKam, *Enoch and Apocalyptic Tradition*, 83–7, accepts the evidence from Eupolemus to support a late third century BCE dating of the *BL*. For more information on Eupolemus, see B.Z. Wacholder, “Pseudo-Eupolemus’ Two Greek Fragments on the Life of Abraham,” in *Essays on Jewish Chronology and Jewish Chronography* (New York: KTAV, 1976), 77–79. On carbon dating, see note 17 above.

³¹ A possibility also envisaged by J.C. VanderKam, *Enoch and Apocalyptic Tradition*, 84, 88, who states on page 88: “though Milik’s case for a date prior to Gen 5 in its final form is thoroughly unconvincing, the AB may be considerably older than B.C. 200.”

carbon dating itself of the Aramaic documents, and the reference to such work found in Eupolomus. In addition, as pointed out by VanderKam, there is the issue of the differences in terms of text and content between the Aramaic fragments and the *Book of Luminaries* itself, in the portions that are usually accepted as parallels.³² A third argument is derived from the references that link the origins of calendrical knowledge to Enoch, as found in *Jubilees*.³³ The text states that Enoch

was the first of mankind who were born on the earth who learned (the art of) writing, instruction, and wisdom and who wrote down in a book the signs in accord with the fixed pattern of their months so that mankind would know the seasons of the years according to the fixed pattern of each of their months.³⁴ (*Jub.* 4:17)

The authoritative status that the *Book of Jubilees* claims for itself in its title has already been pointed out:

These are the words regarding the divisions of the times of the law and of the testimony, of the events of the year, of the weeks of their jubilees throughout all the years of eternity as he related (them) to Moses on Mt. Sinai when he went up to receive the stone tablets—on the Lord's orders as he had told him that he should come up to the summit of the mountain.³⁵ (*Jub.* Prologue)

The *Book of Jubilees* is, for its author(s), to be ranked on the same authoritative level as the books of Moses, the written Torah. It is, for the author, divinely revealed. The title in itself is explicit: the main concern is right praxis in calendrical matters with regard to the observance of the law. This means, of course, observance of the law and its festivals at the appointed times. This is made clear in *Jub.* 4:17, where the astronomical part of the book of Enoch, which Milik indicated to be probably the oldest part of 1 *Enoch* and a book in its own right, is mentioned and referred to as the yardstick regulating the year. There is no doubt that the Aramaic Astronomical work enjoyed an authoritative status, here again due to its perceived revelatory status. All this becomes significant for a probable dating of the Aramaic Astronomical work when one considers the testimony of the *Damascus Rule*, as indicated by Talmon. This work, probably written

³² J.C. VanderKam, *Enoch and Apocalyptic Tradition*, 84, 88.

³³ Talmon, "Calendars and Mishmarot," 114.

³⁴ J.C. VanderKam, *op. cit.*, 26.

³⁵ J.C. VanderKam, *op. cit.*, 1.

ca. 150 BCE, ascribes an authoritative status to the *Book of Jubilees* in calendrical matters:

(For God made) a Covenant with you and all Israel; therefore a man shall bind himself by oath to return to the law of Moses, for in it all things are strictly defined. As for the exact determination of their times to which Israel turns a blind eye, behold it is strictly defined in the book of the divisions of the times into their jubilees and weeks.³⁶ (CD 16:1–4)

Talmon suggests that three generations were needed for the *Book of Jubilees* to attain an authoritative status.³⁷ One may assume, for the sake of the argument, that a generation covered a twenty year period. This would place a possible writing of the *Book of Jubilees* somewhere around the second half of the third century BCE. One now needs to ascribe at least three generations for the Aramaic astronomical work to reach its status of authority that it comes to enjoy by the time of the composition of the *Book of Jubilees*. This brings one possibly to the first half of the third century BCE, and quite possibly earlier. In fact, Talmon claims “the composition of the *Astronomical Book* cannot be dated later than the second half of the fourth century BCE.”³⁸ If one now brings into the equation the similarities between the Aramaic astronomical work, the *Book of Luminaries*, and Babylonian Compendiums or Cuneiform texts, which have been shown to date as far back as the 7th–6th centuries BCE, an early third century BCE dating, although admittedly speculative, seems conservative.³⁹ At the outset, here one is in the realm of speculations.

So, although Milik did not offer satisfactory evidence for his assertion that what he understood to be the *Astronomical Book* circulated under the name Enoch in the fifth century BCE, his suspicion of it being so may be correct. Beckwith, accepting a *terminus ad quem* of 200 BCE for the redaction of the *Astronomical Book*, endeavors to suggest a more precise

³⁶ Vermes, *op. cit.*, 137.

³⁷ Talmon, “Calendars and Mishmarot,” 114.

³⁸ *Ibid.*

³⁹ W. Horowitz, “The 360 and 364 Day Year in Ancient Mesopotamia,” *JANES* 24 (1996): 35–44, has demonstrated the existence of a 364-day calendar in cuneiform texts dating back to the seventh century BCE. The author argues elsewhere, “Two New Zippu-Star Texts and Stellar Circles,” *JCS* 46 (1994): 88–99, that *Mul.Apin II ii 11–17* and the Zippu-Star text *Ao 6478//K.9794* show knowledge of 364-day year in Mesopotamia. The claim was disputed by J. Koch, “Ao 6478, MUL.APIN und das 364 Tage-Jahr,” *NABU* 111 (1996): 97–99, to which Horowitz responded in “The 364 Day Year in Mesopotamia, Again,” *NABU* 49 (1998): 49–51. For a transliteration and translation of *Mul.Apin II ii 11–17*, consult H. Hunger and D. Pingree, *Mul.Apin An Astronomical Compendium in Cuneiform* (AfOB 24; Horn: Berger, 1989), 94–5.

dating.⁴⁰ For him, the *terminus ante quem* must find its *Sitz im Leben* in the Greek conquest of Palestine in 331 BCE. He suggests that the Essenes became a distinct party in the sociological make up of Palestinian Judaism in the aftermath of the assassination of the conservative High Priest Onias III, “an Essene-sympathiser,” by the Hellenizing Menelaus in 171 BCE.⁴¹ The time of the start of the pre-Essene movement is given in the *Book of Dreams* as twelve year-weeks before the rise of Judas Maccabaeus. This suggests the year 251 BCE.⁴² So, argues Beckwith, the 364-day calendar was devised and came into use some time between 251 and 200 BCE. By the time *1 En* 80:2–8 was written (ca. 200 BCE), its authors were already aware that the calendar did not follow the true solar year, and had already formulated a theological justification for the occurrence of the discrepancies between the calendar and the seasons.⁴³ These they blamed on the “sins of men.” Naturally, with a difference of 1.25 days per year between the true solar year and the 364-day year, a significant lapse of time was necessary for the discrepancies to be observable regularly. Beckwith calculated that in forty eight years the 364-day year would have fallen two months behind the true solar cycle. On this basis he posited the institution of the 364-day calendar by the “proto-essene” milieu between 251 and 248 BCE.⁴⁴ They soon enough realised the un-workability of the calendar, and formulated a *theological* justification to explain the discrepancies.⁴⁵

In the light of the arguments suggested by Talmon, and summarized above, it seems difficult to accept Beckwith’s position and argumentation.⁴⁶ Even if essenism became a distinct movement in Palestinian Judaism in the wake of Onias III’s assassination in 171 BCE, a position which is not disputed here, it is difficult to account for the Aramaic astronomical work to have gained an authoritative status as late as the mid third century BCE. A mere four generations might probably not be enough to ensure an authoritative status to the Aramaic astronomical work, or the *Book of Luminaries* in its original form, as that enjoyed by the written Torah. It

⁴⁰ Beckwith, “Earliest Enoch Literature,” 372.

⁴¹ Beckwith, “Earliest Enoch Literature,” 367 note 3. Beckwith had developed this theory in R.T. Beckwith, “The Significance of the Calendar for Interpreting Essene Chronology and Eschatology,” *RevQ* 10 (1979–81b): 167–202, especially 180 ff.

⁴² Beckwith, “Calendar and Essene Chronology,” 182–4.

⁴³ Beckwith, “Earliest Enoch Literature,” 372.

⁴⁴ Beckwith uses the term “proto-Essene” to designate “pre-Essene” origins of the Enochic writings. Cf. Beckwith, “Earliest Enoch Literature,” 365.

⁴⁵ The term ‘theological’ is here used in inverted commas to acknowledge its anachronistic character when used in the context of Second Temple Judaism.

⁴⁶ Talmon, “Calendars and Mishmarot,” 114.

renders the process of the rising of Essenism within Palestinian Judaism far too systematic, and does not allow for a period of crystallization of the ideals embraced by its members over a significant period of time, especially that of 'renewed covenant'.⁴⁷ Rather, such ideals are likely to have evolved over a significant period of time, as the community explored, then formulated *theological* explanations for the trauma it endured through its Babylonian exile.⁴⁸ As a result, any suggestion that the 364-day calendar was a product of Essenism as late as the mid-third century BCE must be abandoned. It is quite possible in fact, as will be explored below, that the *theological* explanation offered in 1 *En* 80 for the disruption of the seasons could be attributed, not to the un-workability of the 364-day calendar, but rather to the differing ways of computing the lunar years into the triennial solar cycle, which, the present author claims, can be identified in some otherwise difficult verses of the *Book of Luminaries*.

2.3 Summary

The above section revisited the hypothesis first formulated by J.T. Milik concerning the dating of what he termed the *Astronomical Book*. In this process the recent distinction between a third century BCE Aramaic astronomical work and the Ethiopic *Book of Luminaries*, both witnesses

⁴⁷ For a proposition about a development of the 'community of the renewed covenant', see S. Talmon, "The Community of the Renewed Covenant: Between Judaism and Christianity," in *The Community of the Renewed Covenant: The Notre Dame Symposium on the Dead Sea Scrolls* (eds E. Ulrich and J.C. VanderKam; Notre Dame, IN: University of Notre Dame Press, 1994), 3–24, especially 22, where Talmon states: "the 'community of the renewed covenant' should be viewed as the third—or second—century crystallization of a major socio-religious movement which arose in early post-exilic Judaism. The movement was prophetically inspired and inclined to apocalypticism. It perpetuated a spiritual trend whose origins can be traced to the prophets of the First Temple period—foremost Isaiah, Jeremiah and Ezekiel—and to the post-exilic prophets Haggai and Zechariah. The development of the movement runs parallel to that of the competing rationalist stream which first surfaces in the book of Ezra, and especially in the book of Nehemiah, and will ultimately crystallize in rabbinic or normative Judaism." See also from the same author: "The 'Essential Community of the Renewed Covenant': How Should Qumran Studies Proceed?" in *Geschichte-Tradition-Reflexion: Festschrift für Martin Hengel zum 70. Geburtstag* (ed. H. Cancik, H. Lichtenberger, and P. Schäfer; Tübingen: Mohr (Siebeck), 1996), 323–53; "The Dead Sea Scrolls' or the 'Community of the Renewed Covenant'?" in *The Echoes of Many Texts: Reflections on Jewish and Christian Traditions. Essays in Honor of Lou H. Silberman*. (eds W.G. Dever and J.E. Wright; BJS 313; Atlanta, Ga: Scholars Press, 1997), 115–45.

⁴⁸ Stegemann also considers the roots of Essenism to rise from the immediate aftermath of the return from exile. See "The Qumran Essenes—Local Members of the Main Jewish Union in Late Second Temple Times," in *The Madrid Qumran Congress. Proceedings of the International Congress on the Dead Sea Scrolls. Madrid 18–21 March 1991. Vol. 1* (eds J. Trebolle Barrera and L. Vegas Montaner; Leiden: Brill, 1992), 83–166.

to an older Enoch composition, recently formulated by VanderKam, was found helpful and adopted, although semantically it seems to complicate the arguments slightly, introducing some level of confusion between terminologies past and present. At the outset, Milik's initial dating of the Aramaic material to the third century BCE, together with the references to calendrical and astronomical knowledge attributed to Enoch and found in later compositions such as *Jub.* 4:17 and CD 16:1–4, would support the possibility that an Enochic tradition dealing with astronomical knowledge may be even older than the third century BCE. Milik's suggestion of a possible fifth century BCE setting, however, cannot be substantiated directly at this stage. Likewise, Beckwith's arguments that the 364-day year was an Essene construct sometime in the second century is not supported by the evidence: the 364-day year was known elsewhere, in a milieu that was known to have had contacts with Judaea earlier in its history.

3. *Antiquity of the 364-day Year*

The above argumentation concerning the dating of the Aramaic astronomical work that witnessed to an earlier Enochic composition is relevant to the question of the antiquity of the 364-day calendar which, according to the evidence available, is perhaps less than ever open to debate. As already noted, Jaubert had suggested that it was the "old priestly" calendar that regulated worship in the Temple before the exile.⁴⁹ Jewish sources of the third, second and first centuries BCE clearly denote a knowledge (and adherence to) a 364-day calendar, but such a calendar-year was known long before that. The present section briefly sets out some evidence for an Egyptian origin of the year, as well as some sources that clearly indicate knowledge of this year in 6th century BCE Babylonia.

3.1. *An Egyptian Connection?*

A recent study by M. Chyutin on the subject tends to concur with Jaubert's thesis.⁵⁰ The merit of Chyutin's work is that it attempts to trace the 364-day calendar back into the period of Egyptian influence in Canaan and Palestine as early as the end of the second millennium BCE. There

⁴⁹ Jaubert, *date de la cène*, 31–59.

⁵⁰ It is quite remarkable that Jaubert's work on the 364-day calendar is nowhere mentioned in Chyutin's recent study, in the first part of his work. Cf. Chyutin, *op. cit.*

is some strong historical and archaeological evidence for a significant Egyptian influence at that time in Palestine.⁵¹ This is shown by the presence of Egyptian administration,⁵² whose influence continued for a significant amount of time.⁵³ Egyptian cultural orientation is also likely to have played a key role.⁵⁴ Egypt was oriented towards worship of the sun. A sun ritual existed in Canaan before the Israelite conquest.⁵⁵ Israel and Judah had a definite orientation in belief towards the sun.⁵⁶ Further, the Egyptian solar calendar was more suited to the Israelite agricultural festivals, at least before the exile, because it followed the seasons closely. In fact, the calendar employed in Judah during the First Temple period strangely resembled the Egyptian solar calendar: the day started at sunrise, the year started in the summer; months were sequentially named by numbers (a characteristic of a solar calendar in which festivals fall on the same day every year). Even the number of days in the month was similar.⁵⁷ Its main difference was that it was adapted to the seven-day week structure by reducing it from 365 to 364 days, presumably by King Solomon. Lastly, the various hints from several documents illustrating a war of calendars in Second Temple Judaism testify to the existence of a solar calendar during the First Temple period in Judah, which clashed with the introduction of a competing calendar based on the moon when the shift of balance took place from Egypt to Mesopotamia in the course of the first millennium BCE.⁵⁸ Jaubert had suggested that the 364-day calendar had evolved

⁵¹ Y. Yadin, "The Earliest Records of Egypt's Military Penetration Into Asia," *IEJ* 5 (1955): 1–16; A. Ben-Tur, "On the Character of the Egyptian Presence in Eretz-Israel in the Early Bronze Period," *ErIsr* 20 (1989): 31–6; M.J. Weinstein, "The Egyptian Empire in Palestine: A Reassessment," *BASOR* 241 (1981): 1–28; Y.M. Grintz, *From the Ancient Egyptian Literature* (Jerusalem: Bialik Institute, 1975); S. Ahituv, *Canaanite Toponyms in Ancient Egyptian Documents* (Jerusalem: Magnes, 1984).

⁵² N. Ne'eman, "Society and Culture in the Late Bronze Period," in *The Ancient Periods* (ed. Y. Efal; vol. 1 of *The History of Eretz-Israel*; 1982); G. Barkey, "An Egyptian Temple in the Late Bronze Period in Jerusalem," *ErIsr* 21 (1991): 94–106 for the presence of an Egyptian Temple in Jerusalem in 13th century BCE.

⁵³ E. Oren, "The Architecture of Egyptian 'Governors' Houses' from the New Kingdom Period in Eretz-Israel," *ErIsr* 18 (1985): 195–7.

⁵⁴ Chyutin, *op. cit.*, 151–3.

⁵⁵ *Ibid.*, 151–3.

⁵⁶ S. Morton, "Helios in Palestine," *ErIsr* 16 (1982): 199–214; S.M. Smith, "The Near Eastern Background of Solar Language for Yahweh," *JBL* 109 (1990): 29–39; Morgenstern, *op. cit.*

⁵⁷ Chyutin, *op. cit.*, 153–7.

⁵⁸ Chyutin, *op. cit.*, 157–9. The struggle is visible, even palpable in compositions such as the *Book of Jubilees*, 1 *Enoch*, 2 *Enoch*, and the various Qumran documents which contain calendrical indications. Chyutin noted that supporters of the lunar calendar never appealed to the authorship of Moses (or any other key biblical figure) to attempt to vest the lunisolar calendar with distinguished authorship and authoritative status. The different

somehow under Hellenistic influence during the Second Temple period. According to Chyutin it would now appear that the 364-day calendar tradition had long been established in Palestine by the Second Temple era, to the extent that different strands of the 364-year existed.⁵⁹

3.2. *A Babylonian Connection*

Traces of a 364-day year have also been identified in texts from Mesopotamia.⁶⁰ In *Mul-Apin* II ii 11–12, a composition arranged ca. 686 BCE,⁶¹ one reads the following note:

11. To . . . the day of disappearance of the Moon for 12 months, you proclaim an intercalary month in three years (variant: the third year);
12. 10 additional days in 12 months is the amount for one year.⁶²

Twelve months and ten days is the amount for a year, i.e., 364 days. This is not dissimilar to some of the claims found in the *Book of Luminaries*, where one reads in *1 En* 74:10 that the year, when it is complete, counts

versions of the Flood story, with their different calendrical indications, may represent attempts by various groups to justify their calendrical preferences. Cf. Chyutin, op. cit., 158. On the Flood narrative and the calendar, see Lim, op. cit; B.K. Gardner, *The Genesis Calendar: The Synchronistic Tradition in Gn 1–11* (Lanham, MD: University Press of America, 2001); Najm and Guillaume, op. cit; Shariv, op. cit; D.W. Young, “The Sexagesimal Basis for the Total Years of the Antediluvian and Postdiluvian Epochs,” *ZAW* 116 (2004): 502–27.

⁵⁹ Glessmer, “4Q319 and Intercalations,” stressed the necessity to speak of 364-day solar tradition to reflect the variety of calendars. Callaway, op. cit, had already argued against those scholars who considered the calendars of *1 En* 72–82, that of the *Book of Jubilees* and that of the *Temple Scroll* to stand in a direct line of continuity. Rather, for Callaway, it is important to “specify whether we are referring to the Jubilees/ShirShabb tradition or the *1 Enoch* tradition or the 11QTemple/4QMishmarot traditions when talking about the calendar.” Chyutin, op. cit., 91–3, identifies no less than five solar calendars: 1: “solar calendar A,” of the Sadducees (*1 Enoch*, Qumran Scrolls), $(90 + 1) \times 4 = 364$; 2: “solar calendar B,” of the Boethusians (*Jubilees*), $91 \times 4 = 364$; 3: “solar calendar C,” of the Essenes, $90 \times 4 + 4 = 364$; 4: “solar calendar D,” (2 [Slavonic] *Enoch*), $90 \times 4 + 5 = 365$ and $91 \times 4 + 1 = 365$; 5) “solar calendar E,” an archaic 360-day calendar (Flood story, Esther, 4Q318).

⁶⁰ A treatment of this particular issue can be found in J. Ben-Dov and W. Horowitz, “The 364-day Year in Mesopotamia and Qumran,” *Meghillot* 1 (2003): 3–24, in Hebrew. In the first part the authors review the evidence from Babylonia, especially *AO* 6478, and *BM* 36712 and its 364.5 days between the risings of Sirius. In the second part they review the Jewish sources that display a knowledge (and adherence to) a 364-day year (in *1 Enoch*, the *Book of Jubilees*, and in the Qumran Scrolls). See also J. Ben-Dov, *Head of All Years: Astronomy and Calendars at Qumran in Their Ancient Context* (STDJ 78; Leiden: Brill, 2008).

⁶¹ Hunger and Pingree, *Mul.Apin*, 10.

⁶² Hunger and Pingree, *Mul.Apin*, 94. Also, Horowitz, “The 360 and 364 Day Year in Ancient Mesopotamia,” 40–1.

364 days.⁶³ Further, AO 6478, a copy found in Uruk of a Ziqpu-Star text originating from Assurbanipal's library, also indicates that this year was known and computed in Babylon as early as the sixth century BCE.⁶⁴ It presents 26 sectors of 26 Ziqpu stars over 364 stellar degrees. Now, the short passage from Mul-Apin presented above suggests that a "stellar" year counts 364 degrees.⁶⁵ The following passage from Mul-Apin (I iii) actually equates one day of the year with one stellar degree:

49. The stars enter into the night in the morning 1 UŠ each day.
50. The stars come out into the day in the evening 1 UŠ each day.⁶⁶

3.3. Summary

The Egyptian connection, investigated by Chyutin, is interesting but perhaps inconclusive. There is no smoking gun as such, or no textual evidence to support the claim that the 364-day year came to Canaan via Egypt sometime around the turn of the second to the first millennium BCE. Likewise, the lack of evidence cannot be taken as conclusive either, and the onus remains on those scholars who deny an Egyptian influence on calendrical matters in Canaan at the turn of the millennium to prove the point. The Babylonian trail, however, has shown more promise. Textual evidence above (Mul-Apin II ii 11–12) indicates that the 364 day year tradition was known in Babylon as early as the seventh to sixth century BCE, and perhaps earlier. It is not entirely clear how the and when Babylonian astronomical knowledge might have travelled to Judeah, or how—or why—once in Judeah it grew as an attractive time reckoning device to some Jews.⁶⁷

⁶³ On 1 En 74:10, see below. For a fuller consideration of the relationship between the *Astronomical Book* and the Mesopotamian Compendium Mul-Apin, see chapter 3 of J. Ben-Dov, "Astronomy and Calendars at Qumran—Sources and Trends," (English summary of Ph.D. Dissertation) (Jerusalem: Hebrew University, 2005).

⁶⁴ Horowitz, "Two New Ziqpu-Star Texts and Stellar Circles," 94–6. The text is a copy of K. 9794, copied ca. 200 BCE in Uruk. As argued by H. Hunger and D. Pingree, *Astral Sciences in Mesopotamia* (HO 44; Leiden: Brill, 1999), 84, "The existence of a copy of the original of Assurbanipal's library, K. 9794, guarantees that the original was already written in the seventh century BC." For a bibliography on K. 9794//AO6478, see Horowitz, "Two New Ziqpu-Star Texts and Stellar Circles," 93 note 10. For an opposite view to that of Horowitz, see Koch, *op. cit.* See the reply by Horowitz, "The 364 Day Year in Mesopotamia, Again".

⁶⁵ Horowitz, "Two New Ziqpu-Star Texts and Stellar Circles," 94.

⁶⁶ Hunger and Pingree, *Mul.Apin*, 57. See also *BM* 38360+ ii' 25–28, Horowitz, "Two New Ziqpu-Star Texts and Stellar Circles," 94, and note 13 on the same page.

⁶⁷ Ben-Dov considers this particular aspect of the question in the sixth chapter of *Head of All Years*. An interesting theory is developed by R. Feldman, "The 364-day 'Qumran'

4. *Identification of Differing Lunar reckonings in the Book of Luminaries*

A third century BCE dating of an Astronomical work composed in Aramaic, and parts of which have survived in the Ethiopic *Book of Luminaries* remains the best solution, just as Milik had argued.⁶⁸ There is much to commend in Drawnel's classification of the Aramaic *Astronomical Book* as a didactic composition emanating from a Levitical (so priestly) school, just like the *Aramaic Levi Document* and the *Visions of Amram* (4Q543–549).⁶⁹ The Aramaic *Astronomical Book* would have been used in the training of priests in matters calendrical, demonstrating by the same token how Babylonian astronomical knowledge could be applied in a Jewish monotheistic setting.

The chain of transmission from the Aramaic to the Ethiopic recensions is notoriously difficult to ascertain, whether one postulates an Aramaic—Greek—Ethiopic linear transmission, as does Nickelsburg in his *Herme-nea* commentary, or a more nuanced approach, in which the connections between the Aramaic original, a Greek translation, and an Ethiopic extant version are not as clearly discernible. Be that as it may, it is a common assertion among scholars that parts of the former have survived in the latter, albeit in an abridged form. The many (textual) variants between manuscripts of the α family and of the β family indicate how difficult the task of establishing the connection between the Aramaic *Astronomical Book* and the Ethiopic *Book of Luminaries* really is.

There is no space in the scope of this study to give a systematic commentary on the *Book of Luminaries*.⁷⁰ Rather, the present section proposes to investigate some peculiarities identified in chapters 73 and 74 of

Calendar and the Biblical Seventh-Day Sabbath: A Hypothesis Suggesting Their Simultaneous Institutionalization by Nehemiah," *Hen XXXI* (2009): 342–65.

⁶⁸ See above. The distinction suggested by VanderKam, J.C. VanderKam, "Aramaic AB and Ethiopic BL," 1, between an Aramaic Astronomical work and the (Ethiopic) *Book of Luminaries* is here adopted. For a summary of the contents of the *Book of Luminaries*, see Neugebauer, "'Astronomical' Chapters," 388–9. Translations worth consulting are, together with those mentioned in note 1 above, those of A. Dillmann, *Das Buch Henoch übersetzt und erklärt* (Leipzig: Vogel, 1853); Charles, op. cit; Milik, *Books of Enoch*; and S. Uhlig, *Das äthiopische Henochbuch* (JSHRZ 5/6; Gütersloh: Gütersloher Verlagshaus, 1984).

⁶⁹ H. Drawnel, "The Literary Form and Didactic Content of the Admonitions (Testament) of Qahat," in *From 4QMMT to Resurrection: Mélanges qumraniens en hommage à Émile Puech* (F. García Martínez; STDJ 61; Leiden: Brill, 2006), 55–73.

⁷⁰ The reader is referred to existing and forthcoming works, some of which are referenced throughout the section.

1 Enoch, and the two manuscripts of the α family, of particular interest to the argument are the fifteenth century CE *Tana*⁷¹ and the fifteenth to sixteenth century CE *EMML* 2080.⁷² It will be argued that chapters 73 and 74 of 1 *Enoch*, in these recensions, contain key information which allow the identification of differing lunar reckonings in the *Book of Luminaries*.

4.1. 1 En 73 and Lunar Reckoning

Chapter 73 of the Ethiopic *Book of Luminaries* expounds the illumination of the moon in parts, while chapter 74 is concerned with its movement.⁷² The moon is presented in 73:1 as the minor luminary. In this chapter the beginning of the month is marked by the coming into existence of the moon on the thirtieth day (v.4), suggesting, according to standard Babylonian astronomical terminology, that the preceding lunar month was hollow.⁷³ The month mentioned could also be the solar month of thirty days, without changing the meaning of the verse. Such interpretation could be conceived on the basis that the sun is clearly seen as the greater in rank among the luminaries (72:1,36). The month, which is talked of as starting with the appearance of the moon on the thirtieth day (of the moon or of the sun), is a lunar month. What is described of the surface of the moon in light—or of period of lunar visibility—one seventh of its half part, seems to be the appearance of the first crescent on the following day (v.6–7). This is confirmed in the later part of v.7 where the moon is said to become dark on the first day of the lunar month “in respect to its thirteen parts that night.” In this particular chapter the lunar reckoning clearly starts with the appearance of the first crescent. This is an important observation, as will become evident below.

⁷¹ See below for details.

⁷² P. Sacchi, “The Two Calendars of the Book of Astronomy,” in *Jewish Apocalyptic and Its History*, in *Jewish Apocalyptic and Its History* (P. Sacchi; JSPSup 20; Sheffield: Sheffield Academic Press, 1996), 130, suggests that chapter 74 is a duplication of chapter 73. In a significant contribution, H. Drawnel, “Moon Computation in the Aramaic Astronomical Book,” *RevQ* 23 (2007): 3–41, argues that the Aramaic *Astronomical Book* recorded not the illuminated surface of the moon, but rather plotted the periods of lunar *visibility* in the sky.

⁷³ Neugebauer, “Astronomical’ Chapters,” 396 In his Doctoral Dissertation “Astronomy and Calendars at Qumran—Sources and Trends”, J. Ben-Dov argues that the thirtieth day mentioned in 73:1 belongs to the preceding *lunar* month, a practice attested in Cuneiform texts from Babylonia. I am grateful to Jonathan Ben-Dov for providing me with a copy of his Doctoral Dissertation in Hebrew as well as a summary in English.

4.2. 1 En 74 and Lunar Reckoning

Chapter 74 of the Ethiopic *Book of Luminaries* gives a description of the movements of the sun and the moon from gate to gate, “based on a simple arithmetical scheme that is well known from computus treatises.”⁷⁴ The chapter, however, also contains key elements which, it is argued, represent remnants of older traditions reckoning the lunar month differently.

4.2.1. 1 En 74:3—an Alternative Lunar Reckoning

Neugebauer proposed the following translation for the verse:

And in steps (of fractions) of sevenths (lit. single seventh parts) the full moon is completed in the east and in steps (of fractions) of sevenths complete darkness is reached in the west.⁷⁵

Although Neugebauer does not indicate which particular manuscript(s) he follows, his translation clearly suggests a sequential observation of waxing and waning of the moon, which is consistent with the material presented in 1 En 73, a state of affairs which should be expected in the light of the preceding chapter where the lunar month starts with the sighting of the first crescent.⁷⁶ The situation is reversed if one follows the translations of either Isaac or Knibb. Following a different manuscript, Isaac’s translation suggests:

[T]he moon wanes in fifteen steps during a period of fifteen days, and waxes in fourteen steps in the east and the west respectively.⁷⁷

Knibb translates:

[I]n seventh parts it makes all its darkness full, and in seventh parts it makes all its light full, either in the east or in the west.⁷⁸

In the most recent translation to date, Nickelsburg/VanderKam suggest:

(In) one-seventh parts it completes^t all its light in the east and in the west.⁷⁹

⁷⁴ Neugebauer, “‘Astronomical’ Chapters,” 399.

⁷⁵ *Ibid.*, 398.

⁷⁶ Isaac suspects Neugebauer’s translation reflects ms. *EMML* 80, an α family representative. See Isaac, *op. cit.*

⁷⁷ Isaac, *op. cit.*, 53.

⁷⁸ Knibb, *op. cit.*, 173.

⁷⁹ Nickelsburg and VanderKam, *op. cit.*, 102. The authors indicate in note ‘t’ that “some mss add *all its darkness and in one-seventh part completes*”.

Both the Isaac and the Knibb translations mention the waning of the moon first. Isaac follows manuscript A, and indicates in his notes the alternative reading of manuscript C, which agrees with Neugebauer's translation.⁸⁰ Clearly, the Isaac/Knibb line of translation marks a contrast with the preceding chapters as regards the mode of observation of the lunar month from its start to its end in a sequential manner. Following chapter 73, one would assume an observation based on a cycle of: first crescent, waxing of the moon until full moon, then waning of the moon until new moon. Rather, in both Isaac and Knibb, one is left with the impression that the observation started at full moon (and not new moon), thus observing first, for fifteen days, the waning of the moon until its total darkness (new moon). The second part of the observation concerned itself with the waxing of the moon "in fourteen steps," presumably and logically from the sighting of the first crescent until its waxing culminates in the full moon. This description is inconsistent with the preceding chapter, where the lunar month unmistakably starts with the new moon.

Admittedly, there are a number of variant sources upon which the translators based their work, as recognized by Neugebauer himself:

It seemed tempting to utilise in this commentary to the astronomical chapters of the book of Enoch the numerous parallels and variants found in the Ethiopic 'computus' treatises. Since, however, practically all of these texts are unpublished and since only a detailed study could bring order and relative completeness to this huge mass of material, I have usually abstained from referring to such 'secondary' sources, though they may well contain information more reliable than the Book of Enoch in its present condition. I made good use, however, of the possibility of discussing my interpretations of the text with Professor Ephraim Isaac at the Institute for Advanced Study in Princeton.⁸¹

This statement suggests that, indeed, there are a great many possible translations, as there are a great many variants which could well be more reliable. It is, of course, way beyond the scope of the present study to embark upon such a task as that suggested here by Neugebauer. This must be left to others. However, a few points can be made at this stage. The first is that, despite the best efforts of the translators, translations necessarily

⁸⁰ "A" and "C" are Isaac's designation, "A" standing for Kebrān 9/II, a fifteenth century manuscript, and "C" standing for *EMML* 2080, a fifteenth (possibly fourteenth) century manuscript. Cf. Isaac, op. cit., 6, and notes. Isaac considers A to be "superior to B and C, often giving shorter and more difficult readings." Cf. Isaac, op. cit., 11.

⁸¹ Neugebauer, "Astronomical' Chapters," 389.

limit the possible meaning of a text in comparison to what the sum of the sources might have implied. Second, in a treatise like the *Book of Luminaries*, the editorial choice of the translator can potentially alter the overall meaning and content of the work. This is evident from the discrepancy of translation of 1 *En* 74 exemplified above. Third, this somehow distorted picture will necessarily colour with a bias any reconstruction of the socio-religious context of the milieu in which a work emerged, in this instance that of late third century BCE Palestinian Judaism. Fourth, this distorted picture will also influence any investigation that will rely in part upon the source in its translated form, or, for that matter, in the original language.

Back to 1 *En* 74:3. The Neugebauer translation makes good sense as it fits perfectly with the description of chapter 73. The Isaac/Knibb line highlights the awkwardness of two differing manners of describing observations. Here, the curiosity of the textual critic is awakened. Following an important criterion of textual criticism, when faced with two conflicting versions of the same narrative, the most awkward passage may be believed to be more ancient in the tradition. This is the reason why Isaac believes ms. 'A' to be more important than mss. 'B' or 'C'. Conversely, the passage which makes the text more intelligible may be suspected of having undergone some amendments at the hands of the redactors, what we may call scribal editorial correction. It is possible that in the present case, one is not only faced with simply an either/or translation of 1 *En* 74:3. In other words, to suggest that the awkwardness of the passage is simply due to a literary device is perhaps akin to dismissing too prematurely some possible avenues of investigation that might otherwise bring light to the meaning of the text.⁸² The editorial differences in the manuscripts may well be a clue suggesting that a process of harmonization took place, possibly in order to make both chapters fit well together. It is of course regrettable that there are to date no extant passages of these chapters in the Aramaic fragments, although it is possible that this particular verse formed part of a summary statement, as suggested by Milik.⁸³

⁸² J. Ben-Dov, in a personal communication, indicated that in his opinion the sequence waxing-waning of the moon in 1 *En* 74:3 is no more than a literary device. Ben-Dov has since formulated his opinion in his Doctoral dissertation, where he refers to our exchanges. See Ben-Dov, "Astronomy and Calendars at Qumran—Sources and Trends," 78 note 3. See also VanderKam's commentary on 1 *En* 74:4, to be published, where VanderKam seems to accept Ben-Dov's position. I am grateful to Professor VanderKam for generously allowing me to consult his manuscript before publication.

⁸³ Milik, *Books of Enoch*, 274–5.

Yet, the possibility remains that originally there were two traditions, or rather two differing manners of reckoning the lunar month, which are reflected in these not just differing but opposite expositions of observation of the lunar cycle. One way of reckoning started the lunar month at the first sighting of the first crescent, and described the changes in the appearance of the moon in a sequential manner, from waxing to waning, from first crescent to full moon to new moon. This is exemplified in the Neugebauer translation. The other way of reckoning describes the appearance of the moon also in a sequential way, this time from waning to waxing, from full moon to first crescent to full moon, as visible from Isaac's use of manuscript C. Could this be the indication that the *Book of Luminaries* bears witness to various ways of reckoning the lunar month, one starting the month at the first crescent (cf. chapter 73), the other starting the month on the day of the full moon (chapter 74)? It is the present author's suspicion that it does. The editorial differences in the manuscripts may well be a clue suggesting that a process of harmonization took place, possibly in order to make both chapters fit well together. 1 En 74:3 could be envisaged as conserving the memory of a forgotten tradition, originally present in astronomical works (circulating under the name Enoch?), which is somehow surviving in the apparent awkwardness of the sequence of chapters 73 and 74 extant in different manuscripts. It is of course regrettable that there are to date no extant fragments of this passage in the Aramaic fragments, although it is possible, as argued by Milik, that this particular verse formed part of a summary statement. Yet the possibility remains that the variants in the Ethiopic *Tana*⁹—which is Isaac's ms. A—may point in the direction of *two* differing ways of reckoning the lunar month. The first, presented in 1 En 73, adopting a first crescent reckoning (commonly called new moon reckoning); the second, preserved in 1 En 74, expounding a full moon reckoning.

If the argument is correct, an assumption that might seem unsurmountable to some, *Tana*⁹ 74:3 could be envisaged as conserving the memory of a forgotten tradition, originally present in astronomical works ascribed to Enoch, which somehow survived in the apparent awkwardness of the sequence of chapters 73 and 74 extant in various Ethiopic manuscripts.

4.2.2. *New Solutions to Old Riddles—the Evidence of 1 En 74*

4.2.2.1. 1 En 74:10

The second part of chapter 74 is rather puzzling at first. It displays both solar years of 360 days and 364 days. This is most evident in 74:10, where

the first part of the verse states: “if five years are combined, the sun gains thirty extra days.” Thirty extra days in five years amount to six days a year. The lunar year counting 354 days, the solar year which is referred to here is the 360 day year. The last part of the verse, on the other hand, explicitly states: “and when it is completed, it turns out to be 364 days.” Here the solar reckoning is clearly the 364 day year. The first and last part of the verse are linked by an obscure statement: “consequently, one of those five years gains.”⁸⁴ This, we are told, is the cause of the completed year counting 364 days. The meaning of this statement is unclear. Is one to understand that one of the five years gains, so that the ideal year can be said to count 364 days? In this case, one year will have to count 380 days, so that $360 \times 4 + 380 = 1440 + 380 = 1820 = 5 \times 364$. The twenty days added to the fifth year (whichever one this may be in the sequence) are not arbitrary. They correspond to the numerical value which must be added to the fifth year so that the ideal year can count 364 days. In other terms, it is the sum of the necessary epagomenal days for each of the five years. Those days fall four times a year on months III, VI, IX and XII in *1 En* 72. But whether they are reckoned thus in *1 En* 74 is not clear. The very least that can be said is that *1 En* 74 suggests an insertion of twenty days every five years so that the ideal year can count 364 days when each year is completed, that is once the epagomenal days are added, presumably because they were not reckoned as part of the year. Thus, the year counted 360 days, and the completed year counted 364 days. The difference between the lunar year and the 360-day year in five years is said to amount to thirty days ($[360 - 354] \times 5$) and consequently one year in five must gain thirty days. But if one considers the completed year of 364 days, the same discrepancy of thirty days only arises after three years, so that every three years thirty days, or a month, were inserted to align the lunar year to the solar year.⁸⁵ This seems to be the best way to interpret *1 En* 74:10.

The gain spoken of in 74:10 cannot be the same as the gain mentioned in the following verse. In verse 11 we are told that the gain of the sun over the moon is six days every year, and amounts to thirty days in five years. The solar year is, again, the 360 day year. Verse 12, it is here argued, refers to the year that “gains” mentioned in verse 10. Its added days “bring about all the years punctiliously, so that they neither gain upon nor fall behind

⁸⁴ Isaac, op. cit., 54.

⁸⁵ For a treatment of the intercalation process in the *BL*, see Albani, *Astronomie*, 9–17. *Idem*: Albani, “Zur Rekonstruktion eines verdrängten Konzepts: Der 364-Tage-Kalender in der gegenwärtigen Forschung”.

their fixed positions for a single day, but they convert the year with punctilious justice into 364 days.” This would suggest that the four epagomenal days are not yet inserted in the computing of the year. Yet, the following verse ensues to state the number of days in three, five and eight 364-day years, respectively 1092, 1820 and 2912. Following this, a specific year in which twenty days were inserted in a five year period must be ruled out. Rather, the better interpretation is to see that the year is measured in terms of 364 days, whatever the year is. At the outset, there appears to be little purpose to this passage.⁸⁶

4.2.2.2. 1 En 74:14

It is the present author’s contention that a consideration of 1 En 74:14 in ms. *Tana*⁹—Isaac’s ms. A—will bring further light upon the issue of the monthly lunar reckoning in the *Book of Luminaries*.

4.2.2.2.1. The Textual Evidence

1 En 74:10–16 is a passage notoriously difficult to translate due to the many variants existing in the two families of manuscripts (α and β). Isaac’s translation of *Tana*⁹ 74:13–15 reads:

In three (years) there are 1092 days and in five years 1820 days, so that in eight years there are 2912 days.¹⁴ For the moon singly in three (years) its days add up to 1030 days, so that it falls behind by 62 days in three years.¹⁵ In five years (they add up to) 1770 days, so that it falls behind by 50 days in five years.

Neugebauer dismissed the passage as a later scribal amendment. VanderKam offers the following translation:

In three years there are 1,092 days; in five years there are 1,820 days, with the result that in eight years there are 2,912.¹⁴ For the moon alone, the days in three years come to 1,062; in five years it is fifty days fewer.¹⁵ In five years there are 1,770 days, with the result that in eight years the moon has 2,832 days.⁸⁷

As noted by VanderKam, there is a series of textual difficulties with the sources concerning verses 14–16.⁸⁸ The verses clearly reflect the pattern

⁸⁶ So Isaac, op. cit., 54, note u; Neugebauer, “‘Astronomical’ Chapters,” 400–1.

⁸⁷ Nickelsburg and VanderKam, op. cit., 102–3.

⁸⁸ Once again I am indebted to Professor VanderKam for generously allowing me access to his manuscript. Reproduced with permission. The primary sources used here are those treated by the author in 1 *Enoch* 2, forthcoming (with George Nickelsburg, in the *Hermentia* series), in the section dealing with 1 *Enoch* 74.

established in verse 13, where the number of days in three, five and eight 364-day years are given, namely: (a) three years = 1,092 days, (b) five years = 1,820 days, and (c) eight years = 2,912 days. As VanderKam indicates, “the pattern underlying vv.14–16 and almost fully preserved in them consists of these three units, each of which is divided into two parts to allow comparison with the solar totals [and] the elements should read”:

- (a) for three years there are 1062 days
(a') and for three years 30 days are lacking
- (b) for five years there are 1770 days
(b') and for five years 50 days are lacking
- (c) so for eight years there are 2832 days
(c') because 80 days are lacking for eight years.⁸⁹

Whereas the above is what the text “should read,” a representative sample of textual evidence gives a somewhat different picture. VanderKam considers mss. g and T⁹ (= *Tana*⁹) as representatives of the α family, and ms. p as a witness of the β group.⁹⁰

expected text (a):

for three years there are 1062 days

actual text (a) in mss:

- ms. g: la-3-ām mawā el 10-100 wa-30 mawā el (= 1030 days)
- ms. p: la-3-ām 10-100-60-wa-2-mawā el (= 1062 days)
- ms. T⁹: la 3 āma mawā el 10-100 wa-30-mawā el (= 1030 days)

⁸⁹ VanderKam, *1 Enoch 2* forthcoming (with Georges Nickelsburg, in the *Hermeia* series). Reproduced with permission.

⁹⁰ The α and β classification of the manuscripts was suggested by J. Flemming, *Das Buch Henoch: Äthiopischer Text* (TU xxii I; Leipzig: Hinrichs, 1902). See Milik, *Books of Enoch*, 83. Ms. g, also classified as “B.M. Orient. 485. Jubilees, Enoch” in Milik, *Books of Enoch*, 84, is commonly dated to the sixteenth century. Ms. p, also classified as “Rylands Libr. Enoch and other books,” Milik, *Books of Enoch*, 84 is dated to the seventeenth century. Ms. T⁹ was first introduced in the discussion by Knibb, op. cit., 23, who classified it as *Tana*^a, and described it as “Lake Tana MS. 9 (Hammerschmidt’s Catalogue, no. 9). 15th cent. Enoch (foll. 71r–124v) and other biblical writings.” Isaac, op. cit., 6, classified it as Ms. A, “Kebrān 9/II (Hammerschmidt—*Tānāsee* 9/II),” and based the bulk of his translation on this particular ms. G.W.E. Nickelsburg and K. Baltzer, eds, *1 Enoch 1: A Commentary on the Book of 1 Enoch, Chapters 1–36; 81–108* (Hermeneia; Minneapolis: Augsburg Fortress, 2001), 16, following Uhlig, op. cit, suggested the following reconstruction of the history of the text: T⁹, with its variants from other alpha-mss, was probably an earlier version dating perhaps to the end of the 13th century; the bulk of the α group was then developed in the course of the following three centuries, from the 14th to the 16th century. All subsequent manuscripts formed the β group.

As VanderKam's puts it, "impressive members of the older ms. tradition read a surprising 1,030."

expected text (a¹) in mss:

ms. g: [no text suggested in VanderKam's argumentation]

ms. p: [no text suggested in VanderKam's argumentation]

ms. T⁹: wa-la 3 am yaxāṣeṣ mawā el 60-wa-2

according to VanderKam the reading (a¹) in T⁹ is consistent with element (a) in the same ms., but "in view of the readings for elements (b), (b¹), (c) and (c¹) in T⁹ in the next lines, the numbers in T⁹ here are patently wrong." VanderKam proceeds to give a text-critical explanation based on an hypothetical original text:

la-3 ām10-100 wa-**60-wa-2**-mawā el wa-la-3-ām yaxaṣṣes **30** mawā el

VanderKam explains:

a copyist's eye may have jumped from one number (60-wa-2) followed by *mawā el* to the next number (30) followed by *mawā el* and omitted the intervening words. The result is the reading in g above and in T⁹ for element (a).⁹¹

So it is this particular reading which would be responsible for the indication in (a¹) of T⁹ that the moon falls behind the sun by sixty two days in three years. VanderKam's solution is appealing from a text-critical perspective. Yet, it is the presence of the "1030 days" also in ms. g which may point in the direction of another explanation.

4.2.2.2.2. A new interpretation

Once again, Isaac's translation following ms. A (*Tana*⁹) renders:

¹³ In three (years) there are one thousand ninety-two days and in five years one thousand eight hundred and twenty days, so that in eight years there are two thousand nine hundred and twelve days. ¹⁴ For the moon singly in three (years) its days add up to one thousand thirty days, so that it falls behind by sixty two days in three years. ¹⁵ In five years (they add up to) one thousand seven hundred and seventy days, so that it falls behind by fifty days in five years.⁹²

⁹¹ VanderKam, *1 Enoch 2* forthcoming (with George Nickelsburg, in the Hermenia series), with permission from the author.

⁹² Isaac, op. cit., 54. In the notes Isaac indicates that manuscript B reads 'one thousand and sixty days', while C reads 'one thousand and sixty two days', instead of A's 'one thousand and thirty days'. Knibb, op. cit., 174, translated: "¹³In three years (there are) one

Clearly, three 354-day lunar years add up to 1,062 days, the number indicated by the vast majority of β mss and some α mss. It is the reading preferred by most translators very probably because it is the reading that aligns with what the difference between three lunar years and three 364-day years should amount to. Yet, it is ms. *Tana*⁹ which is the most illuminating. It states:

For the moon (singly) in three years its days add up to 1030, so that it falls behind by 62 days in three years.

How is this possible? How can the triennial lunar cycle be said to last one thousand and thirty days and to fall sixty two days behind the sun? The solar year considered here is obviously the 364-day year ($3 \times 364 = 1092 = 1030 + 62$).⁹³ It was suggested above that, from the description of, first the waning of the moon and second its waxing, *1 En 74* may presuppose a lunar month which starts with the full moon. Let us assume that the start of the lunar year in *1 En 73* coincides with the start of the solar year, a possibility if the first lunar month is hollow. Thus, the first day of the first month in the first year starts with the new moon in the lunar month. Let us now transpose this in the other lunar reckoning, which we suspect in chapter 74 of starting the lunar month with the full moon. In this reckoning, the lunar year is already started by the time the new moon appears, marking the start of the new moon cycle which coincides with the start

thousand and ninety-two days, and in five years one thousand eight hundred and twenty days, so that in eight years there are two thousand nine hundred and twelve days. ¹⁴For the moon alone the days in three years come to one thousand and sixty two days, and in five years it is fifty days behind . . ." Neugebauer, "Astronomical Chapters", paraphrased vv. 14–16 as: "Three lunar years are 1062 days long, thus 30 days shorter than three solar years. Similarly for five and eight years." Lastly, Nickelsburg and VanderKam, op. cit., 102–3, suggest: ¹³In three years there are 1,092 days; in five years there are 1,820 days, with the result that in eight years there are 2,912 days. ¹⁴For the moon alone, the days in three years come to 1,062; in five years it is fifty days fewer. ¹⁵In five years there are 1,770 days, with the result that in eight years the moon has 2,832 days." They point out in note ¹⁴ that "many mss add because to its sum sixty two days are added."

⁹³ As demonstrated by Sacchi, the *Book of Luminaries* expounds two solar years: the first counting 360 days, the second totalling 364 days. Sacchi argues that the calendrical polemic in the *Book of Luminaries* concerns the counting of the four epagomenal days in the reckoning of the year. For Sacchi, the author of the *Astronomical Book* stresses that these are indeed part of the solar year, which therefore must count 364 days; cf. Sacchi, "Jewish Apocalyptic". Boccaccini has refined the research in this domain and argued in favor of the presence of two sabbatical calendars, a 360 + 4 day calendar, and a 364 day calendar. Boccaccini suggests that the original priestly calendar of Israel was the 360 + 4 day Zadokite calendar. Boccaccini traces this calendar in the biblical book of Daniel. He further suggests that the Enochic group pioneered the 364 day calendar, which was thereafter championed by the Essenes Cf. Boccaccini, op. cit.

of the solar year. If our first *new moon month* counts twenty nine days, a possible inference from 1 *En* 73, it follows that the preceding lunar month counts thirty days, with the full moon appearing on day fourteen of that month, i.e., sixteen days before the start of the new moon month which coincides with the start of the solar month. By implication, the start of the *full moon reckoning* takes place sixteen days before the start of the *new moon month*. Starting sixteen days early, it follows that this full moon start year, and by implication its triennial cycle, will terminate sixteen days before the end of the lunar year and triennial cycle which started on the new moon. Of course, both (intercalated) triennial cycles are of a similar length, i.e., $3 \times 354 \text{ days} + 30 \text{ days} = 1092 \text{ days}$. If measured against the background of the 364-day year however, these lunar triennial cycles come in direct competition.

The key question is: which is the proper lunar reckoning that will allow proper synchronization with the 364-day year? Perhaps, put another way, what is the *wrong* lunar cycle, which will *not* synchronise with the 364-day-year cycle? In the example treated here, in terms of new moon lunar year, the lunar reckoning starting on full moon is now running, or so some were led to believe, $16 + 16 = 32$ days behind. Of course in real terms the loss was of sixteen days only. The duplication of the sixteen day loss once again betrays the polemical tone of the text. The position taken was perhaps that to these thirty two days were added the ten days by which the moon falls behind the sun every year, thirty days over a triennial cycle, giving a total of sixty two days. This sounds simple enough.

But what of the three lunar years said to count 1030 days? Clearly, it cannot be question of the length of three lunar years. This would be $354 \times 3 = 1062$ days, just as most β mss. read. Rather, I suggest that this triennial lunar cycle is here measured in terms of the alternative lunar reckoning, that of the new moon start, against which it is compared. In other words, the triennial lunar cycle starting on full moon added up—as perceived through the lense of a proponent of the triennial/new moon reckoning—to one thousand and thirty days of the triennial lunar cycle starting with new moon and which coincides with the start of the solar triennial cycle. Or, the full moon year runs along the new moon/solar synchronized year for one thousand and thirty days (which, as we will see below, is not quite correct).

The argument can be laid out thus: leaving aside the number of days by which the lunar year falls behind the sun in one year, ten days (thirty days in three years) the text at hand suggests that the lunar triennial cycle under scrutiny by the author (our posited full moon start) falls short of the base

lunar year (posited new moon start) by $1,062 - 1,030 = 32$ days. These thirty two days, it seems, are none other than the accumulation of the two first halves, i.e., the period of time from full moon to new moon, of the first month of the lunar year. The full moon reckoning having started sixteen days before the start of both the new moon reckoning and the solar year, these sixteen days are not reckoned in either the new moon reckoning nor the solar year, but stand outside of both. The discrepancy, it was thought, was also duplicated at the end of the lunar triennial cycle but only for the lunar reckoning, i.e., at the end of three years, the full moon reckoning stopped sixteen days before the appearance of the new moon.

If we transpose this in terms of the solar year, our first lunar (full moon) year runs along the first solar year for $354 - 16$ days = 338 days, and ends on solar year 1 day 338; the second lunar year is complete within the solar cycle and runs from solar year 1 day 339 to solar year 2 day 328, i.e., 354 days; the third and last lunar year is complete within the solar cycle, it starts on solar year 2 day 329 and ends on solar year 3 day 318, i.e., 354 days, and forty six days before the end of solar year 3, or sixteen days before the end of the *proper* triennial lunar cycle (new moon). The careful reader will have noticed that the figures do not add up. The table in Excursus 2 illustrates that in real terms the discrepancy amounted to forty six days only, not sixty two.

This point is important. It underlines a polemical aspect in the background of the verse. It is here suggested that, in an attempt to discredit fully this *wrong* lunar reckoning, the adherents of the *proper* lunar reckoning, who knew that the *wrong* reckoning started sixteen days before, and likewise ended sixteen days earlier than the *proper* reckoning, mounted a case against their principal target by claiming that it fell behind the sun by sixty two days every three years, and that its length, therefore, was one thousand and thirty days. These figures they arrived at not by actually observing the difference in real terms between the two lunar reckonings, but rather by duplicating the sixteen-day discrepancy.

Clear textual evidence to support the hypothesis of a polemically motivated move in the background of *1 En* 74:14 in its *Tana*⁹ and 'g' mss is lacking, and as such weakens the case. However, if located against the background of a work which argues in favour of a 364-day year, and which claims that the moon plays a part in this scheme, the hypothesis becomes a plausibility. Amidst a body of literature that contained strong polemics surrounding calendrical matters in Second Temple Judaism, the particular argument advanced here is by no means out of place. In this

particular version, which still depended on older traditions that were possibly part of the Aramaic astronomical work, it was argued that the *wrong* reckoning caused the *proper* cycle to end sixteen days early, and to fall behind the sun by $16 + 30 = 46$ days in three years. Further, the same *wrong* reckoning, starting sixteen days before the *proper* cycle (lunar and solar), days that could not be counted from the perspective of the adherents to the *proper* cycle, caused a further loss of sixteen days. This pseudo-cycle was understood to lose thirty-two days against the sun (and the *proper* lunar cycle) over three years and with intercalation. Without intercalation of a 37th lunation the discrepancy increased by a further 30 days, so a total of $16 + 16 + 30 = 62$ days over three years. Hence the claim that the three lunar years were one thousand and thirty days long, and fell behind the sun by sixty two days.

4.2.2.3. Testing the Hypothesis and Preliminary Summary

So far we have posited a full moon reckoning starting before the new moon reckoning. What would be the case if the alternative lunar reckoning was to be started after the new moon? In this case, the alternative reckoning would start fourteen days later. It would also end fourteen days later, thus accruing a discrepancy of fourteen days (its opponents might have argued twenty eight days). That this should be so is simply due to the fact that the moon reaches its phase of fullness fourteen days after the first crescent becomes visible in the night.⁹⁴ In terms of the base (new

⁹⁴ There are two ways of considering the lunar month. The first is measured in the time it takes the moon to orbit the earth, i.e. 27.3216 days. So, every 27.3216 days the moon can be observed against an identical stellar background. This lunar month is called "sidereal" and does not take into account the sun and the phases of the moon. Yet, because of the rotation of the earth around the sun, the moon must actually travel more than its full orbit around the earth in order to complete a full cycle of its phases. Thus, a full lunation, or synodic month, takes 29.53059 days. This means that any given lunar phase in the cycle will re-occur every 29.53059 days. So, from one full moon to the next: 29.53059 days; from one new moon to the next: 29.53059 days and so on. During this cycle the moon will be visible from earth in the sky, i.e. from first crescent to last crescent, for 28 days; the period of lunar conjunction, the time when the moon is totally hidden by the earth's shadow, will last roughly 1.5 days. Hence, in the course of twelve lunations or 354 days, lunar months will be reckoned alternatively to last twenty nine days or thirty days, so that a lunar year counts $(6 \times 29) + (6 \times 30) = 354$ days. The sequence of lunar visibility lasting regularly twenty eight days, it follows that it is the time of lunar conjunction which is reckoned to oscillate from one month to the other. On the lunar months and the phases of the moon, see W.J. Kaufmann, *Universe* (New York: Freeman, 1985), 37–40; H.A.G. Lewis, *The Times Atlas of the Moon* (London: Times Newspaper Limited, 1969), ix–xi; P. Moore, *Stars and Planets* (London: Chancellor Press, 1992), 34f.

moon) lunar year, this reckoning would be said to last $1062 - 14 = 1,048$ days. In terms of solar triennial cycle, this alternative reckoning would run in its first year from solar year 1 day 14 to solar year 2 day 4; in its second year it would run from solar year 2 day 5 to solar year 2 day 358; its third year would run from solar year 2 day 359 to solar year 3 day 348. In this scheme, the full moon reckoning would count one thousand and thirty four days of the new moon reckoning, and would fall behind the sun by only sixteen days over three years. However, this reckoning is not consonant to any of the extant literary evidence in the *Book of Luminaries*. The primary sources thus only support a full moon reckoning which started before the new moon base reckoning.

In summary, in the case of a lunar reckoning starting the month and the year with a full moon, a triennial lunar cycle will start sixteen days before the new moon and the start of the solar month. It will come to completion sixteen days before the end of the new moon triennial cycle, and forty six days before the end of the triennial solar cycle of 364-day years. From a polemical perspective this triennial lunar cycle can be said to last one thousand and thirty days because it could be argued that a) its first sixteen days were not part of the triennial lunar cycle starting on new moon, and therefore it caused the first year of the lunar cycle to lose sixteen days, and b) it came to an end sixteen days before the new moon reckoning curtailed, thus shortening the last year of the cycle by sixteen days, so that the triennial pseudo cycle counted $338 + 354 + 338 = 1,030$ days. From this point the target cycle, caused by the *wrong* lunar reckoning, could be denounced for falling behind the solar triennial cycle by sixty two days. In this light, the assertion made above that the *Book of Luminaries* expounds not only one but two different ways of reckoning the lunar month, either from full moon to full moon, or from new moon to new moon, is strengthened.

4.2.3. *External Evidence Concerning the Role of the Moon*

4.2.3.1. *The Book of Parables*

The wider Enochic literature contains a few references to the role of the movements of the luminaries. In the *Book of Parables* (*1 En* 37–71), which Nickelsburg in his *Hermeneia* commentary on *1 Enoch* dated to the late first century BCE, one comes across interesting passages that mention curses and blessings in connection with the law of the luminaries (sun and moon). First, *1 En* 41:8 reads:

Surely the many changes of the sun have (both) a blessing and a curse, and the course of the moon's path is light to the righteous (on the one hand) and darkness to the sinners (on the other hand).⁹⁵

This verse must be read in the context of 1 *En* 41:5, which Ben-Dov translates:⁹⁶

[K]eep faith with one another according to the oath that they have sworn.

In this verse both luminaries seem to be bound by an oath sworn to one another (echoed in 1 *En* 43:2 “they keep their faith with one another”). The blessing and curse motif attached to the luminaries reappears twice in 1 *En* 59, where verses 1 and 3 in Ben-Dov's translation read:

In those days my eyes saw the secrets of the lightnings and the luminaries and their laws; they flash for a blessing and for a curse, as the Lord of Spirits wills. (59:1)

[A]ll the secrets of the luminaries and the lightnings were shown to me, and they flash for blessing and for satisfaction. (59:3)

The mention of the luminaries' paths as light for the righteous and darkness for the sinners is not entirely incompatible with the hypothesis of the infancy in the Ethiopic *Book of Luminaries* of a calendrical polemic centering round the use of the proper lunar reckoning as a synchronizing tool for the 364DY. Some commentators doubt whether one can posit a direct connection between the cosmology expounded in the *Book of Parables* and that presented in the *Book of Luminaries*.⁹⁷ Ben-Dov goes as far as suggesting that the bond between the Luminaries in the *Book of Parables* is to be understood in the same vein as the formula found in the cosmological hymn of 1QS col. X 3–4—“as well as their [the lights] turning points with their bound/faith to each other”—with the difference that the *Book of Parables* develops further the notion found in 1QS and turns it, if we accept Ben-Dov's argument, into an explicit oath between sun and moon.⁹⁸

⁹⁵ Isaac, op. cit., 32.

⁹⁶ J. Ben-Dov, “Exegetical Notes on Cosmology in the Parables of Enoch,” in *Enoch and the Messiah Son of Man. Revisiting the Book of Parables* (ed. G. Boccaccini; Grand Rapids, MI: Eerdmans, 2007), 148, for the translation, with comments in note 20 on the same page.

⁹⁷ See in particular the arguments put forward by J.C. VanderKam, “The Book of Parables Within the Enoch Tradition,” in *Enoch and the Messiah Son of Man: Revisiting the Book of Parables* (ed. G. Boccaccini; Grand Rapids, MI: Eerdmans, 2007), 81–99.

⁹⁸ Ben-Dov, “Exegetical Notes on Cosmology in the Parables of Enoch,” 148–9.

For Ben-Dov, 1QS and the cosmology of the *Book of Parables* belong to the same tradition.

This fits our interpretation above rather well—notwithstanding the cautionary warning against drawing direct connections between the cosmological elements of the *Book of Parables* and the *Book of Luminaries*: those who follow the *wrong* reckoning (based on the lunar path) are “sinners,” and the moon itself leads them astray. The righteous follow the *proper* lunar reckoning (based on the lunar path), and the very same moon is blessings for them. Admittedly, the presentation of a formal relationship between the sun and the moon in terms of explicit oath in the *Book of Parables*—as well as the connection with the sinners—is somewhat remote from the looser presentation one might glean from the meager extant fragments associated with an original Aramaic *Astronomical Book*, as illustrated by 4Q208 (4QEnastr^a) and 4Q209 (4QEnastr^b). To these we now turn.

4.2.3.2. The *Book of Jubilees*

It is in this mid-second century BCE composition that one finds arguably the strongest extant anti-lunar statement of the entire second Temple literature corpus. From the perspective of its author, an exclusivist proponent of (one form of) the 364DY, the moon simply cannot play any role in calendrical matters:

There will be people who carefully observe the moon with lunar observations because it is corrupt (with respect to) the seasons and is early from year to year by ten days. Therefore years will come about for them when they will disturb (the year) and make a day of testimony something worthless and a profane day a festival. (*Jub.* 6:36–37)⁹⁹

The reason is simple: “the divisions of times are ordained on the heavenly tablets” (6:35). The sole culprit in the eyes of the author of the *Book of Jubilees* seems to be the moon and its calendar year of 354 days. There is no question from the author’s perspective that the lunar reckoning might be integrated with the 364DY; both have to be kept separate, and the year “must be kept in this number—364 days.”¹⁰⁰

4.2.3.3. The Biblical Book of *Sirach*

The book of *Sirach*, which most likely dates from the earlier part of the second century BCE, offers a somewhat different perspective within

⁹⁹ J.C. VanderKam, op. cit., 43.

¹⁰⁰ J.C. VanderKam, op. cit., 42.

second Temple Judaism on the role of the lesser light. In chapter 43 the author gives a hint as to the role played by the moon—for the Jewish community/school from which the composition emanated—as a regulator of the cycle of festivals:

It is the moon that marks the changing seasons, governing the times, their everlasting sign. From the moon comes the sign for festal days, a light that wanes when it completes its course. (Sir 43:6–7)

No two texts could better illustrate opposite positions and understandings on the subject of the role of the moon in matters calendrical in second Temple Judaism. Perhaps the position expounded in *Sirach* developed partly as a reaction to earlier polemics involving the determination of the correct lunar reckoning—from the perspective of the community/school behind the text—to be used in regulating the determination of the cycle of festivals. It is to be noted that there is no polemical tone in the *Sirach* position against any sort of year reckoning; simply a positive endorsement of the moon as governing the times and marking the seasons. The last clause in verse 7 strongly suggests a lunar reckoning that follows the waxing, then the waning phases of the moon. The passage does not indicate when the lunar month starts; it simply states that the light “waned when it completes its course.”

4.2.3.4. 4QEnastr^b (4Q209)

Going back even further in the traditions we now consider the admittedly fragmentary 4Q209. This evidence from the few surviving Aramaic witnesses to the third century BCE (hypothetical) Aramaic Astronomical work, especially fragments 25 and 26 of 4QEnastr^b, is of particular interest to this discussion. It is perhaps significant that references to “an other computation” are contained in 4QEnastr^b (4Q209).¹⁰¹ Frg. 25 reads:¹⁰²

[...]^ל שניא [...] .1
[...] ... [...] .2

¹⁰¹ Most significantly Frg. 25 (*olim* frg. 12; Mus. Inv. 856; PAM 41.370, 42.236, 43.209). Also Frg. 26 (*olim* frg. 13; Mus. Inv. 856; PAM 41.370, 42.236, 43.209), especially line 6–7: 6 “[light] only. And now I am showing to you, my son *vacat* [7] a calculation he sho[w]ed [me;” and Frg. 27 (Mus. Inv. 856; PAM 40.581, 43.209), especially line 3: “calculation of the end of.” See Tigchelaar and García Martínez, *op. cit.*, 102–4. Admittedly, the exact meaning of the term “calculations” in this context cannot be ascertained, as pointed out by VanderKam in a private communication.

¹⁰² F. García Martínez and E.J.C. Tigchelaar, *The Dead Sea Scrolls. Study Edition. Volume 1, 1Q1–4Q273* (Leiden: Brill, 1997), Heb 436, trans. 437. Also in Tigchelaar and García Martínez, *op. cit.*, 162.

.3 [ח...]שבון אחרן אחזית לח די אזל [...]
 .4 ל[...].חדשין ע[...]

1.] years [
2.] *vacat* [
3.] I was shown another [cal]culation for it, that it goes [
4.] [] new moons [...]

The expression **השבון** “calculation/computation” together with **אחרן**—“another”—if we accept Milik’s reconstruction, also appears in 4QEnastr^b (4Q209) Frg. 26, lines 6–7:¹⁰³

.6 [נהור]ה בלחודהי וכען מחוה אנה לך ברי [...]
 .7 [חשבון אחרן [...]

6.] her [light] only. And now I am showing you, my son *vacat* [
7. [...] a calculation he sho[w]ed [me

The reference in line 3 of the same document indicates that it is most likely the moon which is the subject of the passage:

.3 [שבעין חמש ועשרין וי]ומין תרין ומחסר מן דבר שמשא [...]

3. [... twenty five weeks and] two [d]ays. And it falls short from the move of the sun [...]

Whereas Milik had identified this particular fragment with *1 En 78:10*, the editors of DJD xxxvi proposed to identify the passage with *1 En 74:1* on the basis of a more adequate correspondence with the Aramaic.¹⁰⁴ Following this suggestion, the mention of ‘another computation/calculation’ would fit with what was suspected above concerning chapter 74 and its presentation of another lunar reckoning. Further, the mention of “new moons” in line 4 of frg. 25 could be significant. It could be hypothesized that the ‘other calculation for it’ would this time take into account lunar months contrasted to new moon months, an alternative to the other reckoning starting the lunar month on new moon. The interpretation of *1 En 74:10* in its ms. *Tana*⁹ variant would also be intelligible, that this specific triennial lunar reckoning would be measured in terms of its duration within the preferred new moon start lunar reckoning (1,030 days). At the outset, although one cannot claim absolute certainty, the possibility

¹⁰³ Tigchelaar and García Martínez, op. cit., 162. The term for “computation”/“calculation” also appears in Frg. 28 (Mus. Inv. 856; PAM 40.581, 43.209), especially line 3, where it is translated “calculation”: “calculation of the end of.”

¹⁰⁴ Tigchelaar and García Martínez, op. cit., 162.

that 4QEnastr^b/4Q209 Frgs 25, 26 and perhaps 28, preserve references to different manners of reckoning the lunar cycle must be entertained and cannot be ruled out. This could be significant when considering still debated aspects of the Qumran calendars.¹⁰⁵

4.2.3.5. Alternative Lunar Reckonings in Other Sources

4.2.3.5.1. The New (invisible) Moon

There is some evidence to suggest that in the mid 4th century BCE the Egyptian lunar calendar was reckoned to start the month on the day of the disappearance of the last crescent.¹⁰⁶ This observable lunar phase occurs roughly during the first part of the day, and fitted well with a day reckoning starting at dawn. For a day reckoning starting at dusk, however, the disappearance of the last crescent during the daytime might have marked the last day of the month, or the eve of the first night of the following month. Such month would then have started with the first night of lunar astronomical conjunction. Thus, observation of the last crescent would mark the last day of the lunar month and the eve of the first day of the new lunar month. Such reckoning, however, would be at loggerheads with the lunar reckoning in 1 *En* 73, where the lunar month starts with the sighting of the first crescent.

4.2.3.5.2. The Full Moon

There may be evidence supporting the hypothesis of a lunar reckoning starting the month at full moon.¹⁰⁷ Some argue that the *Gezer* calendar, an archaic calendar in use in Canaan around the First Temple period,¹⁰⁸ started the month at full moon.¹⁰⁹ To this must be added the testimony of the Arab writer Al-Biruni on the *Magharians*, or “people of the cave”:

¹⁰⁵ See Chapter 7.

¹⁰⁶ Parker, *op. cit.*

¹⁰⁷ Cf. K. Sethe, “Die Zeitrechnung der alten Aegypter im Verhältnis zu den anderen Völker,” in *Nachrichten von der koenigl. Gesellschaft der Wissenschaften zu Gottingen Phil. Hist. Klasse* (1919), 289. Cf. Parker, *op. cit.*, 70 note 3, for the pagination differences between 1919 and 1920 volumes.

¹⁰⁸ See above chapter 5, note 5 on the *Gezer* calendar. Additionally, Chyutin, *Role of Solar and Lunar Calendars*, 23, suggests that this calendar was based on the archaic calendar in use in Canaan before David’s reign. See also Cohen, *op. cit.*, 383–4, for the Albright translation of the plates, and a short discussion of the *Gezer* Calendar.

¹⁰⁹ According to Chyutin, this calendar testifies to the existence of a very old way of reckoning the start of the month at full moon. The two passages suggested by Chyutin are interesting for our purpose. The first describes the cycle in terms of waxing and waning: “On the waxing and the waning, month after month, forever” (KAI 12:43); conversely, the second mentions the waning first: “The waning of the month of Ethanin with the waxing

'Abu 'Isa al-Warraḡ reports in his *Kitāb al-Maḡālāt* on a kind of Jews called the *Maḡariba*, who allege that feasts are not legal save when the moon rises full on the night of Wednesday, i.e., the night following Tuesday's sunset, and that it would have to be in the land of the Israelites. This is the beginning of the new year for them. From this the days and months are counted, and according to it, the cycle of feasts begins. Their reason for this is that God the Exalted One created the two major luminaries on Wednesday.¹⁰⁰

To this testimony must be added that of Ya'qūb al-Qirḡisānī who, in Chapter 7 of Part I of his *Kitāb al-Anwār wa'l Marāḡib*, states:

The Magharians fixed the beginning of the months by the appearance of the full moon. They adduce certain reasons in support of this; we shall mention them when we come to the discourse on the beginning of the months and their indications. . . .¹⁰¹

His promise is fulfilled in Part vii, chapters 5–6, where Qirḡisānī adds:

They think that God—may His praise be great—created all things perfect and complete in the first moments of creation. . . . He created the body of each of the two luminaries, i.e., the sun and the moon, along with all the stars, according to the utmost degree of their possible perfection. As proof that the moon was created perfect and complete they offer the text, “As the moon remains forever. . . .” [Ps 89:38]. And, thus, as the world was created perfect and whole, the moon was also created perfect at the moment when it was created. Furthermore, they say that the Bible calls the two luminaries

of the month of Ethanīm” (KAZ, A37:1–2). Cf. Chyutin, op. cit., 24. Chyutin reckons the first part of the second passage to refer to the second part of the month, while the second part of the passage points to the first part of the month, the waxing from first crescent to full moon. Thus, both passages can be interpreted as synonymous and describing the rhythm of the cosmos. While this interpretation is plausible, the second passage can simply be interpreted as the description of the month of Ethanīm, from full moon to full moon. In favour of such interpretation is the fact that the custom in Canaan appears to have been to reckon the month from the full moon, an element recognised by Chyutin (2002, 25). If this is correct, we would have in these texts two differing ways of reckoning the lunar months as early as the 10th century BCE in Canaan. The two traditions identified in *1 Enoch* 73–74 would then display a strange similarity to those present in Canaan several centuries earlier, an argument which favours an early rather than late date for the composition of the *Book of Luminaries*.

¹⁰⁰ Cf. Fossum, op. cit., 304. This evidence had already been drawn to bear on the debate surrounding the Qumran calendar(s) by Jaubert, *date de la cène*. See also the comments of Beckwith, “Reconsideration,” 464 ff., where Beckwith suggests that the association of full moon with a Wednesday New Year might just betray on the part of Al-Biruni a misunderstanding of the sources he was considering. These are now lost to us. Beckwith suggests that in the second year in the synchronistic calendar, the Tishri New Year would have been on 16th of the lunar month, close enough to the full moon to allow the *Magharians* to reckon that year to start on Wednesday full moon.

¹⁰¹ Talmon, “The Gezer Calendar,” 177; Cohen, op. cit., 383–4.

at the time of their creation “the large ones” [cf. Gen 1:16]. This [they say] took place on Wednesday, and there is no doubt [in their minds] that this was the first day of the month and that they [i.e., the sun and the moon] were created at the limit of their size, since He calls them the two large ones. When the moon is full, it is the largest and greatest, and thus we know that when it is full, that day is the first day of the month.¹¹²

Links between the people behind the Dead Sea Scrolls and the sect of the Magharians have been suggested.¹¹³ It is possible that the *Magharians* and the Qumranites appeared on the scene in Judaea around the same time, just like it is possible that these two groups belong to two different periods. Be that as it may, the fact that the calendar followed by the *Magharians* should start on Wednesday, the fourth day of creation, and should indicate that Passover was celebrated only on a Wednesday—two particular characteristics shared with the 364-day year calendar of the Dead Sea Scrolls—would suggest some strong similarities between their calendar and that followed by the Essenes and expounded in the calendrical and *mišmarot* documents found in the vicinity of the Dead Sea. The location near Jericho of the cave where the *Magharian* writings were found renders the association even more plausible.¹¹⁴

4.2.3.6. Testing the Hypothesis Once Again

To count the length of one triennial cycle in terms of its duration within a competing cycle seems rather odd to the modern mind, but makes sense from the perspective of the ancients, for whom the correct reckoning of time was no trivial matter. Before we explore possible explanations for this apparent oddity, it is necessary to enquire whether conclusions drawn so far would be identical if the base lunar reckoning was that starting the month and the year on full moon, and the alternative one the new moon reckoning. We appealed above to the support of 4QEnastr^b / 4Q209 frg. 25, in which “new moons” follow the indication of “an other [cal]culation for it.” Admittedly, the other hypothesis must also be considered, i.e., that the lunar reckoning starting on new moon is an alternative to that starting its reckoning on full moon. Due to the lack of indications in the fragment,

¹¹² Cf. Fossum, *op. cit.*, 307. For further references to *Magharian* writings, see Fossum, *op. cit.*, 308–12, who also quotes the evidence from: a) Abu’l Fath Muhammad ben ‘Abd al-Karīm ash-Shahraštānī, in his *Kitāb al-Milal wa’l Nihal*, and b) Judah Hadassi, in his *Eshkōl ha-Kōfer*, although neither appears to mention anything on calendrical issues.

¹¹³ Jaubert, *date de la cène.*; Fossum, *op. cit.*

¹¹⁴ For an informed treatment of the Magharians and the similarities between their doctrines and that of the Essenes, see Fossum, *op. cit.*, 303–44.

it may be useful to consider whether our demonstration would work as well if this time we consider the triennial lunar cycle commencing on full moon to coincide with the start of the triennial solar cycle. The question would then become *what would be the alternative cycle that would start sixteen days before the start of the full moon/solar triennial cycles, would last one thousand and thirty days of the full moon triennial cycle, and would fall behind the sun, i.e., 364-day year, by sixty two days over three years?*

To answer this question adequately it is necessary to qualify what is meant by new moon. Whereas in the above argumentation we assumed the understanding of *1 Enoch 73*, and equated the first sighting of the moon to 'new moon', a more specific definition is now required. As already mentioned, a cycle of the phases of the moon lasts 29.5 days roughly, which over twelve lunations amounts to 354 days, or six 29-day months and six 30-day months. In the case considered above, the lunar phenomenon taking place sixteen days before the 'new moon' could be either the full moon (in the case of a full month preceding the first crescent's sighting), or the lunar phase immediately preceding the full moon (in the case of a hollow month preceding the first crescent's sighting). Now, in the case at hand, the lunar phenomenon taking place sixteen days before the full moon will be, in the case of a hollow month, the last visible lunar phase of the lunar cycle, also known as last crescent or 'old moon'. In the case of a full month it will be the first night of the moon's conjunction, i.e., the astronomical new moon.

Which is to be the preferred hypothesis? Here again we must refer to *1 En 73* and the indication that 'on the thirtieth day (of the first solar month)' the appearance of the first crescent marks the start of the month, suggesting that the preceding month, the first month which coincided with the start of the solar year, lasted twenty nine days, and was itself preceded by a thirty day month. Thus, literary evidence points to the latter possibility, i.e., the first night of lunar conjunction, or astronomical new moon.

The results yielded so far in our enquiry are: a) if the month of reference is the one which starts with the sighting of the moon's first crescent, sixteen days before the first crescent the lunar phenomenon observed will be the lunar phase prior to the full moon in the case of a hollow month preceding, and the full moon phase in the case of a full month preceding; b) if the month of reference is the full moon reckoning, sixteen days before the full moon will be, in the case of a hollow month preceding, the last phase of the moon, or last crescent; and in the case of a full month preceding, the first night of lunar conjunction, or astronomical new moon. So, if the reference lunar month is the new moon month, the alternative

lunar reckoning is one which should reckon the start of the month either on the lunar phase prior to the full moon, or one which would start the month with the actual full moon. Likewise, if the reference lunar month is the one which starts on full moon, the alternative lunar reckoning can either start the month sometime around the last crescent, or sometime around the astronomical conjunction of the moon, or new moon. Admittedly, if we follow the indications given in 1 En 73 regarding the start of the lunar month, i.e., “on the thirtieth day (of the first solar month)” the sighting of the first crescent marks the start of the lunar month and coincides with the second lunar month. In the cycle this month is full, and the preceding lunar month, the first month, is hollow. In the light of this, of the four possibilities suggested above, two become strong contenders: first, the full moon, taking place sixteen days before the first sighting of the moon, would mark the start of the alternative lunar reckoning if the lunar month of reference is the new moon month (first crescent); second, the first night of lunar conjunction, here also taking place sixteen days before the full moon, would belong to the first day of the alternative lunar month in the case of a full moon month of reference. In both cases, the alternative lunar reckoning could be declared to last one thousand and thirty days of the triennial lunar reckoning of reference and of the triennial solar cycle, and could be said to lose sixty two days on the sun.

5. *Summary and Conclusions*

From the above investigation several points can be drawn:

First, Milik’s dating of an Aramaic astronomical work to the third century BCE at the latest remains the preferred solution. It is necessary however, in order to account for the differences in form and content between the surviving Aramaic fragments of Enoch (4QEnastr^{a-b} / 4Q208–209) and 1 En 72–82 to posit the existence of both an Aramaic astronomical work and the *Book of Luminaries*, as recently argued by VanderKam.

Second, the 364-day year, expounded and adhered to in some Jewish sources spanning from the third century BCE to the end of the first century BCE, was also known in earlier times in settings neighbouring Judaea. The Egyptian connection, although noted, can neither be asserted nor discarded at this stage of our knowledge. The Babylonian connection has been more fruitful in illustrating the knowledge of the 364-day astral year in astronomical compendiums such as Mul-Apin and the Ziqpu-star text AO 6478. In these quarters of the ancient Near East the year was

also measured in 364-days. In the light of these two points it is becoming increasingly difficult to posit a 364-day calendar as a construct of a Jewish group sometime in the third century BCE.

Third, a consideration of some difficult passages found in noteworthy textual witnesses of the tradition has opened up some interesting possibilities:

a) the peculiar assertion that three lunar years count 1,030 days, attested by two important witnesses of the α family of Ethiopic manuscripts, can be explained without having to appeal to a scribal error—although it is granted that the later *may* have occurred. Given what is known of the importance, and impact, of calendrical disputes in Second Temple Judaism, the present solution makes good sense of the evidence and may have something to contribute.

b) *Tana*'s assertion that three lunar years fell behind the triennial solar cycle by 62 days may be seen in the same light. It was suggested that both claims were founded on the desire to discredit a particular lunar reckoning in favour of a preferred, *proper* one, that allowed correct synchronization between the 364-day year triennial cycle and its lunisolar counterpart. Perhaps, the evidence from 4Q209 frg. 25 represents an allusion to such "other calculations" involving the moon.

c) *1 En* 74:14 may represent a vestige of a forgotten tradition which, in the third century BCE, may have kept the memory of a polemic that centered around the identification of that lunar reckoning that would allow proper synchronization with the 364DY. The exaggerated claim that "in three years the moon falls behind the sun by 62 days," and that "three lunar years count 1,030 days," certainly point in the direction of a polemic that had come to be detached from reality. It must be conceded that those who understood the basis of the polemic also understood its falsity (the exaggerated 62 days). Simply as a tool of argument the proposed polemical aspect would appear implausible. It is, however, the support drawn from external evidence that prevents a hasty dismissal of the present argumentation.

Fourth, external evidence has been adduced, which is altogether compatible with the hypothesis investigated:

a) 4QEnastr^b (4Q209) makes references to "other calculations" concerning or involving the moon, although admittedly one can only speculate as to what those "other calculations" were.

b) Alternative new moon and full moon lunar reckonings were evidenced from other sources. In fourth century BCE Egypt there existed the custom of starting the month with the day on which the disappearance

of the last crescent was witnessed. The tenth century BCE *Gezer* calendar may represent an old witness to a full moon start of the month. Close to twenty centuries later, the Arab historians Al-Biruni and Al-Qirqisani reported on the custom of a group of people who reckoned the month—and the year—from the night of the full moon.

Fifth, it is difficult at this stage to be too categoric and suggest which is to be considered the lunar month of reference, and which is to be considered the alternative lunar reckoning from the evidence consulted so far. The textual evidence is simply too vague to settle the question unequivocally. What is clear is that chapter 73 of the *Book of Luminaries* suggests a lunar month of reference starting with the first sighting of the moon, while chapter 74 contains, it is argued, difficult verses that allude to the existence of at least one alternative lunar reckoning. In this respect it will be interesting to note that there also existed in the Qumran Calendrical Scrolls a lunar reckoning which departed from the customary 'first-crescent sighting' as a marker for the beginning of the lunar month. Rather, the evidence, as visited in the next chapter, suggests that the lunar month was reckoned to have started with the disappearance of the last crescent in the day time sky.

CHAPTER SEVEN

THE CALENDRICAL DOCUMENTS FROM QUMRAN

1. *Introduction*

The previous chapter investigated aspects of the Ethiopic *Book of Luminaries* that have remained unexplained so far in scholarship. The hypothesis was formulated that chapter 74 of the Ethiopic *Book of Luminaries* contains remnants of a tradition which, at some stage in the development of the work, sought to synchronize the *proper* lunar year with the 364-day year over a triennial cycle. This tradition was equally concerned with identifying the other lunar reckoning that caused the triennial lunar cycle to fall behind the sun by sixty-two days, and was singled out for lasting one thousand and thirty days. External evidence, supporting the hypothesis, was adduced. The textual evidence in the Ethiopic *Book of Luminaries* itself, however, did not allow for a certain identification. There are, nevertheless, other calendrical documents closely related to the Ethiopic *Book of Luminaries* [*Ethiopic BL*], and to an earlier Aramaic astronomical work [*Aramaic AB*] which may bring some light on the issue. More particularly, it is possible that the hypothesis offered here of two lunar reckonings existing in the *Ethiopic BL* will further advance understanding of some particular aspects of these calendrical documents. To these we now turn.

2. *The Meaning of X and dwq in 4Q320, 4Q321 and 4Q321a*

Among the Scrolls and numerous fragments recovered in the wake of the first find in a cave of the Khirbet Qumran site in 1947, a significant number exhibit a strong interest in calendrical matters. Most of those documents are, indeed, classified as Calendrical Documents and Mišmarot Documents, the former expounding a series of feasts, festivals, and/or sabbaths, and the latter indicating the occurrence of those feasts, festivals and/or sabbaths within the roster of priestly service in the (Jerusalem) Temple. Most demonstrate the use of an underlying calendrical system based on a 364-day year [364DY] pertaining to the same 364-day year tradition

[364DYT] already present in the *Aramaic AB* and the *Book of Jubilees*.¹ The significance of calendrical matters in the Dead Sea Scrolls was hinted at very early on by S. Talmon in a seminal article on *peshet Habakkuk* from Qumran cave 1 (1QpHab).² More than a half century later the significance of these documents, together with the relative extent to which they testify to the importance that calendrical polemics played in the internal strifes of second Temple Judaism, is better appreciated by scholars of the period.³ It is perhaps within this discussion that the oddity identified above of comparing two lunar reckonings against the background of the 364-day year must be placed and viewed.

Here is not the place to engage in yet another classification of the different cycles of time expounded in these documents.⁴ For our purpose it is enough to present briefly the underlying structure of the 364DY calendar. It comprises twelve months, eight of which each lasted thirty days, while the other four counted thirty-one days each. The year is divided in four quarters of $30 + 30 + 31 = 91$ days; thirteen weeks exactly. The sabbatical framework of the year—fifty-two weeks with no remainder—ensured that any would fall on the same day of the week year on year. Thus those festival days that were fixed according to their date were attached to the same day of the week, year on year. Likewise, those particular days which had heightened significance (e.g. sabbath) recurred year on year on the same dates in their particular month.

¹ For a thorough introduction to the calendrical and Mišmarot scrolls from Qumran, see Glessmer, “Calendars in Scrolls”; J.C. VanderKam, *Calendars in the DSS*. The calendrical texts have now been edited in their entirety; cf. Talmon, Glessmer, and Ben-Dov, op. cit.

² See Talmon, “Yom Hakkippurim”, where the author takes issue with A. Dupont-Sommer’s interpretation of the Scroll and identification of the Teacher of Righteousness. Talmon draws attention to the underlying, yet significant, difference of calendrical systems upon which festival days were celebrated by opposing factions. For a recent proposal on the identity of the Teacher of Righteousness, see M.O. Wise, “Dating the Teacher of Righteousness and the *Floruit* of His Movement,” *JBL* 122 (2003): 53–87. Dupont-Sommer’s theory can be found in A. Dupont-Sommer, “Le Commentaire d’Habaccuc découvert près de la mer morte: traductions et notes,” *RHR* 137 (1950): 159, 169–70.

³ On these calendrical differences, see particularly Talmon, “Divergences”; S. Talmon, “The Calendar Reckoning from the Sect of the Judean Desert,” in *Aspects of the Dead Sea Scrolls* (eds C. Rabin and Y. Yadin; ScrHier 4; Jerusalem: Magnes, 1958), 162–99; S. Talmon, “Calendar Controversy in Ancient Judaism: The Case of the ‘Community of the Renewed Covenant,’” in *The Provo International Conference on the Dead Sea Scrolls* (eds D.W. Parry and E. Ulrich; STDJ 30; Leiden: Brill, 1999), 379–95; Callaway, op. cit., 27–9; Chyutin, op. cit., 1–159.

⁴ For these, see particularly J.C. VanderKam, *Calendars in the DSS*; Glessmer, “Calendars in Scrolls”; M.G. Abegg, “The Calendar at Qumran,” in *Judaism in Late Antiquity, Part 5, Vol. 1* (Leiden: Brill, 2001), 145–71; J. Ben-Dov and S. Saulnier, “Qumran Calendars: A Survey of Scholarship 1980–2007,” *CBR* 7 (2008): 131–79.

As indicated by the prologue of the *Book of Jubilees*, the calendar is believed to have been revealed by God to Moses and is, therefore, vested with divine authority. The creation of the heavenly bodies sun and moon “to rule over the day and over the night, and to separate the light from the darkness” (Gen 1:18) on the fourth day of the week, a Wednesday in the 364DY, marks the beginning of time reckoning and the start of the 364DY calendar. Likewise, festival days fall on the same day of the week each year. Therefore it would appear that, whether incidentally or by design,⁵ the liturgical pattern governed by the 364DYT was attached to specific days of the week, allowing on the one hand the festivals to fall every year on the same day of the week, and on the other hand keeping festivals from coinciding with the sabbath.⁶ The seven-day week is most certainly a purely Jewish characteristic, as it is, to the present writer’s knowledge,

⁵ Beckwith argued that the Essene calendar was a construct. Cf. Beckwith, “Earliest Enoch Literature,” 379–81.

⁶ Barthélémy and Jaubert were the first scholars to identify this characteristic of the 364DY calendar. Cf. Barthélémy, *op. cit.*; Jaubert, “Calendrier des Jubilés: jours liturgiques”. Jaubert’s hypothesis of the liturgical significance of Wednesdays, Fridays and Sundays has attracted mixed responses from scholars. For a recent reaction to Jaubert’s thesis, see Wacholder and Wacholder, *op. cit.* Abegg, “Calendar”, engaged with Wacholder’s treatment of Jaubert’s hypothesis and suggested (147 note 7) that Wacholder’s figures (22–23) “reveal that whereas it is possible for 43% of numbers 1–31 to fall on a Sabbath in the 364 day calendar, only 18% of the dated events occur on these dates,” thus still indicating a phenomenon of avoidance of the Sabbath. More recently Beckwith, “Significance of the 364-Day Calendar”, also published in Beckwith, *Calendar, Chronology and Worship*, 54–66, has compiled a list of references from the biblical books that contain dates. Beckwith states (p. 70–71): “Though the immediate source of the *Jubilees* calendar is evidently the *Astronomical Book of Enoch* (1 Enoch 72–82, in its longer, aramaic form), Mlle Jaubert very reasonably infers that its [the 364-day year] ultimate origin is the Old Testament. However, the year of 364-day does not lie upon the surface of the Old Testament, like the lunar year of about 354 days or the rough solar year of 360 days, and it is against these popular counts that 1 Enoch and *Jubilees* have to argue in favour of their own, more sophisticated reckoning (1 En 75:1–2; 82:4–6; *Jub.* 6:36–38). The way that they derive it from the Old Testament is in the same way that the book of *Jubilees* applies it, that is, by making sure that the scriptures, like *Jubilees*, avoid activities on the sabbath day. A day of the week is assigned to all the dated events of the Old Testament, in accordance with the fixed year of 364 days or fifty two complete weeks, and the question is then asked, which day of the week is it on which nothing happens? For, in the mind of the divine, author of the scriptures, that day must be the Sabbath.” Whether one agrees with Beckwith about the process of intermingling the 364 day year in the Old Testament, the results (p. 72–80) are eloquent: dates are recorded in Genesis (6), Exodus (9), Leviticus (15), Numbers (17), Deuteronomy (1), Joshua (2), 1 Samuel (6), 1 Kings (3), 2 Kings (5), Jeremiah (5), Ezekiel (21), Isaiah (2), Hosea (1), Amos (1), Haggai (6), Zechariah (2), Ruth (1), Psalms (1), Daniel (1), Esther (11), Ezra (9), Nehemiah (6), 1 Chronicles (1), 2 Chronicles (8). Events taking place on these dates occur on the following days of the week: 34 on Sundays (+5 possibles), 0 on Mondays (+2 possibles), 18 on Tuesdays (+6 possibles), 48 on Wednesdays (+18 possibles), 10 on Thursdays (+8 possibles), 39 on Fridays (+7 possibles), and 0 on Sabbaths (+3 possibles).

not found in any documents, calendrical or other, of neighbouring people in the First or Second Temple periods.⁷

2.1. *X and dwq/duqah in Recent Scholarship*

The question of the meaning of *X* and *dwq* has been thoroughly discussed in recent scholarship, and several possible hypotheses have been put forward, most supported by strong textual evidence. A brief history of scholarship in this field will help clarify the issues. It was J.T. Milik who first ventured to suggest, based on his interpretation of 4Q320 i 1–5, an identification of *dwq* with the day on which the new moon (first crescent) was observed:⁸

1.] ן [להראותה מן המזרח
2.]ל[ש]י[ח]י[ב]מחצית השמים ביסוד
3.]הבריא[ה מערב עד בוקר ב// בשבת
4.]ג[מול לחודש הרישון בשנה
5.]הרישון[נה⁹

1. [] to its being seen (or: appearance) from the east
2.] to [sh]ine[in] the middle of the heavens at the foundation of
3. [Creatio]n from evening until morning on the 4th (day) of the week (of service)
4. [of Ga]mul in the first month in [the fir]st (solar)
5. year *vacat*¹⁰

Milik concluded that the *X*-date taking place at the beginning of the month was the full moon, which shone in the heaven “from evening till morning.” Several scholars followed suit and identified the *X*-date, which occurs sixteen or seventeen days before *dwq* and follows it by thirteen days,¹¹ with

And of the six days upon which these events fall, Wednesday, Friday, and Sunday are the most conspicuous ones, with 121 out of 149 (some 81%).

⁷ Chyutin, *op. cit.*, 64ff.

⁸ Cf. J.T. Milik, *Ten Years of Discovery in the Desert of Judaea* (translated by John Strugnell; Studies in Biblical Theology 26; London: SCM, 1959), 152 note 5.

⁹ Talmon, Glessmer, and Ben-Dov, *op. cit.*, 42–3.

¹⁰ Talmon, Glessmer, and Ben-Dov, *op. cit.*, 42.

¹¹ For a tabulation of the intervals between the *X* and *dwq* dates over the duration of the triennial cycle, see Appendix 4, Table 1: *X and duqa/oh Occurrences*, in Talmon, Glessmer, and Ben-Dov, *op. cit.*, 30–2. As is illustrated by Column E, time intervals from any given *X*-date to the immediately subsequent *dwq*-date alternate between 16 and 17 days, starting with a 16 day interval in the first month of the triennial cycle. Conversely, the interval from any *dwq*-date to the following *X*-date remains fixed at 13 days throughout the cycle. Column F brings out the regular pattern of alternating 29 and 30 day time intervals from one *X*-date to the next, the first of these intervals consisting of 29 days. Although not explicitly named, it would seem that the *X*-date took precedence over the *dwq*-date in

the full moon. The natural conclusion for these scholars was that the lunar month in this text was reckoned to start with the full moon, just as 4Q320 1 i 1–4 seems to imply, and just as the Genesis story of the creation of the heavenly luminaries on the fourth day of Creation suggests:¹²

God made the two great lights—the greater light to rule the day and the lesser light to rule the night—and the stars. God set them in the dome of the sky to give light upon the earth, to rule over the day and over the night, and to separate the light from the darkness. And God saw that it was good. And there was evening and there was morning, the fourth day. (Gen 1:16ff)

Further evidence was drawn from the interpretation of 4Q317 *Phases of the Moon* and 4Q503 *Daily Prayers*,¹³ *Mišmarot* A 2 I 3–5 and 4QS^c 1 V 10–11.¹⁴ For these scholars, X marked the date of the full moon, and *dwq*, occurring

the documents in which it was recorded. This suggestion is borne out by the fact that the X-date is constantly recorded first, even when the documents treat a particular month in which the *dwq*-date occurs first chronologically. This is the case for the months when a second X-date is recorded, which falls chronologically after the *dwq*-date but is recorded before the it, as in the first month of the first year of the sexennial cycle (cf. 4Q320 frg. 1 Col. i 4–6 partially restored; 4Q321a Col. I 1–3 restored), and in the first month of the fourth year of the cycle (cf. 4Q321 Col. III 7 partially restored). This is also the case for the months which record two *dwq*-dates, the first of which falls chronologically before the X-date of the month but is recorded after the X-date, as is the case in the ninth month of the second year of the cycle (4Q321 Col. II 5), and in the ninth month of the cycle's fifth year (4Q321a Col. V 3–4 partially restored).

¹² Milik, *Ten Years of Discovery*, 152 note 6; J.C. VanderKam, "Calendrical Texts and the Origins of the Dead Sea Scroll Community," in *Methods of Investigation of the Dead Sea Scrolls and the Khirbet Qumran Site* (eds M. Wise, et al.; Annals of the New York Academy of Sciences 722; New York: New York Academy of Sciences, 1994), 380–1; M.G. Abegg, "Does Anyone Really Know What Time It Is: A Reexamination of 4Q503 in Light of 4Q317," in *The Provo International Conference on the Dead Sea Scrolls. Technological Innovations, New Texts, and Reformulated Issues* (eds D.W. Parry and E. Ulrich; STDJ 30; Leiden: Brill, 1999), 396–406; Abegg, "Calendar," 148–9; V. Gillet-Didier, "Calendrier lunaire, calendrier solaire et gardes sacerdotales: recherches sur 4Q321," *RevQ* 20 (2001–02): 182, who states: "Pour notre part, nous nous rangeons du côté des analyses qui voient dans le pointage d'un jour X celui d'un jour qui se situe très certainement au moment de la pleine lune, et dans le pointage d'un jour דוקה celui d'un jour qui se situe au moment de la nouvelle lune." Gillet-Didier's interpretation of the data is in line with that of the scholars who previously followed Milik's identification of X as the full moon. As will be demonstrated below, this explanation is based on a misinterpretation of the double-dating of the (second) X-date in the first month of the first year of the triennial cycle. Gillet-Didier's initial interest in calendrical questions and the significance of time in second temple Judaism was first expounded in her V. Gillet-Didier, "Temps de Dieu, temps des hommes: Généalogies, calendriers et tradition dans le judaïsme de l'époque hellénistique et romaine," Thèse de Doctorat (Paris: École Pratique des Hautes Études- Section des Sciences Religieuses, 1997).

¹³ Abegg, "Does Anyone Really Know?" 403 ff.

¹⁴ J.C. VanderKam, "Calendrical Texts and Origins," 381.

thirteen days prior to X and sixteen or seventeen days after X, indicated the appearance of the first lunar crescent at the start of the month.

Yet, this hypothesis has by no means generated any scholarly consensus. The primary reason for the disagreement revolves around the meaning of term *dwq*. Milik had suggested that דוקה should be connected to the root, דוק “examine, observe.”¹⁵ Conversely, Talmon and Knohl connected דוק to the Hebrew root דקק, “to be thin,” the indication for them that the term should be connected to the point during the lunar phases when the moon begins to wane.¹⁶ They identified *dwq* as “the designation of the day in the middle of the lunar month that is preceded by the night in which the full moon begins to wane, and X as the day at the end of the lunar month that follows upon the night in which the moon is in full darkness.”¹⁷ Because of opposite presuppositions Milik and Talmon/Knohl arrived at opposite conclusions regarding the identification of *dwq*. Milik presupposed the implied lunar month to start with the full moon, and therefore suggested that it was the new crescent that was being observed and recorded with the indication *dwq*.¹⁸ Talmon/Knohl presupposed that the lunar month was reckoned from the sighting of the first crescent, and therefore identified *dwq* as the day following the first night of waning of the moon. Wise was the one who undertook to examine further the possible etymology of *dwq*. He concluded that the term was more likely to mean “(astronomical) observation,” and on this basis acknowledged the possibility that the term referred to the observation of the new crescent

¹⁵ Milik, *Ten Years of Discovery*, 152 note 6.

¹⁶ S. Talmon and I. Knohl, “A Calendrical Scroll from a Qumran Cave: *Mišmarot B*,” 4Q321,” in *Pomegranates and Golden Bells: Studies in Biblical, Jewish, and Near Eastern Ritual, Law, and Literature in Honor of Jacob Milgrom* (eds D.P. Wright, D.N. Freedman, and A. Hurvitz; Winona Lake, IN: Eisenbrauns, 1995), 298.

¹⁷ *Ibid.*, 297.

¹⁸ As indicated by M.O. Wise, “Second Thoughts on *Duqah* and the Qumran Synchronistic Calendars,” in *Pursuing the Text. Festschrift B.Z. Wacholder* (eds J.C. Reeves and J. Kampen; JSOTSup 184; Sheffield: Sheffield Academic Press, 1994), 100 note 7, the following scholars accepted Milik’s interpretation and identification of *dwq* in the context of a lunar month starting at the full moon: M. Albani, “Die lunaren Zyklen im 364-Tage-Festkalender von 4QMischmerot/4QSe,” *Mitteilungen und Beiträge. Forschungsstelle Judentum* 4 (1992): 24; U. Glessmer, “Antike und moderne Auslegungen des Sintflutberichtetes Gen 6–8 und der Qumran-Pesher 4Q252,” *Theologische Fakultät Leipzig Forschungsstelle Judentum Mitteilungen und Beiträge* 6 (1993): 46; J.C. VanderKam, “Calendrical Texts and Origins,” 381 ff.; B.Z. Wacholder and M.G. Abegg, eds, *A Preliminary Edition of the Unpublished Dead Sea Scrolls: The Hebrew and Aramaic Texts from Cave Four* (Washington, D. C.: Biblical Archeological Society, 1991), 60, 104. To the above we must adduce F. García Martínez, *The Dead Sea Scrolls Translated* (Leiden: Brill, 1994), who also infers from the calendrical documents that the month started with the full moon.

(Milik, Wacholder), but rejected Talmon and Knohl's proposition to connect the term to the observation of something invisible during daytime at the time of the full moon.¹⁹

Interestingly, Wise suggested that *dwq* marked the (astronomical) observation of the full moon. This conclusion he drew from a consideration of works which expound the movement of the moon such as 4QEnastr^{a-d}, 4Q503 *Daily Prayers*, and 4Q317 *Phases of the Moon* which, Wise argued, all demonstrate that the lunar month starts at the time of the new moon and not the full moon.²⁰ Thus, for Wise, to hold that the month started at the time of the full moon was simply to assert that "the Qumran texts evidence two fundamentally different lunar systems. That position seems unlikely *prima facie*."²¹ Yet, this is exactly what Wise went on to suggest: the month at Qumran started at the time of the conjunction of the moon, i.e. the first night of full darkness. This practice represented a departure

¹⁹ M.O. Wise, "Observations on New Calendrical Texts from Qumran," in *Thunder in Gemini and Other Essays on the History, Language and Literature of Second Temple Palestine* (M.O. Wise; JSPSup 15; Sheffield: Sheffield Academic Press, 1994), 225–8. See also the more recent summary of the discussion concerning the etymology of דוק in Gillet-Didier, "Calendrier lunaire, calendrier solaire," 179–82.

²⁰ For a treatment of 4Q317 and its possible contribution to the understanding of *dwq*, see Wise, "Second Thoughts," 111–20. While Wise concludes that 4Q317 allows the identification of *dwq* with the full moon, Abegg, Abegg, "Does Anyone Really Know?" 403 ff, arrives at the exact opposite conclusion, i.e., 4Q317 demonstrates that in the Qumran world-view the moon had been created full and marked the beginning of the month. Such discrepancy in conclusion is due to the several emendations present in the text itself, which render difficult the recovery of the original meaning and the identification of scribal mistakes. In the light of these disagreements it is difficult to assert how much significance should be given to 4Q317 until a more thorough examination of the text is carried out. In a recent publication, J.-C. Dubs, "4Q317 et le rôle de l'observation de la pleine lune pour la détermination du temps à Qoumrân," in *Le Temps et les temps: dans les littératures juives et chrétiennes au tournant de notre ère* (eds C. Grappe and J.-C. Ingelaere; JSJSup 112; Leiden: Brill, 2006), 37–54, argues (on p. 47) that "4Q317 appartient à la nécessaire série d'études préalables qui ont contribué à la mise sur pied de ce calendrier sacerdotal 'parfait', donc à un stade préparatoire." J. Ben-Dov, "The Initial Stages of Lunar Theory at Qumran," *JJS* 54 (2003): 125–38, had already argued that 4Q317 represented an earlier stage of development in the astronomical knowledge displayed by the Qumran Calendrical Scrolls. In his treatment of 4Q503, F. Schmidt, "Le calendrier liturgique des *Prières quotidiennes* (4Q503)," in *Le Temps et les temps: dans les littératures juives et chrétiennes au tournant de notre ère* (eds C. Grappe and J.-C. Ingelaere; JSJSup 112; Leiden: Brill, 2006), 55–88, argues on page 67 that the month displayed in the extant portion of 4Q503 is "un mois de trente jours, qui est tout à la fois lunaire et solaire." Schmidt identifies this month as "un mois de trente jours, dont le premier jours est un mercredi, et dont les sabbats sont fixés aux 4^e, 11^e, 18^e et 25^e jours... le premier mois d'une année solaire de 364 jours... combinés avec le premier mois d'une année lunaire... le premier mois de la première année d'un cycle triennal..." (p. 73).

²¹ Wise, "Observations," 229.

from the biblical practice of starting the month at the time of the sighting of the first crescent but fitted well with *Jubilees'* assertion that the people of Israel would "forget the new moons" (6:34).²² Following Wise's contribution, Talmon amended his own position: *dwq* was now the *nigt* following the night when the moon is full, or, to put it in other words, the night when the moon begins to wane.²³ That it was the practice in Ancient Egypt to start the month on the day the last crescent disappeared in the (daytime) sky, so that the night which belonged to this first day of the month was a night of complete darkness, or of moon conjunction with the sun, may not be unrelated to the manner in which month reckoning may have evolved, or perhaps, originated.²⁴

Wise provided some interesting points of reference as to whether the Qumran triennial cycle could in fact have been observed in practice.²⁵ Following not the Julian calendar but the 364-day calendar, Wise noticed that, provided one started from the right lunar phenomenon taking place on Nisan 1, i.e., either the sighting of the first crescent, or the full moon, or the conjunction of the moon, the same phenomenon would re-occur at or roundabout the same date every three years. Such a pattern would hold over a time span of ca. thirty years, after which the actual phenomenon would start to move too far away from the date on which it would be expected to occur. From this Wise deduced that such a time span, thirty years, was enough to produce the synchronistic tables. Only with intercalation could the pattern be continued on a longer time span.²⁶ Of

²² Wise, "Observations," 230–1.

²³ Talmon, Glessmer, and Ben-Dov, *op. cit.*, 34–5.

²⁴ Cf. Wise, "Second Thoughts," 101. On the start of the month in the Egyptian calendar, see Parker, *op. cit.* In his discussion about the start of the lunar month in Ancient Egypt, the author draws the conclusion, based on tables setting out the date of the start of the month, the date of lunar conjunction, the morning of invisibility and the evening of visibility, that calculations show that around the mid fourth century BC the underlying basis for determining the start of the lunar month was the transition of the last crescent from visibility to invisibility (during the day time). Parker adduces the evidence of the composition "The knowledge of the movements of the two lights," of the Edfu library, probably composed at a time coinciding with the start of the first period of the Hellenistic age (p. 17 note 56, with a reference to O. Neugebauer, "Egyptian Planetary Texts", *Transactions of the American Philosophical Society* xxxii part II [new series, Jan 1942]). Parker concludes (p. 23): "The Egyptian lunar month, therefore, did begin on that morning when the old crescent could no longer be seen."

²⁵ Wise, "Second Thoughts," 104–11.

²⁶ The question of intercalation of the 364-day calendar remains an unresolved issue for want of a "smoking gun." Despite the highly significant nature of the issue, there is no space in the scope of this particular study to speculate on *how* intercalation of the 364-day calendar was implemented. Such treatment will have to wait for a comprehensive assessment at a future date. It is enough at this stage to point out that, following our

immediate interest is that the triennial cycles, and therefore the sexennial cycles, were consonant with actual lunar observations in the framework of the 364-day year. Thus, every three years the same lunar phenomenon would be observed on or very near Nisan 1. The pattern would hold provided the reckoning started in a year when the desired lunar phenomenon was observed on Nisan 1. It would be fair to say that, in such a specific year, any alternative lunar reckoning, which we identified in the *Ethiopic BL*, would start sixteen days early. It would also be fair to say that, over the length of a triennial cycle, this alternative lunar reckoning could be argued to lose sixty two days on the sun, and to last one thousand and thirty days of the original lunar reckoning, just as the *Ethiopic BL* affirms in chapter 74, according to the reading found in ms *Tana*⁹. This gives a further clue as to the actual meaning and role of X and *dwq*.

The term *dwq* is a "hapax legomenon" in Qumran writings.²⁷ As already noted, scholars have pointed to the possible etymology of the term, and have connected it to דקק = "small," or to דוק = "to look at something carefully."²⁸ Yet, no entirely satisfactory explanation has been proposed for the meaning and role of *dwq*. The closest one comes to any form of certainty regarding X and *dwq* is that these record dates of *actual* observations of lunar phenomena. Wise's demonstration referred to above goes some way to ascertaining the actuality of these phenomena within the framework of the 364-day year.²⁹ It will be argued below that the textual evidence points to observations of day-time phenomena, which is the best alternative to account for the recording of an *undated* X at the start of the synchronistic calendar. As to the X phenomenon, occurring sequentially on days 29 of the first month, day 30 of the second month, day 29 of the third month, and so on, it will be noted that it singles out the last day of the *lunar* months, and more specifically the day-time part of the day. As such, it will occur during the day time part of day 1, in the first month, in years one and four of the sexennial cycle (364DYT).³⁰ At the start of

investigation of the cycle of festivals in chapters 2, 3 and 4 above, intercalation of the 364-day calendar is likely to have been practised, and this despite the lack of explicit literary evidence so far. For bibliographical references on the issue of intercalation of the 364-day year, see above, chapter 1 note 132, and chapter 4 note 63.

²⁷ Talmon and Knohl, *op. cit.*, 297.

²⁸ Wise, "Observations," 225–6. Also Gillet-Didier, "Calendrier lunaire, calendrier solaire," 179–82.

²⁹ Wise, "Second Thoughts".

³⁰ For the tabulation of the intervals from one X-date to the next over a triennial cycle, see col. F in Ben-Dov's Appendix 4, Table 1, in Talmon, Glessmer, and Ben-Dov, *op. cit.*, 30–2.

years one and four, this particular day is also the last day of a full lunar month, the thirty-seventh lunation that is inserted at the end of the triennial lunar cycle to keep it in line with the triennial 364DY cycle (in the Qumran synchronistic calendrical tables).

2.2. Identity of *X* and *dwq*, a New Proposal

As this concise review of scholarship on the question shows, the identity of *X* and *dwq* remains a current point of debate. A fresh look at the textual evidence, both internal and external, will advance the discussion further.

2.2.1. Internal Textual Evidence

Amongst the calendrical documents discovered on the Qumran site are some documents which record specific dates in terms of their date in the lunar month, their equivalent date in the 364DYT, and their occurrence on such and such day of the week in the roster of priestly courses. The following passage from 4Q321a Col. I (Frg. 1) illustrates the scheme:

- [] .1
 [השנה הראשונה בארבעה בגמול באחד בראשון בחמשה] .2
 .3 [בידעיה בשלושים בוא השנית ודוקו בששה במעוזיה בשבעה עשר בוא]

1. []
2. [The first year: On the fourth (day) in (the week of) Gamul (which falls) on the first (day) of the first (month). On the fifth (day)]
3. [in (the week of) Jedai'ah (which falls) on the thirtieth in it (the first month) the second (occurrence of *X*); and *duqo* (is) on the sixth (day) in (the week of) Ma'oziah, (which falls) on the seventeenth in it].³²

Admittedly, the text is reconstructed by the editors of DJD xxi. But 4Q320 1 I 3–4 and, to a lesser extent, 4Q320 3 I 9–12, allow for the reconstruction. So if the reconstruction proposed by the editors is correct, both sets of dates are present in the passage above. The first is recorded, yet remains unnamed in the text, and has been termed *X* in scholarly research; the second set of dates is explicitly termed *dwq* in the text.³³ Both sets are specifically recorded together in 4Q321 Col. I:1–IV:8. In these fragments they occur according to the following pattern: *dwq* follows *X* by sixteen or seventeen days, while *X* always takes place thirteen days after *dwq*. To put it another way, *dwq* is attached to the sixteenth day of a twenty

³¹ Talmon, Glessmer, and Ben-Dov, op. cit., 84.

³² Talmon, Glessmer, and Ben-Dov, op. cit., 85.

³³ Talmon and Knohl, op. cit., 292.

2.2.1.1. The X Date

Both 4Q320 1 i 6 and 4Q321a Col. I 2–3 in their reconstructed text indicate that the first *recorded* X date falls “on the fifth (day) in (the week of) Jeda’iah.”

4Q320 1 i 6:

[on the 5th day in Jeda’iah at (or: coinciding with) the 29th (day of the lunar month), on the 30th in it (the first solar month)]

4Q321a Col. I

[in (the week of) Jeda’iah (which falls) on the thirtieth in it (the first month) the second (occurrence of X); and *duqo* (is) on the sixth (day) in (the week of) Ma’oziah, (which falls) on the seventeenth in it]

Further, if the reconstruction of the text by the editors is correct and accepted, it can be inferred from 4Q321a Col. I 3 that X occurs on the thirtieth day in the first 364DY month. 4Q320 1 i 6 is more precise in its extant form and indicates that the thirtieth day of the first month in the 364DY is actually the twenty ninth day of the first Qumran lunar month. This suggests that X, in the first month of the first year, follows the pattern Qumran lunar month date $Y = 364DY \text{ date} - 1$. This equation holds true only for the first month in years 1 and 4. The evidence suggests that the day in the 364DY and the day in the Qumran lunar calendar do not coincide exactly, the lunar reckoning starting only once the day in the 364DY reckoning reached evening. This hypothesis is consonant with Gen 1:18 where it is specified that the sun (mentioned first) rules the day, while the moon (mentioned second) rules the night.

It has been suggested that day one in month 1 of the 364DY in the first year of creation is not day 1 of the first lunar month, but rather corresponds to an hypothetical day 0 in the lunar month.⁴⁰ This analysis, however, is not strictly correct, as will be expounded below. Before doing so, however, it is necessary to rehearse the particular arguments concerning the issue of day reckoning in the 364DYT. There is solid evidence to suggest that in some traditions of the 364DY calendar the day was reckoned to start at sunrise. Such day reckoning may already be present in the *Book of Jubilees* and its exposition of the law governing the Sabbath *day* in chapter 50, especially verses 6 and 7, and 9, as argued by Talmon.⁴¹ This position was discounted principally by Baumgarten based on the textual evidence of *Jub* 49:1 and its exposition of the statutes concerning the Passover:

⁴⁰ Talmon, Glessmer, and Ben-Dov, *op. cit.*, 33–4.

⁴¹ “Calendar Reckoning,” 187.

[T]hat you may celebrate it at its time on the fourteenth of the first month, that you may sacrifice it before evening, and so that they may eat it at night on the evening of the fifteenth from the time of sunset.⁴²

Admittedly the issue cannot be settled by sole recourse to the textual evidence of the *Book of Jubilees*. Attempting to do just that would perhaps not do justice to the complexity of the process of composition of the *Book of Jubilees*, a complexity brought into focus by the literary-critical approach applied by Michael Segal to the text of the *Book of Jubilees*.⁴³ Such undertaking would also oversimplify the 364DYT to a single, homogeneous tradition, of which the *Book of Jubilees* would be a worthy representative. This, however, has been shown to be simply wrong, as indicated by the composition's solitary polemical stance against the moon (*Jub.* 6:32–38). In fact, it is the oddity within the 364DYT of this explicitly polemical stance that singles out the *Book of Jubilees* as uncharacteristic of the 364DYT.⁴⁴

A sunrise reckoning of the day has also been posited in other Qumran documents pertaining to the 364DYT. Talmon argued that the intentional reordering in 1QS col. X 10 of the benedictions of Deut 6:7, so that ׀וּ = “day” is now followed by ׀לַיְלָה = “and night,” is a strong indicator of the particular day reckoning observed by those Talmon came to define as the *covenanters*.⁴⁵ Following this line of argument, Talmon interpreted the time indicator in CD 10 14–15 “on the sixth day from the time when the orb of the sun is distant from the gate by its own diameter” as an additional gloss by a ninth century copyist to the paraphrase of the command to observe the seventh day as a sabbath to the Lord (cf. Deut 5:13), which originally contained no reference to rest on any part of the sixth day.⁴⁶

⁴² The citation is from J.C. VanderKam, op. cit., 315. Baumgarten adduces also the passage from Jubilees 21:10, indicating the timing by which the sacrificial victim offered as a peace offering (cf. Jub 21:7) is to be consumed: “but the sun is not to set on it on the next day until it is eaten. It is not to be left over for the third day because it is not acceptable to him.” See Baumgarten, “Beginning of the Day”.

⁴³ M. Segal, *The Book of Jubilees. Rewritten Bible, Redaction, Ideology and Theology* (JSJ-Sup 117; Leiden: Brill, 2007).

⁴⁴ J. Ben-Dov, “Tradition and Innovation in the Calendar of Jubilees,” in *Enoch and the Mosaic Torah: The Evidence of Jubilees* (ed. G. Boccaccini; Grand Rapids, MI: Eerdmans, 2009), 276–93.

⁴⁵ Talmon, “Calendar Reckoning,” 189.

⁴⁶ Talmon, “Calendar Reckoning,” 192. See also the more recent treatments by the same author, with additional arguments, in S. Talmon, “Sabbath Observance According to the Damascus Fragments: Evening to Evening or Morning to Morning?” *Meghillot* 1 (2003): 71–93; S. Talmon, “Reckoning the Sabbath in the First and in the Early Second Temple Period: From the Evening or From the Morning?” in *Sabbath: Idea, History, Reality* (ed. G.J. Blidstein; Beer-Sheva: Ben Gurion University Press, 2005), 9–32.

Of further interest is the recording in 4Q329a of the occurrence of Passover on the third day during the week of service of such and such priestly family. What is telling here is the absence of any reference to the festival of Unleavened Bread, which incidentally is dated to the 15th of the month, the day after Passover, in 4Q326.⁴⁷ 4Q*Morning and Evening Prayer* (4Q408) Frgs 1+1b:8–10 may support the position of a sunrise to sunrise day reckoning:⁴⁸

8. אשר ברתה את הבקר אות להופיע ממשלת אור לגבול יומם בר[...]
 9. לעבדתם לברך את שם קדשך בראתם כי טוב האור וב[...]כי
 בכול [...]
 10. [...]... אשר בר[ת]ה את הערב אות להופיע ממשלת[חושך ...]
 11. [...] מעמל לברך [את שם קדשך ב]ראתם[כ]י[ה]כוכב[ים [...]ל[...]
8. as you created the morning as a sign of the appearance of the dominion of light for the area of day at [...]
 9. for their work, to bless your holy name when they see that the light is good and [...] in all [...]
 10. [...]... as [you] created the evening as a sign of the appearance of the dominion of [darkness...]
 11. [...] from work, to bless [your holy name when] they see [th]at [the star]rs [...]⁴⁹

Any attempt at synchronizing the 364DY together with the lunisolar reckoning has to consider the possibility that the first day of the first year in the 364DY reckoning may have started at sunrise, with the appearance of the sun in the morning sky. That day 1 in the lunisolar reckoning started with the appearance of the smaller light in the evening sky is hardly ever questioned. In other words, in a synchronized triennial cycle the first lunisolar day would start in the evening of the first 364DY day—if, of course,

⁴⁷ See chapter 4 for a treatment of the cycle of Festivals in the Dead Sea Scrolls.

⁴⁸ On 4Q408, see A. Steudel, “4Q408: A Liturgy on Morning and Evening Prayer—Preliminary Edition,” *RevQ* 16 (1994): 313–34; J.M. Baumgarten, “Some Notes on 4Q408,” *RevQ* 18 (1997): 143–4. The official edition in the *DJD* series published the text, again translated by Steudel, under the siglum 4Q*Apocryphon of Moses*? Cf. S. Pfann and P. Alexander, eds, *Cryptic Texts and Miscellanea, Part 1, in Qumran Cave 4.XXV: Cryptic Texts Miscellaneous Texts from Qumran* (DJD XXXVI; Oxford: Oxford University Press, 2000), 298–315. On the issue of day reckoning in biblical thought and in Second Temple Judaism, see also: Haewood, *op. cit.*; Zeitlin, “Beginning of the Jewish Day”; Baumgarten, “Beginning of the Day”; Stroes, *op. cit.*; Beckwith, “The Day in Biblical Thought”; J.M. Baumgarten, “4Q503 (Daily Prayers) and the Lunar Calendar,” *RevQ* 12 (1986): 399–407; N.L. Collins, “The Start of the Pre-Exilic Calendar Day of David and the Amalekites: Notes on 1 Samuel XXX 17,” *VT* 41 (1991): 203–8; Talmon, “Reckoning of the Day”; J.C. VanderKam, *Calendars in the DSS*, chapter 1.

⁴⁹ García Martínez and Tigchelaar, *The Dead Sea Scrolls Vol. 2*, 838–9.

the lunar month considered is the traditional Jewish month starting with the sighting of the first crescent in the evening sky. This hypothesis is consonant with Gen 1:18, where it is specified that the sun (mentioned first), which rules the day, and the moon (mentioned second), which rules the night, were created on the same day, the fourth day of creation. So the evening of the first 364DY day marks the onset of the first lunisolar day. The day-time part of the first lunisolar day coincides with the day-time part of the *second* 364DY day. More importantly, the night-time in both reckonings pertains to the *same* day in each reckoning, i.e., the first night time pertains to day 1, whether in the 364DY or in the Qumran lunar calendar. As a result, an observable phenomenon which belonged to the day-time part of the day in the first month of the Qumran lunar calendar would engender a situation in which its dating Y would have a corresponding dating in the 364DY of Y+1 in the first month of the first year of the triennial cycle.

The situation just described corresponds very well with the data recorded in 4Q320. The equivalent of the Qumran lunar date Y is Y+1 in the 364DY. If the hypothesis here proposed is correct, the double dating of X, according to the pattern 364DY date = Qumran lunar calendar date + 1 *in the first month*, is an indication that X referred to a day-time observable phenomenon, or possibly even a time span measurement. This is a logical explanation which accounts for the double dating of X according to the pattern exemplified by the text.

On the strength of 4Q320 1 I 3–6 the editors of DJD xxi suggest that 4Q321a I 3 further identifies this X phenomenon, taking place on the thirtieth day of the first 364DY month (the twenty ninth lunisolar day), as being **השנית**—“the second (occurrence of X).” Note that there is no indication of the Qumran lunar dating here. This raises the question: if there is a preceding X in the first 364DY month, why is it not recorded in the text? The answer lies implicit in the text. The X date is each time given in Qumran lunar terms first, followed by its equivalent in the 364DY reckoning. We identified above a ‘decallage’ between the 364DY and the Qumran lunar dating of X within the first month of the triennial cycle. This is due to the fact that X pertains to a day-time lunar observation. From this it follows that the only time span in the first 364DY month not belonging also to the first Qumran lunar month must be the location of this first (undated) X. The only day-time part of a 364DY day with no equivalent in the Qumran lunar reckoning in the first month of the first year of the triennial cycle is none other than the day-time part of the first day of the first month. This first X day-time lunar phenomenon remains undated in lunisolar terms

because, strictly speaking, it occurs at a moment when the Qumran lunar reckoning has not started yet.

The textual evidence offers a second clue. The regular intervals of time occurring between X and *dwq* are 16 to 17 days. As already mentioned, *dwq* falls sixteen or seventeen days after X, and is followed by X thirteen days later. The intervals from one X to the next then oscillate between twenty nine and thirty days. Counting twenty nine days back from the first dated X (twenty ninth Qumran lunar day, thirtieth day of the first month in the 364DY reckoning) one falls on Talmon's hypothetical lunar day 0, the day-time of which corresponds to the day-time part of day one in the 364DY calendar. If one, however, were to count thirty days back, then one would fall altogether outside of the first 364DY month, or, to put it another way, on the last day of the twelfth month of an hypothetical previous 364DY month. In this particular case, however, there would be no need to specify in the text that the 29th of the first Qumran lunar month, which is the 30th of the first 364DY month, marks the *second* occurrence of X. The very indication in the text that this particular X is the second in this first month indicates that this X must pertain to this first (364DY) month.

To sum up our findings on the X date: the indication that the first recorded X date is actually the *second* occurrence of X in the first month of the first year of the triennial cycle points to the conclusion that the first X occurred during the day-time part of the first day of the first 364DY month. It was not recorded because, as a lunar phenomenon, its particular ephemeris had not yet started. It is the difference of day reckoning between the 364DY and the Qumran lunar ephemeris which explains the indication of the existence of a first X phenomenon in the first 364DY month, undated in lunar terms because it falls before the actual start of the first Qumran lunar month. The present writer suggests that this day is not a hypothetical lunar day 0, but the day-time part of the last day of an hypothetical previous Qumran lunar month, which coincides with the day-time part of day one in the first 364DY month. Talmon's assertion, in his argumentation against those scholars who, in the wake of Milik's interpretation of 4Q320, defend the "moon created full" position, that they failed to notice that the moon was created 13/14th part, and not full, is unwarranted. It does not follow that, if one posits the moon created full, one must conclude that the lunisolar month was reckoned to start the day after the full moon.⁵⁰ Rather, the moon may well have been created

⁵⁰ As Talmon does, *DJD XXI Calendrical Texts*, 34.

3. [in (the week of) Jeda'iah (which falls) on the thirtieth in it (the first month) the second (occurrence of X); and *duqo* (is) on the sixth (day) in (the week of) Ma'oziah, (which falls) on the seventeenth in it].⁵²

It is significant that the *dwq* date only appears in its 364DY dating. As was established above for the dating of X, the key concerning *dwq* is also contained in the first month in the first year. No extant document gives an equivalent dating of *dwq* in Qumran lunar terms. Nevertheless, this lacuna from the text may simply be explained in the following way: the *dwq* date registers the observation of a night-time lunar phenomenon. We identified above that the one day discrepancy in the first month of the first year between the 364DY and lunisolar dating of X is most probably due to the occurrence of X during the day-time part of the day. This was due to the difference of reckoning the day in the solar and lunar ephemeris. Because of this, the day-time part of the day belonged to two different days in the 364DY reckoning or the Qumran lunar reckoning. A night-time phenomenon, however, had the same dating, whether in the 364DY or the Qumran lunar reckonings in the first month of the first year. The present writer suggests therefore that *dwq* registers the observation of a *night-time phenomenon*. This much had been suspected by scholars, although I am not aware of any attempt at advancing the present argument. The identity of this phenomenon is non-other than the lunar phase occurring 16 or 17 days after the disappearance of the last crescent in the day-time sky, i.e., a lunar phenomenon observable at night around the time of the full moon.

There is one more perplexing fact. The argument that the night-time parts of any given day in both ephemeris belong to the same numbered day in each ephemeris works for the first month. This agreement should break down once *dwq* is tracked in subsequent months. However the extant textual sources indicate quite the opposite: i.e., *dwq* is dated *in 364DY terms only* in all subsequent months. That the scribes did not see the need to record *dwq* in its Qumran lunar date may be a veiled indication that *dwq* played no significant role in the synchronization of the 364DY calendar and the Qumran lunar calendar. This particular role was played by the tracking of the X date.⁵³ This is another indication that the

⁵² Talmon, Glessmer, and Ben-Dov, op. cit., 85.

⁵³ Ben-Dov comes to a similar conclusion regarding the significance of the X date over the *dwq* date. Arguing against Gillet-Didier's hypothesis that X, as an indicator of the full moon, was enrobed with positive religious significance, Ben-Dov suggests, rather, that the "preference for observations of the last visibility in 4Q320 and 4Q321 thus reflects

calendrical practice at Qumran, although based on a 364DY *Jubilees*-like calendar, marked a significant departure from the anti-lunar bias of the 364DY *Jubilees* tradition.

2.2.2. External Evidence

J. Ben-Dov and W. Horowitz have provided additional evidence from Babylonian sources, which, they argue, partly allow confirmation of the identification of X and of *dwq*.⁵⁴ In a text describing lunar months (Tablet *BM* 32327) they identify three phenomena that have been described in other publications as the “Lunar Three.” Two of these record dates and time spans after the full moon.⁵⁵ The “Lunar Three” are:

- a) the name of the month followed by the number 1 or 30, 1 meaning that the preceding month counted thirty days, 30 indicating that the previous month was hollow (twenty nine days);
- b) a phenomenon called *na*, indicating the day on which the moon set for the first time after sunrise, a date that came after the full phase of the moon;
- c) a phenomenon called KUR, which recorded the last visibility of the moon and its setting in the day-time sky at the end of the lunar month. Ben-Dov and Horowitz observed that in *BM* 32327 KUR occurred thirteen or fourteen days after *na*, while *na* was visible sixteen or seventeen days after KUR.

scientific interests rather than religious principles,” and points to the evidence of the *Diviner’s Manual*—esp. lines 58–61—as an indication of the “the day of the disappearance of the moon’ as the first astronomical phenomenon to be thoroughly observed.” See Ben-Dov, *Head of All Years*, 243, with bibliographical reference in note 104. Gillet-Didier’s argument is developed in “Calendrier lunaire, calendrier solaire”.

⁵⁴ I am grateful to Jonathan Ben-Dov for providing me with a copy of the paper he presented at the Xth IOQS in Groningen (2004), which has now been published as Ben-Dov and Horowitz, “The Babylonian Lunar Three”.

⁵⁵ The “Babylonian Lunar Three” were first described by A. Sachs, A. Sachs, “A Classification of the Babylonian Astronomical Tablets of the Seleucid Period,” *JCS* 2 (1948): 271–90. The text under consideration, as pointed out by H. Hunger, *Astronomical Diaries and Related Texts from Babylonia Vol. 5: Lunar and Planetary Texts* (Österreichische Akademie der Wissenschaften: Philosophisch-Historische Klasse Denkschriften, 299. Band; Vienna: Verlag, 2001), 100, was first described by A. Sachs, “Sirius Dates in Babylonian Astronomical Texts of the Seleucid Period,” *JCS* 6 (1952): 110–2, and “contains the lengths of the months, the calendar date of the day (after the full moon) when the moon set for the first time after sunrise, and the calendar date of the last visibility of the moon towards the end of the month, for the years SE 62–93.”

Ben-Dov and Horowitz compared these data with that found about the X and *dwq* dates in 4Q320, 4Q321 and 4Q321a, and concluded that the “Lunar Three” were direct equivalents to the data in the Qumran documents. First, the pattern for naming the month and indicating the number of days in the previous month in the Babylonian text was also present in the Qumran texts. Second, the intervals between *na* and KUR in the Babylonian text were similar to those measured between X and *dwq* in the Qumran material. Third, *na* and KUR and X and *dwq* were “standard attributes of the lunar month in their respective traditions,” each consistently presented with an indication of the number of days in the previous month.

On this basis Ben-Dov and Horowitz proposed to identify *dwq* with the Babylonian *na*, and X with the Babylonian KUR, and suggested that in the Qumran documents the X date marked the time from moon rise to sunrise (so a night-time occurrence) when the moon was last visible after sunrise (during the day) towards the end of the lunar month. As for *dwq*, it marked the day on which the moon set first in the sky after sunrise.⁵⁶

Ben-Dov and Horowitz’s identification of X as the day upon which the moon sets for the last time after sunrise at the end of the lunar month, i.e., immediately before the lunar conjunction, agrees *partially* with the interpretation given above and drawn from the textual evidence concerning the double-dating of X. The problem with partial agreement is that it often comes with partial disagreement. In the case at hand the partial disagreement is quite significant and resides in that Ben-Dov and Horowitz consider X to be a night-time measurement, and not a daytime period as I have argued. For them, “KUR occurs at the end of the lunar cycle and marks the time *from moon rise to sunrise* when the moon is last visible around sunrise towards the end of the last lunar month.”⁵⁷ In favor of their interpretation is the fact that none of the Lunar Six pay attention to the day-time part of the day when the last crescent disappeared in the sky. This may not be surprising as the lunar month was not reckoned in Babylon to start at that time but at the time of the appearance of the new crescent in the evening sky, which the Babylonians did record—as

⁵⁶ Ben-Dov and Horowitz, “The Babylonian Lunar Three”.

⁵⁷ Ben-Dov and Horowitz, “The Babylonian Lunar Three,” 113 See also Ben-Dov, *Head of All Years*, 236–9, where the author discusses the correlation between NA and KUR and the Qumran data *dwq* and X. For Ben-Dov, X = KUR = last morning visibility of the moon at the end of the lunation; *dwq* = NA = first moonset after sunrise, on the day following the full moon (see p. 237). Ben-Dov does not clarify whether the “last morning visibility” pertains to the night-time, the daytime, or two both.

part of the Lunar Six—as *NAn* = the time between sunset and the setting of the moon, when it has become visible for the first time after conjunction.⁵⁸ From the Qumran perspective it is perhaps strange to single out a phenomenon which supposedly indicated the end of the lunar month and the start of the following lunar month a few hours before the change over from one month to the next actually took place. More importantly, if the hypothesis of a varying day reckoning between the 364DY and the Qumran lunar year is correct, the dating of X if X was equivalent to the Babylonian KUR would be the same in both calendars in the first month of the year.

As for *dwq*, it was recorded in the text with a single-dating custom. It was suggested above that this single dating points to a night-time phenomenon. From this perspective, Ben-Dov and Horowitz's identification of *dwq* with *na*, a day-time measurement in Babylonian sources, is also problematic. If the hypothesis drawn from the textual evidence that the single dating of *dwq* indicates a night-time phenomenon or measurement, then *dwq* cannot be identified with the Babylonian *na*. The latter marked the measuring of a day-time interval "between sunrise and moon set, when the moon set for the first time after sunrise" in Babylonian Diaries, i.e., a daytime occurrence.⁵⁹ There were, however, two other intervals of time measured during the night around the full moon in Babylonian Diaries. The first, ŠÚ, measured the interval of time from moon set to sunrise.⁶⁰ The second, GE₆, "a usual logogram for night" in Babylonian Diaries, measured the interval between sunset and moon rise.⁶¹ Both were night-time measurements and might qualify as equivalent to *dwq*. To ascertain beyond doubt which of ŠÚ and GE₆ corresponded to *dwq* at Qumran is beyond the scope of the present undertaking. Both were night-time measurements around the full moon phase, and in some way both could qualify as *dwq*, an observed (measured?) night-time phenomenon. Whereas more research is needed to ascertain the exact identity of *dwq*, that of X seems now to be secure.

⁵⁸ For a definition of the "Lunar Six," see H. Hunger, "Non-Mathematical Astronomical Texts and Their Relationships," in *Ancient Astronomy and Celestial Divination* (ed. N.M. Swerdlow; Cambridge, Mass: MIT, 1999), 77–96, esp. 78, and Sachs, "A Classification of the Babylonian Astronomical Tablets of the Seleucid Period", esp. 273 and 275.

⁵⁹ A. Sachs, *Diaries from 652 B.C. to 262 B.C. Texts* (ed. H. Hunger; vol. I of *Astronomical Diaries and Related Texts from Babylonia*; Philosophisch-Historische Klasse Denkschriften, 195. Band; Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1988), 48.

⁶⁰ Sachs, *Diaries from 652 B.C. to 262 B.C. Texts*, 21.

⁶¹ Sachs, *Diaries from 652 B.C. to 262 B.C. Texts*, 20.

2.3. *Summary*

If the arguments presented here are correct, then our enquiry of the X and *dwq* dates recorded in some calendrical documents from Qumran has shown that the X date recorded the lunar phenomenon which took place in the day-time sky and marked the end of the lunar month, as first suggested by Wise. This also heralded the start of the next lunar month. It was the last time the moon set after sunrise during any one lunation. Contrary to the claim made by Ben-Dov and Horowitz, as a day-time phenomenon or measurement X *cannot* correspond to the Babylonian KUR, which measured a night-time phenomenon.

Likewise, the *dwq* date at Qumran marked a night-time phenomenon, thirteen or fourteen days before the X phenomenon, and must have been the observation of either a lunar phenomenon (full moon phase), or the measurement of an interval of time during the night involving a particular lunar phenomenon. It may have corresponded to one of two possible dates recorded in Babylonian Diaries, both of which measured time intervals during the night: either ŠÚ, which measured the interval of time from moon set to sunrise; or GE₆, which measured the interval between sunset and moon rise.

3. *The Ethiopic Book of Luminaries Once Again*

In the previous chapter, verse 14 of *1 Enoch* 74 was identified as a variant reading which, in its tradition, may suggest that a given lunar triennial cycle was understood to last one thousand and thirty days and to lose sixty two days over the solar (364-day) year in the course of the cycle. It was suggested that this lunar triennial cycle was measured in terms of another lunar reckoning which started at the same time as the solar triennial cycle. Several possibilities were suggested to explain such data: (1) If the base lunar year was the full moon start, the alternative year, singled out for lasting one thousand and thirty days of the triennial cycle, started sixteen days before full moon, and was marked by the last crescent as a day-time phenomenon. (2) If the base lunar year started with the sighting of the first crescent, the alternative lunar year, causing the three year cycle to count one thousand and thirty days over the solar triennial cycle, started sixteen days earlier with the full moon. (3) If the base lunar year started with the first night of lunar conjunction, the alternative year started sixteen days earlier with a lunar phase occurring two

days before the full moon. Admittedly, option (3) would prove difficult to follow as the observation of the lunar phase preceding the full moon may not be easily determined with precision. Moreover, this lunar reckoning is nowhere attested to in any ancient sources (to the knowledge of the present writer). Option (2) is plausible because it would equate the base lunar year of *1 En* 74 with that expounded in *1 En* 73. However, it fails to account for the alternative description of the moon cycle, from waning to waxing, which marks the distinctiveness of chapter 74 in the translation followed here.

Option (1) offers the best solution to account for the anomaly identified in *1 En* 74, where the base year is reckoned to start with the full moon and follows a waning-waxing lunar cycle. In addition, such reckoning indicates that the alternative lunar reckoning, starting sixteen days early and singled out for lasting only one thousand and thirty days over the solar triennial cycle, and for losing sixty two days over the sun, starts with the day marked by the disappearance of the last crescent, and the first night of lunar conjunction, or first night of full darkness.

The alternative lunar year posited in option (1), starting with the first night of lunar conjunction, is identical with the one which regulates the Qumran calendar: X records a day-time observation, which has been identified as the last crescent just before the first night of lunar conjunction; *dwq*, a night-time observation, takes place sixteen or seventeen days after X, and has been identified as the full moon. What *1 En* 74 may be understood to suggest is that if the full moon reckoning (start of the lunar month with the full moon) of the lunar year is abandoned in favor of the lunar cycle starting the month on the day of the X-date, then the lunar triennial cycle will only coincide with the solar one for one thousand and thirty days, and it would lose sixty-two days over the triennial cycle. This, at least, seen or perceived from the viewpoint of the opponents to the X-date reckoning of the lunar cycle.

4. *1 En* 80:2–8—a New Interpretation

It is from this particular perspective that the passage in *1 En* 80:2–8 is probably best understood. Verse 2 reads:

And in the days of the sinners the year shall be shortened
 (i.e., cut short in number, though extended in length),
 And their seed shall be tardy on their lands and fields

And all things on the earth shall alter,
 And shall not appear in their time;
 And the rain shall be kept back,
 And the heaven shall withhold it.⁶²

It may be recalled that *1 En* 48, considered above, also draws a connection between the luminaries, blessings and curses, and the sinners. For the author of the passage under consideration it would seem that use of the wrong lunar cycle, which only “the sinners” would follow, would cause the year to shorten, so that the triennial cycle would count, so it was argued, one thousand and thirty days as opposed to the expected one thousand and ninety two days of the triennial solar cycle. As pointed out above, the discrepancy in real terms was of forty six days over three years. The duration of a single triennial cycle, governed by the wrong lunar reckoning, was enough for the natural phenomena described in *1 En* 80:2–6 to be noticeable: the fruits of the land came later, and “all things on the earth . . . alter . . . do not appear in their time” (v.2).

In addition, the alternative, *wrong* lunar reckoning caused the epagomenal days to fall in the wrong gate. Ethiopic astronomy presented in *1 Enoch* clearly portrayed the movements of the moon and the sun through gates of heaven.⁶³ To start the solar year at the wrong time, i.e., coinciding with the wrong lunar reckoning, would cause the epagomenal days to fall at the wrong time and to appear in the wrong gates. From this perspective, the passage in *1 En* 82:5–6 becomes more intelligible. R.H. Charles translated the passage:

Owing to them men shall be at fault and not reckon them in the whole reckoning of the year: yea, men shall be at fault, and not recognize them accurately. For they belong to the reckoning of the year and are truly recorded (thereon) for ever, one in the first portal and one in the third, and one in the fourth and one in the sixth, and the year is completed in three hundred and sixty four days.⁶⁴

⁶² Beckwith, *Calendar and Chronology*, 109. Nickelsburg/VanderKam, Nickelsburg and VanderKam, op. cit., 110, translate: “In the days of the sinners the year will grow shorter, their seed will be late on their land and in their fields. Everything on the earth will change and will not appear at their times, the rain will be withheld, and the sky will stand still,” indicating that “some mss read a causative form of the verb.”

⁶³ O. Neugebauer, “Notes on Ethiopic Astronomy,” *Or* 33 (1964): esp. 51–61. A cursory glance at Table I p. 53, shows that to accuse a discrepancy of 16 days in the start of the solar year, a discrepancy which would take place if one followed the wrong lunar reckoning, will cause the calculations to fall in the wrong gates.

⁶⁴ *The Apocrypha and Pseudepigrapha of the Old Testament in English. Vol. II Pseudepigrapha* (Oxford: Clarendon, 1913), 247.

Isaac translates:

On this account there are people that err; they count them (the four?) in the computation of the year:⁶⁵ for the people make error and do not recognize them accurately; for they belong to the reckoning of the year.⁶⁵

Nickelsburg/VanderKam propose:

People err regarding them and do not calculate them in the numbering of the entire world because they err regarding them and people do not understand them precisely.⁶⁶

It has been suggested that this passage shows that at some stage the awareness arose that the year was running behind the sun, so that the different harvests came late and did not come at their appointed time.⁶⁷ It is here argued, rather, that 1 En 80:2–8 is in keeping with chapter 74 of the same work. It denounces the seasons coming late because of the sins of men, and not because the 364DY is slowly moving out of synchronization with the true solar year. Chapter 74 gives us a clue as to the nature of the sin of men: it was seen, from the perspective of the writer, as following the full moon start of the year. This caused the *proper* lunar reckoning to fall behind the sun by thirty two days over three years, sixty two days once the necessary extra lunation had been added, although the year might have seemed longer (cf. ‘cut short in number yet extended in length’). Of course, such discrepancy was quickly noticeable. A full sexennial cycle would have made it plain to anyone. Moreover, it could not be rectified by any extra intercalation possibly used to eventually bring the one thousand and ninety two day triennial cycle, and stopped the 364-day year, advocated by Enoch,⁶⁸ from keeping in line with the true solar year.

⁶⁵ “1 Enoch,” 60 ‘q’ indicates mss B and C: ‘they do not count them in the reckoning of the whole world’.

⁶⁶ Nickelsburg and VanderKam, *op. cit.*, 113.

⁶⁷ Beckwith, *Calendar and Chronology*, 108–10.

⁶⁸ See Albani, *Astronomie*, 278–84, esp. 280–1, where the author suggests that in the AB the weekly lunar run is also synchronised with the solar run through synchronization with the number 364. Thus, Jewish priestly scholars were preoccupied with Babylonian astronomy in order to secure the stability of the festival calendar (280 note 32).

5. *Conclusions*

In this chapter it was argued that the identification of a *polemic* concerning the lunar reckoning, identified in the preceding chapter, contributed to the debate over the identification of the X and *dwq* dates recorded in 4Q320, 4Q321 and 4Q321a. Based on a close consideration of the textual evidence, it was suggested that the X date recorded in these documents marked the occurrence of a day-time phenomenon, the disappearance of the last lunar crescent in the sky after sunrise on the last day of lunar visibility in the lunation. This was inferred from the double dating of X in the first month of the first year, following a pattern of lunar date = 364DY date *minus* 1. This marked the last day of the lunar month and the eve of the first day of the following lunar month (starting at sunset). It was shown that this day-time phenomenon belonged to the first day of the first solar month in the first year of the triennial cycle. As such, X cannot have indicated the observation of the full moon.

The textual evidence also allowed the inference that *dwq*, because of its single 364DY/lunar dating in the first month of the first year, must have been a phenomenon (or a time period) which occurred in the part of the day commonly shared by both the lunar and the 364DY day reckonings, i.e., night-time. As such *dwq* was, as the texts suggest, probably the observation of a night-time phenomenon (or a time period) which took place sixteen or seventeen days after the disappearance of the last crescent, a time within the lunar phase which would coincide with the expected full moon.

In recent scholarship, the close correspondence between Qumran and Babylonian astronomy allowed the formulation of the hypothesis that the X date could be identified with the Babylonian KUR, recorded in *Astronomical Diaries*. This hypothesis has been here shown to be partially problematic. Although the identification of X with a Babylonian recorded phenomenon (or time period) associated with the moon is correct, its particular identification with the Babylonian KUR is perhaps not correct. The second part of this hypothesis, which identifies *dwq* with the Babylonian *na*, has also been called into question. Rather, it is here suggested that the Qumranic *dwq* date, as marking a night-time phenomenon, may have corresponded to one of two possible dates recorded in *Babylonian Diaries*, both of which measured time intervals during the night: either ŠÚ or GE₆. More research in this promising area is needed, however, to establish the point.

Last, in the light of the interpretation of *1 En* 74:14 suggested in the preceding chapter, a new interpretation of the material found in *1 En* 80:2–8 has been advanced. This particular passage has traditionally been associated with the argument that the 364DY could not have been observed in practice. This, it was claimed, was the evidence that disproved Annie Jaubert's theory of two Passover celebrations following different calendars during the week of the passion. However, on the contrary, the arguments presented here show that the note in *1 En* 80:2–8, concerning the "days of the sinners" and the shortening of the year, alludes not to the 364DY, but rather to a lunar reckoning which caused the lunar triennial cycle to "fall behind the sun by sixty-two days in three years." The interpretation proposed here, if accepted, also contributes to the removal of the "calendrical objection" set against Jaubert's thesis.

Future avenues of investigation may consider in greater depth the Babylonian background to many traditions that are present in the documents from the Dead Sea. It is likely that such investigations will uncover more forgotten connections between these documents and the antique backgrounds of their traditions.

CHAPTER EIGHT

CONCLUSIONS

At the outset, as a study of various calendrical issues of second Temple Judaism, the present undertaking constitutes a preliminary study to the investigation of the occasion of Jesus' last meal with his disciples. More particularly, it lays the foundations for a future thorough investigation of the evidence adduced by Annie Jaubert regarding the case she put forward as a solution to the discrepancies evidenced in the Passion Narratives of the Gospels. The above study contributes to the discussion in several different areas, as summarized below. First, it demonstrates that the calendar objection originally leveled against Jaubert, and identified in the introduction to this study as the main stumbling block for her theory concerning the date of the last supper, was simply over estimated. A review of key textual sources of the First and Second Temple periods concerned with the exposition of the cycle of festivals demonstrates that all textual sources—and by extension the communities/schools behind those sources—considered *inter alia* the cultic cycle they followed to be attached to the seasons and to the agricultural cycle. This simple point cannot be emphasized enough.

Second and significantly, the above study identifies important, previously undefined aspects of calendrical variations in the Second Temple period. As such it contributes to the ongoing development of knowledge in the fields of Enochic literature, Dead Sea Scroll studies, Hebrew Bible, New Testament and related fields. In the final analysis, this study demonstrates that the Jaubertian hypothesis, which postulates that the discrepancies recorded in the Passion narratives of the four Gospels can be interpreted against the *Sitz im Leben* of first century Palestinian Judaism, itself deeply rooted in the traditions emanating from the later centuries of the Second Temple period, has much to contribute to contemporary New Testament scholarship.

1. *The Calendar Objection Leveled Against the Jaubertian Theory*

Among the key arguments leveled at Jaubert and reviewed in Chapter 1, the calendar objection has been shown to present the greater challenge. It

argued that there was simply no evidence to support Jaubert's claim that the 364-day year calendar of *Jubilees* was followed in first century Palestine, and rejected the hypothetical connections between Passion week and the 364-day calendar as "fanciful" and with no relation to reality.¹ The above provides a solid refutation of this position by systematically pointing out the connections between the cultic cycles expounded in the sources and the agricultural year.

1.1. *The Calendar and the Seasons*

Very soon after the publication of Jaubert's *La Date de la Cène*, and coinciding with a focused scholarly attention towards the new data concerning what Jaubert coined "the old sacerdotal calendar," scholars rightly pointed out that the 364DY, with its rough 1.5 day discrepancy with the true solar year, could not be kept in line with the seasons, and, therefore, must have drifted slowly back through the seasons. In the absence of any textual evidence showing how this calendar was kept in line with the seasons, scholars such as Beckwith suggested that the calendar must have been a construct of the Essene group sometime in the mid-third century BCE. By the year 200 BCE or there about the group finally realized, so the argument went, that their innovation could not be kept in line with the seasons. As a result they were forced to abandon this ideal calendar. The latter only found some form of redemption as an tool used to compute cultic rosters that had little to do with reality and ritual praxis in the later parts of the Second Temple period. This was, and remained for a significant length of time, a valid argument and perhaps the most serious challenge to Jaubert's theory.

The present undertaking, however, identifies and challenges the assumptions which underline this position, namely, that there was a disconnection in practice between what the sources claimed about their cultic cycle, and what their followers actually adhered to.

1.1.1. *The Festivals in the Sources*

It was argued and demonstrated that all the sources reviewed, whether proponents of a lunisolar calendar or of a 364-day year tradition, considered the connection between the cultic cycle and the seasons to be an intrinsic reality in their exposition of the cycle of festivals. The festivals

¹ Jeremias, *Eucharistic Words*, 25.

of the Raising of the Sheaf, Weeks, and Tabernacles, all known to have strong connections with the agricultural cycle, were to be celebrated, according to the sources, at roughly the same times of the year. Further, the festival(s) of Passover and Unleavened Bread, with their implicit connection to the “morrow after the Sabbath” (Lev 23:15), were also closely dependent upon the agricultural cycle. It was argued and demonstrated above that, surprisingly, sources such as *Jubilees*, the *Temple Scroll*, and the Calendrical Documents, all proponents of the 364DY tradition, and theoretically more prone to move away from the agricultural year, provided more expansive legislations concerning the agriculturally-connected festivals, in some cases adding first fruits festivals and agricultural festivals of their own. *Jubilees* expanded the Genesis-Exod 12 story line by weaving in its narratives presenting the lives of the Patriarchs the statutes concerning the festivals. The *Temple Scroll* legislated for additional first fruits festivals (New Wine and New Oil). The Calendrical Documents incorporated these additional first fruits festivals in their rosters. Such picture runs counter to the assumption that these documents expounded a theoretical calendar not connected to the cycle of seasons. It rather strongly suggests that proponents of the 364-day calendar were concerned with keeping the cultic year and the agricultural cycle well in tune. It is interesting to note that to the knowledge of the present writer no textual evidence has been found to suggest that, at some stage in the copying process of the sources, which admittedly carried on well over a century, attempts were made to indicate a change of status of the legislations related to the observance of a cultic cycle dependent upon its connection with the agricultural year.

1.1.2. *First Fruits in Jubilees and at Qumran*

Both *Jubilees* (32:10) and the *Temple Scroll* (11Q19 xlili 3–11) give strict and precise instructions concerning the offering of first fruits and tithes. Both sources stipulate that first fruits could only be offered, and consumed, until the time of their corresponding new festival the following year had arrived. Consumption of the old fruit after the new first fruit festival was prohibited and considered a serious offense. Such legislation becomes difficult to understand in the context of a cultic year which would be dissociated from the agricultural cycle. In such context one would perhaps suspect to find greater attempts at spiritualizing a cycle of sacred time. Rather, the presence of such agriculturally minded legislations in documents that were copied well over two centuries strongly suggests that both documents, and the communities that adhered to the legislations and commands therein, considered their cultic cycles to follow the cycle

of the seasons. No other interpretation can quite so satisfactorily make sense of the textual evidence related to the legislations governing tithing and first fruit offerings. They presupposed a cultic cycle attached to the agricultural cycle, and they legislated for just that.

1.2. *The Second Passover in the Sources*

The present thesis also contributes original arguments demonstrating the negative impact the (general) second Passover was believed to play on calendrical practices by the author of *Jubilees*, and, to a lesser extent, at Qumran. The biblical accounts record that King Jeroboam, on his coming to power in the tenth century BCE, introduced a calendrical innovation and “appointed a festival on the fifteenth day of the eighth month like the festival that was in Judah” (1 Kgs 12:32). By so doing it is possible that Jeroboam reverted to a (pre-monarchic?) calendar, previously followed in the Northern Kingdom (1 Kgs 12). The narrative remains best understood against the background of a single-month discrepancy between the Northern Kingdom and Judah in matters calendrical. The *innovation* in the eighth (Judaean) month was, in the Northern reckoning, the seventh month, traditional time for the festival of Tabernacles.

The episode related in 2 Chr 30, concerning the postponement to the second month “for all Israel” of the Passover and the unleavened bread during the reign of King Hezekiah, can be best interpreted in this light. King Hezekiah, so the text argues, postponed the Passover and Unleavened Bread to the second (Judaean) month, the first month according to the former Northern calendrical reckoning, and traditional time for the celebration of Passover / Unleavened Bread. However, this postponement introduced in Judah a disconnection between the cultic calendar and the agricultural year. This is the reason which motivated the Chronicler to refer to “the third and seventh months” (2 Chr 31:7), and not to the festivals of Weeks and Tabernacles, as the times for tithing. The postponement of Passover together with Unleavened Bread occasioned the postponement of the Raising of the Sheaf on the “day after the Sabbath,” and of the festival of Weeks fifty days later. If only a second Passover had been celebrated then the argument would not stand, as the “day after the sabbath” would have been celebrated after the first Passover celebration, and the count of fifty days to the festival of Weeks would have started after the first Passover. However, in this instance both Passover *and* Unleavened Bread were celebrated in the *second* month. If such was the case there

must have been some kind of adjustment necessary, as the fifty-day-count to the festival of Weeks was also delayed to the second month. The distinction is important and must not be overlooked.

It is further argued that the author of *Jubilees* purposefully left the second Passover out in its rewriting of Num 9, incidentally the only Torah legislation which mentions the second Passover. In its place, the author of *Jubilees* inserted a calendrical warning to celebrate the Passover “once a year, on its day,” and “not to delay by a month” (*Jub.* 49:7, 8, 9, 10, 14). By acting thus, the author probably displayed his own bias against a festival that was known from biblical times potentially to introduce a disconnection between the cultic cycle and the agricultural year. Considering the position expounded by the author of *Jubilees* on the utmost necessity to celebrate the appointed festivals at the right time in his favored 364DY calendar, it is easy to see why the author kept silent about a second Passover, and instead insisted upon the celebration of the festival of Passover “once a year . . . on its day.”

The hypothesis is strengthened by the identification of the voluntary omission of the second Passover by the author of the *Temple Scroll*, another document known to follow the 364DY, and which expounds the law governing the cycle of festivals. That the second Passover is recorded in a few Calendrical Documents from Qumran does not constitute a significant challenge to the interpretation offered therein as, unlike the *Temple Scroll*, the latter documents were arguably concerned with recording the occurrence of all festivals within the roster of priestly service and paid no attention to the legislation governing tithing and first fruit offerings. From this perspective, there was little point in leaving the second Passover out, as it simply could not effect the synchronization between the cultic cycle and the agricultural cycle. This may also explain why the Calendrical Documents record two separate dates for Passover and Unleavened Bread, as if there were two festivals, whereas the book of *Jubilees* clearly considers Passover / Unleavened Bread as one festival.

It is to my knowledge the first time the hypothesis of a voluntary omissions of the second Passover on the part of the authors of *Jubilees* and *Temple Scroll* is put forward. If the hypothesis is correct, the omission from key documents concerned with the cycle of festivals and the laws governing tithing and first fruit offerings of a festival potentially troublesome for proper praxis is a strong indication that the proponents of the 364DY calendar indeed considered their calendar to be in proper sync with the cycle of seasons. The motivation for banishing this festival was

probably rooted in the precedent reported in the biblical account of Hezekiah's postponement of the Passover and Unleavened Bread to the second month, and the resulting disconnection between the cultic cycle and the agricultural year this engendered, as suggested by the text.

2. *Specific Calendrical Issues in Second Temple Judaism*

In the third part are identified some previously unnoticed aspects of the calendrical practices expounded in the *Book of Luminaries*, notably the existence at some stage in the tradition(s) of conflicting lunar reckonings. These were identified possibly in the midst of a calendrical polemic that centered around the use of the proper lunar reckoning to govern the 364DY. Admittedly these stand within the 364DY that accepts the role of the moon in matters calendrical, as expounded by the Book of *Sirach*, and as illustrated by those documents from the Dead Sea Scrolls corpus that synchronize the 364DY with lunar observation—be they observations of lunar phenomena or recording of periods of lunar visibility. In addition, this third part of our enquiry contributes original arguments that further advance the contemporary discussion concerning the identification and interpretation of the X and *dwq* dates in 4Q320, 4Q321 and 4Q321a.

2.1. *Antiquity of the 364-day Year Calendar*

With regards to the 364-day calendar of the *Book of Jubilees*, Jaubert can be credited with identifying its sabbatical structure, as well as its New Year start on the fourth day of the week. These findings have been largely corroborated by the discoveries of the Dead Sea Scrolls in the vicinity of Qumran. There is no consensus to date, however, on the question of the antiquity of the 364-day calendar. Jaubert suggested that it antedated the book of Ezekiel and, therefore, may well have antedated the exile in Babylon. This claim must remain hypothetical for the time being. Just as Milik's claim that the Astronomical work circulating under the name Enoch could probably be dated to the fifth or sixth century BCE. The evidence reviewed here indicates that the 364DY tradition is accounted for in second Temple sources from the late third century BCE to the first century CE. Outside of Judaea, the 364DY tradition was already known in Babylon as early as the seventh to sixth centuries BCE (Mul-Apin; *Ziqpu Stars*). There is little else that can be ascertained in light of the present state of knowledge which would not move into the hypothetical realm.

2.2. *Identification of a Forgotten Connection: Lunar Reckonings in the Book of Luminaries*

A serious consideration of difficult readings contained in some of the oldest manuscripts of the Ethiopic *Book of Luminaries* opened up some interesting and new possibilities. More specifically, it was argued that the existence in some mss of the α family of a textual tradition that stated that three lunar years counted 1030 days, and fell behind the sun by sixty-two days, was the indication that there were probably differing traditions of reckoning the lunar cycle, which sought synchronization with the 364-day year. It was further suggested that the oddity of the numbers could be explained if one posited a polemical aspect behind the textual tradition. This polemical background, suggested as the *Sitz im Leben* of the practice of synchronization of the 364-day tradition with competing lunar reckonings, was further supported by the evidence of 4Q209 Frgs 25, 26 and 27. Additionally, support was also drawn from external evidence, notably the Egyptian practice of reckoning the start of the month from the time of the disappearance of the last lunar crescent in the sky. The identification in the Calendrical Documents of a lunar reckoning, which matches one of the lunar reckonings identified in the Ethiopic *Book of Luminaries*, strengthens the interpretation offered.

At this stage of our knowledge, and owing to the lack of explicit textual evidence so far to confirm the hypothesis suggested, the concession must be made that the appeal to a scribal error to explain the difficult verse in *1 En* 74:14, as VanderKam does, cannot be totally dismissed and offers an elegant solution to the problem. The potential weakness of the scribal error solution, however, is its tendency to be rather oblivious to external evidence. In the case at hand it overlooks the continuous link identified between one of the two lunar reckonings expounded in the Ethiopic *Book of Luminaries*, and the lunar month at Qumran as identified from the X and *dwq* dates. This particular lunar reckoning is found nowhere else in Jewish sources of the period under investigation.

2.3. *Contribution to the Identification and Interpretation of the X and dwq dates in 4Q320, 4Q321 and 4Q321a*

Another possibly significant contribution is the positive identification, based on a close reading of the textual evidence available, of the X date with a day time phenomenon, and the *dwq* date as a night-time phenomenon. It was argued that the double dating (lunar/solar) of X in the first

month of the first year of the triennial cycle could only mark the time of the day when the solar and the lunar dating would differ by one unit, i.e., the day-time part. Likewise, the single-dated *dwq* in the first month of the first year could only mark the occurrence of a phenomenon which took place at a time when both lunar and solar reckonings shared the same date, i.e., the night-time. This new argument supports the identification of X as marking the time of the disappearance of the last crescent in the day time sky at the end of the lunar month, just before lunar conjunction. It also militates for the identification of *dwq* with the observation of a lunar phenomenon around the time of the full moon. The present argument provides some support to Ben-Dov's recent proposal to identify the Qumranic X date with the Babylonian KUR date.² However, it presents a serious challenge to his suggested identification of *dwq*, a night-time phenomenon, with the Babylonian *na*.

Last, the identification in the calendrical documents 4Q320, 4Q321 and 4Q321a of a lunar reckoning starting the month with the last disappearance of the lunar crescent in the sky before lunar conjunction, lends support to the proposition that there are two alternative lunar reckonings in the *Book of Luminaries*, one of which matches the lunar reckoning in use in the Qumran Calendrical scrolls. Once again, this particular lunar reckoning differs from that which is identified in any other Jewish sources of the period. A direct connection between the two sources cannot be entirely ruled out.

3. *Back to the Date of the Last Supper*

Having started this investigation from Jaubert's premise that the difficulties surrounding the discrepancies contained in the Passion Narratives of the four Gospels could be positively explained by the consideration that there were different, competing year reckonings in use in first century Judaea, it is now fitting to consider the ways in which parts Two and Three of the present thesis contribute to the question. In other words, how do the investigation of the relation between the cultic cycles and the agricultural cycles in the sources on the one hand, and the specific Second Temple calendrical issues identified and interpreted on the other and, contribute to the thesis defended here?

² Ben-Dov and Horowitz, "The Babylonian Lunar Three". See also Ben-Dov's Doctoral Dissertation: "Astronomy and Calendars at Qumran—Sources and Trends".

In relation to the issues surrounding the question of the date of the last supper the present enquiry seeks to demonstrate that: 1) a consideration of second Temple cultic cycles as expounded in the extant textual sources shows that all sources indicate *inter alia* that they considered their cultic cycles to be synchronized with the seasons; 2) a consideration of specific second Temple Judaism calendrical issues reinforces, by way of additional evidence, the hypothesis that there were, indeed, competing calendars followed by different strands of Judaism in Palestine in the centuries leading up to the first century CE. Both lines of enquiry, from the perspectives considered therein and within the limits of the textual evidence available, contribute to develop further our knowledge of the calendrical issues that are likely to have formed the backdrop to first century Palestine and to the events centering on the last few days of Jesus' earthly life. At the outset, the above findings clear the path for a thorough re-appraisal of the question surrounding the discrepancies recorded in the Gospels concerning the date and nature of Jesus' last supper with his disciples.

3.1. *Calendrical Variations in Second Temple Judaism and the Date of the Last Supper*

The present undertaking does not directly engage with the question surrounding the date of the Last supper in the New Testament. Rather, it identifies the key objection leveled against the theory, and sets out to answer this objection. The reprobation of what has arguably been, from a historical-critical perspective, the main objection leveled at the Jaubertian theory, does not constitute a positive endorsement of the original hypothesis. It only represents a positive step in removing a key objection to the original hypothesis. The lack of space in the present undertaking, largely due to the breadth and depth of the material covered, and the technical aspect of some of the arguments offered therein, represent the principle reasons for limiting this undertaking to a preliminary investigation. Admittedly the issues surrounding the date of the Last Supper are numerous and could not be adequately treated within the constraints of this book.

The present work does assert, however, that textual evidence from the last centuries of the second Temple period supports further the conclusion reached by others before: calendrical issues were at the epicenter of Judaism for very obvious reasons.³ Mircea Eliade once wrote:

³ See for instance the important work in this field by no lesser authority on the subject than Shemaryahu Talmon.

“the periodic re-actualization of the creative acts performed by the divine beings *in illo tempore* constitutes the sacred calendar, the series of festivals.”⁴ It is this very cultic cycle, this “succession of eternities,”⁵ as it is expressed in Judaism, that gives us a clue as to the extent to which calendrical issues really mattered. That which was at stake for the various groups within Judaism was the *re-actualization* of their sacred world *at the appointed times*. Biblical festivals fell on *appointed times*. Numbers (9:13) stated that the one who did not keep the Passover *at its appointed time* should “bear the consequences for the sin.” The Book of *Jubilees* (6:37–38) explicitly warned against making a profane day holy and a holy day profane. Those who did so would, according to *Jubilees*, “eat all the blood with all (kinds of) meat” (49:38c), a practice strictly forbidden (Lev 19:26), and associated with serious wrong-doing in the eyes of God: “Abstain from it [eating blood], that you and your children after you may prosper for doing what is right in the sight of the Lord” (Deut 12:23–25).⁶ Likewise, the book of Enoch linked calendrical (cultic?) and seasonal disconnection with the “days of the sinners” (1 En 80:2).

This limited sample of extracts is indicative of a perceived concern in second Temple Judaism with the observation of God’s festivals at the proper time—the *appointed times*. It also illustrates the connection drawn by the authors between sin and calendrical anomalies. The overarching issue is to do with the perceived sustenance of the temporal by the divine. It is also to do with the threat that disturbances to the divinely appointed order represents to the community, or to the “religious man” to use Eliade’s terminology.⁷ From this perspective it must come as no surprise that texts from the period and locale under investigation, which seek to expound the movements of the sun and the moon, contain indications of—at the very least—“discussion and disagreements,” and at best, full blown controversies, concerning the correct computing system to adopt. How the sun and moon were reckoned to command the years was debated, even within traditions following the same year length, as the differing positions between the Ethiopic *Book of Luminaries*, the *Book*

⁴ Eliade, *op. cit.*, 85.

⁵ As described by Hubert and Mauss, cited by Eliade, *op. cit.*, 88.

⁶ Cf. Lev 3:17. Interestingly the command not to eat “flesh with its lifeblood still in it” is the only negative ordinance formulated in the narrative describing the covenant between God and Noah (Gen 9:1–7, esp. 4). See also Deut 12:16.

⁷ Eliade, *op. cit.*, 68–113.

of *Jubilees*, and the Calendrical Documents from Qumran illustrate.⁸ Such discussion is relevant and pertinent to the present inquiry, and fitting as a preliminary investigation to the problem of the date of the Last Supper. No one would seriously dispute the centrality of the calendrical issue to the Quartodeciman controversy. Such controversies were rooted in the old traditions inherited from Judaism, and as such are connected directly to second Temple calendrical issues.

3.2. *The Cycle of Festivals and the Date of the Last Supper*

The background identified above also allows one to appreciate better the ramifications of calendrical disputes centering around the cultic cycle in second Temple Judaism. Sacred time is that time which allows one to re-experiment, re-enact the intervention of the divine in history, thus renewing and sustaining profane time.⁹ In Judaism this is nowhere better expressed than at the time of Passover, when the community recalled contemporaneously God's saving intervention in history.

If calendrical controversies were an issue for the different strands of Judaism in first century Palestine (and before), and the evidence here considered suggest that they were, then this issue impacts directly upon the interpretation of the events recorded in the Gospel passion narratives, regardless of how much or how little these narratives explicitly reveal on the issue. As indicated in the Introduction, the various theories put forward to account for the Gospel discrepancies contain difficulties. The chronology of the Synoptic tradition is flawed if one takes seriously the indication in John 18:28 that the Jews had not yet eaten the Passover for fear of defilement. The chronology of the fourth Gospel is probably correct in indicating that Jesus died at the time of the slaughtering of the Passover lambs in the Temple, as supported by external evidence (b. *Sanh.* 43a, 67a). Yet, the compelling case presented by the Synoptic tradition, as argued by J. Jeremias, that the Last Supper was indeed a Passover meal represents a strong and valid argument, which prevents one from dismissing the Synoptic tradition too hastily. Hence the second alternative, Jaubert's theory, that there was probably in the background to the actual events two differing calendars has much to commend itself. Each calendrical tradition displays characteristics that can explain satisfactorily some key aspects of the passion narratives. The 364DY tradition, with its

⁸ *Jub.* 6:32–38 denies that the moon plays any role in the reckoning of the year.

⁹ Eliade, *op. cit.*, 89.

Passover celebrated on a Tuesday every year, would allow for the presence of the Passover elements to the meal. It would also allow precious additional time for the otherwise very tight chronology of events defended by the proponents to the Thursday arrest-Friday execution of Jesus.

The official, lunisolar tradition, which is kept in the fourth Gospel, allows the conclusion that Passover was celebrated, according to this calendar, that very year on a Friday evening at the start of the Sabbath. The main difficulty with the 364DY tradition was to assert whether it was aligned with the lunisolar calendar the year Jesus died, so much that its Passover celebration fell on the Tuesday of passion week. Whereas this particular issue still remains to be considered further, the present enquiry demonstrates that, based on the textual evidence available about the 364DY tradition, there is no real ground to posit a year dissociated from the cycle of seasons. In other words, on the balance of probability, the 364DY was, that particular year like in any other year, aligned with the cycle of seasons. Therefore, its own celebration of Passover took place on a Tuesday, not far removed from the celebration of Passover in the official calendar.

3.3. *On the Question of Intercalation of the 364-day Year*

It has not been possible here to consider in depth the question of intercalation of the 364DY tradition. This means that the calendar objection identified as the main objection leveled at Jaubert can only positively be dealt with as far as the extant primary sources are concerned. No *smoking gun* that would tell scholars how exactly the proponents of the 364DY kept their calendar aligned with the seasons has been identified. As a result the affirmation that intercalation of the 364DY observed in Judaea sometime from the third century BCE to the first century CE must have taken place is to remain theoretical still. Of course, the argument against the practicability of the 364-day calendar, based on the absence of any such *smoking gun*, remains itself primarily an argument from silence that flies in the face of the considerable textual evidence considered here with regard to the festivals and their observations.

Since the important discussions on the subject articulated by Glessmer and by Albani, scholars have added several pieces to the puzzle. There is first the stone roundel, found in Qumran locus 45.¹⁰ The instrument has been interpreted as an astronomical measuring device, allowing the

¹⁰ M. Albani and U. Glessmer, "Un instrument de mesures astronomiques à Qumrân," *Revue biblique* 104 (1997): 88–115.

determination of the four cardinal points, as a sundial, and as an odometer.¹¹ It is possible that the question of the exact nature and purpose of the roundel will contribute further to the discussion surrounding the issue of intercalation of the 364DY. Such discussion must be delayed until a later date. Second, important connections have been highlighted between the 364DY tradition found in most of the Dead Sea Scrolls and Mesopotamian astronomy.¹² It is likely that further efforts in this promising direction will bring more light to the subject. Third, scholars have also found connections between the 364DY tradition from *Jubilees* and specific aspects of liturgical practices followed in the early Jerusalem church and in some strands of early Christianity.¹³ This will also contribute to the research effort.

4. *Areas for Further Enquiries*

First, it convincingly deals with the calendar objection leveled against the Jaubertian theory by demonstrating that the sources which followed a 364-day year were very likely to have followed a calendar they professed was attached to the seasons. Thus, by removing the main objection to Jaubert's theory, the present work paves the way for the systematic reappraisal of further aspects of Jaubert's theory at a later stage. Of particular importance will be a thorough investigation of the treatment of

¹¹ Albani and Glessmer, *op. cit.*, 106–14; G.M. Hollenback, "The Qumran Roundel: An Equatorial Sundial?" *Dead Sea Discoveries* 7 (2000): 123–9, argued that the object could help the determination of constant solar hours, resulting in varying number of hours in day and night according to the seasons. B. Thiering, "The Qumran Sundial as an Odometer Using Fixed Lengths Hours," *Dead Sea Discoveries* 9, no. 3 (2002): 347–63, suggested that the device was probably used as a portable odometer, which allowed one to measure distances walked in terms of time. As recently as 2004 the discussion on the exact nature of the device was still developing. Cf. G.M. Hollenback, "More on the Qumran Roundel as an Equatorial Sundial," *Dead Sea Discoveries* 11 (2004): 289–92.

¹² Ben-Dov and Horowitz, "The 364-Day Year in Mesopotamia and Qumran"; Ben-Dov and Horowitz, "The Babylonian Lunar Three"; Ben-Dov, "Astronomy and Calendars at Qumran—Sources and Trends" See also the discussion above on the identification of X and *dwq*.

¹³ B. Lourié, "Les quatre jours 'de l'intervalle': une modification néotestamentaire et chrétienne du calendrier de 364 jours," in *L'Église des deux Alliances: Méorial Annie Jaubert (1912–1980)* (eds B. Lourié, M. Petit, and A. Orlov; OJC 1; Piscataway, NJ: Gorgias Press, 2008), 103–33; M. van Esbroeck, "L'année régulière de 364 jours dans la controverse au sujet de Chalcédoine," in *L'Église des deux Alliances: Méorial Annie Jaubert (1912–1980)* (eds B. Lourié, M. Petit, and A. Orlov; Orientalia Judaica Christiana 1; Piscataway, NJ: Gorgias Press, 2008), 97–102; W.D. Ray, "August 15 and the Development of the Jerusalem Calendar," Ph.D. diss. (University of Notre Dame, 2000).

the subject of Passover among Christian writers in the first five centuries of the present era. Jaubert had already gathered a substantial body of Patristic literature, which must be reconsidered at greater depth than was affordable in the present undertaking.

Second, some new, so far undefined, characteristics pertaining to particular traditions in the 364DY tradition are identified, such as the avoidance of the second Passover. Such avoidance was identified in *Jub.* 49. In addition, one may note that those documents from the Dead Sea Scrolls corpus which do list the purely agricultural feasts of New Oil and New Wine (such as 4Q325; 11QT^a) do remain silent about a second Passover, whereas those documents which *do not* list those purely agricultural feasts do mention the second Passover. So much so that one may venture the following hypothesis: in documents concerned with the *practicability* of the 364DY, the second Passover is omitted because of its potentially disrupting impact upon the synchronization of the cycle of festivals with the cycle of seasons. If the hypothesis, which no doubt will require further refinement, is correct, it will increase our understanding of this calendar, and encourage anew further investigations. If it is becoming increasingly difficult to doubt the practicability of the 364-day year, scholars are still at a loss to explain how the calendar was kept in line with the seasons. Avoidance of the second Passover may be a clue in the right direction. More studies on this particular issue are called for.

Third, the thesis proposes fresh interpretations of difficult readings of the *Book of Luminaries*. If accepted, these will also generate a renewed interest in the field by opening new possibilities. In particular, the interconnection between Jewish astronomy and astronomical works from neighbouring civilizations may generate further fertile grounds.

Fourth: the thesis provides new arguments in favor of the identification of the X and *dwq* dates recorded in 4Q320, 4Q321, and 4Q321a, thus also partly confirming a recent scholarly hypothesis linking the dates with lunar observations in Babylonia. From this perspective, a fresh investigation of the proposal of Jerome Murphy O'Connor that influential for the rise of the Essene movement was a Persian influenced sector of Judaism, based on late returning groups from the exile in Babylon, would likely be beneficial.¹⁴

¹⁴ J. Murphy O'Connor, "Demetrius I and the Teacher of Righteousness," *Revue biblique* 83 (1976): 400–420; J. Murphy O'Connor, "The Essenes in Palestine," *Biblical Archaeologist* 40 (1977): 100–124.

APPENDIX

THE 364-DAY YEAR, THE LUNAR CYCLE, AND THE TRIENNIAL CYCLE

1. *The 364-DY Triennial Cycle*

This annual cycle is very straight forward: each year counts 364 days, amounting to a total of 1,092 days per triennial cycle. The length of this cycle is indicated indirectly in *1 En* 74:14 through a reference to the length of a triennial lunar cycle counting 3×354 days = 1,062 days, to which 30 days are to be added in order to keep the cycle synchronized with the 364 DY triennial cycle of 1,092 days.

In the calendrical scrolls from Qumran cave 4 this 364-DY triennial cycle is integrated with the rotation of weekly temple service of the twenty-four priestly families known from the biblical book of *1 Chr* 24. This is evidenced in particular by the *Mišmarot* documents, so called because they record the occurrences of cultic dates (sabbaths, festivals, first day of the year, of the month, and of the year quarters) during the week of temple service of such or such priestly family during any given year of the sexennial cycle. This integration of the two cycles allows for an equal allocation of temple weekly service between the twenty-four priestly families over a duration of six years. In other words, during each sexennial cycle each priestly family served in the temple for a combined thirteen weeks.

2. *The Lunar Triennial Cycle*

The lunar year accrues to 354 days, divided into twelve months, six months of 29 days, six months of 30 days, in an alternating sequence, starting with a 29 day month, as suggested by *1 En* 73:4. The verse reads: "In this way it rises with its beginning towards the east, it emerges on the thirtieth day, and on that day it is visible. It becomes for you the beginning of the month on the thirtieth day with the sun in the gate where the sun emerges." This verse may well describe the last lunar phase before lunar conjunction: the moon rises during the night and is visible in the sky at day break, the thirtieth day of the month, and remains visible for a good period of the day.

The indication “on that day it is visible” would not make sense if the moon was visible in the daytime sky only for a short period of time, as is the case in the early stages of the lunar phases (first crescent and subsequent days). Daytime lunar visibility is minimal around the time of the full moon, while following the full moon phase the daytime period of lunar visibility increases every day until the last day of the lunar phase. On the last day of the lunar phase the moon disappears in the daytime sky, entering its period of linear alignment with the earth and the sun, standing between the two. This period is typically referred to as *lunar conjunction*. The moon becomes visible again from the earth about a day and a half later, when the first crescent indicating the start of the next lunar phase is observable in the evening sky (before night).

The identification of the beginning of the month in *1 En* 73:4 as “the thirtieth day with the sun in the gate where the sun emerges” suggests that the day of disappearance of the last lunar crescent in the daytime sky marks the end of the lunar month. This in turn indicates that the lunar month starts, according to *1 En* 73:4, at the point when the last lunar phase ends and the moon enters its period of conjunction. This thirtieth day of the sun becomes the first day of the subsequent lunar month.

Whether starting with the full moon, the sighting of the first crescent, or the disappearance of the last crescent, or indeed with *any* given lunar phase, the triennial lunar cycle adds up to 3×354 days = 1,062 days. Knowledge of this triennial cycle is explicitly indicated in *1 En* 74:14 “For the moon alone, the days in three years come to 1,062.” It is implicit in the calendrical scrolls from Qumran which synchronize the lunar cycle with the base 364-DY (e.g. 4Q320, 4Q321 and 4Q321a).

3. *The 364-DY Triennial Cycle and Lunar Synchronization*

As suggested by the content of the *Astronomical Book* on the one hand, and by the *Mišmarot* document from Qumran cave 4 on the other hand, attempts were made at synchronizing the 364 day year with the lunar year. If the arguments developed in chapter 7 above are correct, the computing of the X and *dwq* dates in 4Q320, 4Q321 and 4Q321a suggest that the 364 day year triennial cycle was synchronized at Qumran with a (astronomical) new moon start lunar reckoning, i.e. with a lunar month reckoned to start at the time of disappearance of the last lunar phase in the daytime sky. This, however, is unlikely to have been at any given point during the second temple period a unified practice.

The somewhat cryptic material preserved in ms *Tanag* of the *Astronomical Book*—especially chapter 74—becomes more intelligible once one posits a synchronization of the 364-DY together with the lunar year. For a group synchronizing the 364-DY together with a *full moon* start lunar reckoning, the *new moon* start lunar reckoning would appear to behave oddly when measured against the 364-DY / full moon triennial cycle. From a certain perspective it can be said to start 16 days before the actual start of the synchronized 364-DY/full moon triennial cycle, and to end 16 days before the actual completion of the triennial full moon cycle. The arguments are developed in chapter 6 above.

Synchronized 364-DY/full moon lunar reckoning:

$$\begin{array}{rcccc}
 & 364 \text{ days} & & 364 \text{ days} & & 364 \text{ days} & & = 1,092 \text{ days} \\
 [& \text{-----} &] & [& \text{-----} &] & [& \text{-----} &] \\
 & 354 \text{ days} & & 354 \text{ days} & & 354 \text{ days} & & 30 \text{ days} & = 1,092 \text{ days} \\
 [& \text{-----} &] & [& \text{-----} &] & [& \text{-----} &] & [& \text{---} &]
 \end{array}$$

New moon lunar reckoning measured against the competing 364-DY/full moon:

$$\begin{array}{rcccc}
 (-16d.) & 354d. & & 354d. & & 354d. & & -16d.-30d. & = 1,030 \text{ days} \\
 [-] & [\text{-----} &] & [\text{-----} &] & [\text{-----} &] & [-] & [\text{---} &] \\
 1092 \text{ days} - 1030 \text{ days} & = & 62 \text{ days} & (16 + 16 + 30)
 \end{array}$$

From the perspective of an adherent of the 364-DY/full moon lunar reckoning, when measured against the “correct” 364-DY/lunar synchronization (full moon lunar reckoning), the triennial (astronomical) new moon lunar reckoning may be dismissed as lasting “only” 1,030 days, and as “falling” 62 days behind the sun, just as is recorded in 1 *En* 74:14 in ms. *Tana*⁹ “for the moon singly in three (years) its days add up to one thousand thirty days, so that it falls behind by sixty two days in three years.” The *sixty two* day discrepancy was derived from the fact that, a) the first 16 days of the 364-DY/new moon reckoning stood outside of the correct 364-DY/full moon reckoning and therefore could not be counted from the perspective of the latter; b) the 364-DY/new moon reckoning ended 16 days earlier than the correct 364-DY/full moon reckoning; and c) the lunar triennial cycle—in whatever reckoning—fell 30 days behind the 364-DY triennial cycle. The assertion in ms. *Tana*⁹ becomes intelligible: 16+16+30 = 62, the amount of days by which the triennial lunar reckoning is singled for falling out of synchronization with the 364-DY triennial cycle.

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