CHAPTER

1

The Formation of the Bible

James Chukwuma Okoye, CSSp

Introduction

The word "Bible" comes from the Greek *ta biblia* ("the books"), for the Bible is a library of books that Christians regard as inspired by God, a collection that spans many centuries. Jews more often call the collection the Miqra, meaning "a reading," or Tanak, an acronym of the letters TNK, representing the three divisions of the collection: Torah (Law), Nevi'im (Prophets), and Kethuvim (Writings). Jews and Christians believe that God's people first transmitted God's word orally. These oral traditions were eventually put into writing, adapted, or expanded, in order to reflect the communities' fresh experiences of God. The term "Scripture" is also sometimes used for such writings.

Another term sometimes applied to this collection is "canon" (from the Greek, $kan\bar{o}n$). The word means a rule or measuring cane, and it is used also for lists of works that set the standard in literature or art. In reference to the Bible, the canon is "a fixed collection of Scriptures that comprise [the] authoritative witness for a religious body."¹ Although the notion of a canon implies a stable collection, a canon may allow tensions to stand. In the New Testament canon, for example, letters bearing Paul's name but written by others stand alongside authentic letters of Paul. A more striking example of tension is found in Exodus 20:5–6 and Deuteronomy 7:10. The former says that the punishment for crimes committed by fathers will fall

^{1.} Lee Martin McDonald and James A. Sanders, introduction to *The Canon Debate*, ed. Lee Martin McDonald and James A. Sanders (Peabody, MA: Hendrickson, 2002), 3–20, at 11.

upon their children. The latter, however, asserts that God "repays with destruction *those who hate him*; he does not delay with those who hate him, but makes *them* pay for it" (NABRE; italics added)—rejecting trans-generational retribution for individual retribution.

Canons also differ among and even within traditions. This is seen especially in the various collections of Jewish Scriptures. For example, the Hebrew Bible contains thirty-nine books arranged in tripartite form (Torah, Prophets, and Writings). The ancient Greek version, called the "Septuagint" (discussed below), had about fifty books in a fourfold arrangement: Pentateuch (Law), Historical Books, Poetic Books, and Prophets. In the various Christian traditions, the books of the Old Testament follow the divisions of the Septuagint. The Protestant Old Testament has the same number of books as the Hebrew Bible (thirty-nine), while the Roman Catholic has forty-six, the Greek Orthodox has forty-eight or nine, and the Ethiopian Orthodox has fifty. For Jews, Torah is the center of revelation and the books of Judges–2 Kings are "prophets." For Christians, Judges–2 Kings (with the addition, in many denominations, of certain books from the Septuagint) are "history."

The picture is much simpler with regard to the New Testament. All Christians now accept the same twenty-seven books.

The Hebrew Bible—Christian Old Testament

While the Jewish Tanak and the Christian Old Testament contain many of the same books, they remain distinct collections. "Old Testament" is a Christian term. Paul referred to the Scriptures of Israel as the "old covenant" (2 Cor. 3:14), and in Luke 22:20 Jesus proclaimed a "new covenant." The Septuagint rendered the Hebrew word for covenant (*berit*) with a word more often translated as "testament" (*diatbēkē*). Irenaeus of Lyon (130–200 CE) was the first to speak of an "Old Testament" and a "New Testament." Today, some Christian scholars prefer to speak of the "First Testament" in order to avoid the implication that the Hebrew Scriptures are outmoded or obsolete; rather, they are the foundational revelation for understanding the New Testament.

No matter which collection is the focus of study, the Tanak or the Christian Bible, these collections are the end product of a long history of, first, composition; second, collation into a collection; and third, acceptance as sacred texts. While some of that history is the same for Jews and Christians, the formation of the Christian Bible is more complex.

The Pentateuch

Some of the poetic pieces of the Pentateuch appear to be as early as the twelfth century BCE (Exod. 15:1-18 [the Song of Moses] and Deut. 33). Outside the Pentateuch, Judges 5, and Psalm 29 also seem quite ancient, with parallels in non-Israelite writings dating from the fourteenth to twelfth centuries BCE. Such early examples of poetry, which is generally transmitted orally, remind us that pre-literate communities generally preserve communal history through oral tradition. Gerhard von Rad believed that Genesis, Exodus, Leviticus, Numbers, Deuteronomy, and Joshua grew out of a "cultic credo" (Deut. 26:5-9) recited in the central shrines of Gilgal and Shechem, with the following broad themes: Exodus from Egypt, entry into the promised land, patriarchal stories, wilderness wanderings, and Sinai and covenant.² These credos would have been expanded into written historical units by various writers at different stages in Israel's history. The prevailing theory of Julius Wellhausen (1878), called the Documentary Hypothesis, posits four writers over a period from the tenth century BCE until about 400 BCE.

The Documentary Hypothesis: J E D P

Scholars have long noticed repetitions, contradictions, and inconsistencies throughout the Pentateuch. These can best be explained by thinking of the composition of these texts as occurring over centuries, first through gathering oral traditions, and later by editing and adding to these traditions to address new situations in Israel's history.

(continued)

^{2.} Gerhard von Rad, "The Form-Critical Problem of the Hexateuch," in *The Problem of the Hexateuch and Other Essays*, trans. E. W. Trueman Dicken (New York: McGraw-Hill, 1966), 1–78.

The Documentary Hypothesis: J E D P (continued)

Although specific theories about the formation of the Pentateuch are quite varied, the model proposed by Wellhausen provided the vocabulary for this history until recently, but is increasingly being challenged. These written traditions are called "sources." This chart³ summarizes the main features of these four sources as proposed by Wellhausen.

	Yahwist (J)	Elohist (E)	Deutero- nomist (D)	Priestly Writer (P)
Date	United monarchy	Divided monarchy	Reign of Josiah (Judah alone)	End of the exile
Place	Southern kingdom	Northern kingdom	Southern kingdom	Judah
Divine Name	Uses Yahweh through- out the Pentateuch.	Uses <i>Elohim</i> exclusively until the divine name is introduced in Exodus.	Not applicable	Uses <i>Elohim</i> exclusively until the divine name is introduced in Exodus.
Reli- gious Features	Sacrifice is offered in dif- ferent loca- tions. Priests and heads of house- hold offer sacrifices.	Sacrifice is offered in dif- ferent loca- tions. Priests and heads of house- hold offer sacrifices.	Only the Lev- ites can make sacrifices in the one place God chooses.	Only the offspring of Aaron can make sacrifices. A single place of sacrifice is assumed.
Literary Features	Lively nar- rative and anthropo- morphic view of God.	Lively nar- rative and anthropo- morphic view of God.	Sermonic, with char- acteristic phrases.	Preserves traditions, such as genealogies, precise loca- tions, and ages. Regal view of God.

^{3.} Corrine L. Carvalho, *Encountering Ancient Voices* (Winona, MN: Anselm Academic, 2010), p. 34.

More recent evaluation of the sources of the Pentateuch has challenged parts of this model. Some scholars postulate that Israel's national and religious traditions in the Pentateuch were transmitted primarily in oral form in twin traditions (the P-composition and the D-composition) that merged during the exile. Whatever the precise details of the formation of the Pentateuch, it was in a form close to what is in the Bible today before 300 BCE, evidenced by the fact that the Samaritans, who split from Judea about that time, retained a Pentateuch (the Samaritan Pentateuch) close in form to the Hebrew Torah, but with multiple variations.

The Historical Books

Another significant collection of material is found among the historical books. How this collection came together and then eventually was combined with the Pentateuch is a matter of speculation. Many scholars believe that the Deuteronomistic History (Deuteronomy–2 Kings) was first composed either under King Hezekiah (716–687) or King Josiah, and was later supplemented during the exile. At some point, this historical collection was combined with Genesis–Numbers. Others propose that the corpus of Deuteronomy–2 Kings was the work of an exilic editor. Deuteronomy was later detached from this corpus and attached to Genesis–Numbers to close the period of Mosaic revelation. Still other scholars propose a Primary History (Genesis to Kings) which was the Bible of the exiles. What is clear is that many of these books bear the stamp of an exilic redaction or composition.

The Prophets

Outside of the Pentateuch and the Deuteronomistic History, the biblical books tend to be discrete texts, each with its own history of composition. The history of the collation of these discrete books into other larger collections is obscure. For example, it is clear that many of the prophetic books passed through an oral stage before being written down. Already in the eighth century, Isaiah recorded and sealed an apparently unfulfilled prophecy (Isa. 8:16). Jeremiah wrote down all his prophecies and repeated the exercise after King Jehoiakim burned the first scroll (Jer. 36).

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The book of Isaiah offers a classic example of a prophetic book passing through many different stages. The historical prophet, Isaiah of Jerusalem, delivered his oracles primarily in prophetic speeches, the oral stage of the material. These oracles were eventually written down, but this written stage led to further expansions and development. The book of Isaiah now contains oracles related to three diverse contexts: Isaiah 1–39 (largely the eighth century), 40–55 (the exilic context, 586–539 BCE),⁴ and 56–66 (the postexilic context, around the fifth century BCE). Even within that broad sweep, more recent material can be found; Isaiah 24–27 (called the Isaiah Apocalyse) was probably added in the third century BCE.

This complex process of composition is found in other prophetic books as well. For example, the book of Jeremiah exists in at least two versions: a Hebrew version preserved in the Jewish canon (sometimes called the "Masoretic Text") and the Septuagint version, based on a different Hebrew version, which is one-eighth shorter. In contrast to Isaiah and Jeremiah, however, the book of Ezekiel may have originated as a written collection, although even that written form developed over time with significant variations found in various ancient manuscripts.

Although the shorter prophetic books each have their own history of composition, they were eventually brought together to form a fixed list of twelve minor prophets. Within the Jewish tradition, they are counted as one "book," perhaps because they were often written on one scroll. Many scholars agree that the collection started with the books of Hosea and Amos. Beyond this, no consensus exists.⁵ The Septuagint included Daniel among the prophets, although the Hebrew Bible places it among the Writings. Some collections of the prophets were stabilized by the first century BCE/CE.

^{4.} H. G. Williamson, *The Book Called Isaiah: Deutero-Isaiah's Role in Composition and Redaction* (Oxford: Clarendon Press, 1994), 241. "In order to locate his message in relation to the earlier and continuing ways of God with Israel [Deutero-Isaiah] included a version of the earlier prophecies with his own and edited them in such a way as to bind the two parts of the work together" (240–41).

^{5.} For one influential reconstruction, see James Nogalski, *Literary Precursors to the Book of the Twelve* (Berlin: Walter de Gruyter, 1993), 282.

The Septuagint

There are versions of the Hebrew Bible in various ancient languages, such as Aramaic, Syriac, Latin, and Coptic, but the most important is the ancient Greek translation, call the Septuagint, which became the basis for the Christian Old Testament. The Letter of Aristeas (between 130 and 70 BCE) narrated the myth of seventy-two translators, six from each of the twelve tribes, summoned from Palestine to Alexandria by the Hellenistic king, Ptolemy II Philadelphus (285-246), to produce a Greek version of the Torah. This translation came to be called the Septuagint, meaning "Seventy" (abbreviated LXX). At first only the Torah (Genesis-Deuteronomy) was translated, suggesting that it was the only part of the Hebrew Bible to have reached some fixity at that time. By the second to early third centuries CE, "Septuagint" referred to a Greek translation of the entire Bible. It also seems to have been the Bible used by the first Christians: when the New Testament authors quote the First Testament, more than 90 percent of the time they use the Septuagint.⁶

The Dead Sea Scrolls

The Dead Sea Scrolls were discovered in the Judean wilderness around a site called Qumran, near the Dead Sea, from 1947 to 1956. These scrolls, dating from around the mid-second century BCE to around 70 CE, attest to the fluid state of the text of the Old Testament at that time. Among the scrolls were found Hebrew and Aramaic copies of scriptures that would be excluded from the Hebrew Bible but would be preserved in Greek translation in the Septuagint, such as Sirach, Tobit, Psalm 151, and the Letter of Jeremiah (in Hebrew and Greek).⁷ The six Jeremiah fragments from Qumran belong to two different text types: a shorter text resembling that of the Septuagint (4Q Jer^b and 4Q Jer^d),

^{6.} Lee Martin McDonald, The Biblical Canon: Its Origin, Transmission, and Authority (Peabody, MA: Hendrickson, 1995), xvii, 35.

^{7.} Further evidence of the circulation of Greek translations of the Scriptures in Palestine at that time is offered by fragments of a Greek version of the book of the Twelve Prophets (dating from ca. 50-100 CE), at Muraba'at near Bethlehem.

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ומאכלויעלהעליוי עשיר ימחק שאר ובחליחוקתפייעשמת אנת מחיה תפריו נומה ואנדינוחלקבל הכבל יבוח לא נחוה TTATATT שחוש

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Fragments of the original Hebrew text of Sirach have been found among the Dead Sea Scrolls and in the Cairo Geniza, the source of the fragment shown here. Sirach did not become part of the Hebrew Bible, but was included in the Septuagint and Vulgate.

and a longer one resembling the Masoretic Text (4Q Jer^a and 4Q Jer^c).⁸

The group who hid these texts also preserved other Jewish texts, some of which may or may not have been considered sacred, such as *1 Enoch, Jubilees*, and the *Temple Scroll.*⁹ The variations found among documents that would eventually be included in the Bible show that the text was not yet fixed. One mid-second-century BCE sectarian text (4QMMT) yields some evidence of an emerging canon when it speaks of blessings and curses "in the book of Moses [and] in the book[s of the Pr]ophets and in Davi[d and in the events] of ages past."¹⁰ This suggests a canon of Torah and Prophets, possibly an emerging third section (indicated by "David," that is, the Psalms), and maybe even a fourth section that covers historical writings (similar to the four divisions of the Septuagint).

^{8.} Cf. James VanderKam and Peter Flint, *The Meaning of the Dead Sea Scrolls* (San Francisco: HarperSanFrancisco, 2002), 134.

^{9.} Ibid., 177-79; see also James C. VanderKam, "Questions of Canon Viewed through the Dead Sea Scrolls," in *Canon Debate*, ed. McDonald and Sanders, 91-109, at 108.

^{10.} VanderKam and Flint, The Meaning of the Dead Sea Scrolls, 170.

The Canonization of the Hebrew Bible— Christian Old Testament

Before discovery of the Dead Sea Scrolls, the consensus among scholars was that the collection of Torah closed by about 400 BCE, Prophets by 200 BCE, and the Writings around 90 CE. Now it is clear that the process of canonization was longer and more complicated, and that it varied within both Judaism and Christianity. The "praises of famous men" in Sirach 44–50, written ca. 182 BCE, follows the order of the Pentateuch (the five books of Moses), Joshua–2 Kings, Isaiah, Jeremiah, Job, the Twelve Prophets, and Nehemiah. The foreword to the Greek translation of Sirach, which was written slightly later (ca. 117 BCE), refers to apparently closed sections of "Law and Prophets" and an indeterminate third section, referred to as "the rest of the books," and "the others that followed them."

In Luke 24:44, Jesus speaks of "the law of Moses, the prophets, and the psalms," with "psalms" perhaps representing an emerging section. In the late first century, Josephus (*Against Apion* 1.37–42) was the first to list the books of a Hebrew canon. This list numbered twenty-two books, the number of the Hebrew alphabet: five books of Moses, the prophets in thirteen books covering Israelite history, then four books of hymns and "instructions."¹¹ In the extra-biblical *4 Ezra* 14:23–28 (ca. 100 CE), Ezra dictated ninety-four books, twenty-four for everybody (corresponding to the Hebrew numbering of the current Hebrew canon) and seventy reserved for the wise.

Jewish texts like the Mishnah and the Talmud give further evidence of how the canon developed in Jewish tradition.¹² *Mishnah Yadayim* 3:5 (the Mishnah dates to 200 CE) reports a discussion at Jamnia (Hebrew: *Yabneb*) toward the end of the first century CE about whether Qohelet (Ecclesiastes) and the Song of Songs "defile the hands," that is, are sacred Scripture. A passage in the Talmud that contains discussions between rabbis at the end of the second century CE lists by name the current twenty-four books of the Hebrew Bible in its three sections (*B. Baba Batra* 14b).

^{11.} Barclay suggests this refers to wisdom texts like Proverbs and Ecclesiastes; *Flavius Josephus: Translation and Commentary*, ed. Steve Masonvol, vol. 10, *Against Apion*, trans. by John M. G. Barclay (Leiden and Boston: Brill, 2007), 30.

^{12.} See chapter 7, "Christians, Jews, and Muslims: People of the Book."

The New Testament

The formation of the New Testament canon was also a complex process. Christians regard Jesus Christ as the center of God's revelation. So the sayings of Jesus and traditions about him from witnesses who knew him were of paramount importance to the early believers, but at first these circulated in oral form only. Until about the end of the second century CE, "Scripture" for the early church meant the Greek Old Testament. First Corinthians seems to refer to the words of Jesus as having some normative force as well (see 7:10, 25; 9:14). Additional sayings continued to circulate, some of them later collected in the *Gospel of Thomas*.¹³ Joachim Jeremias compiled a list of 266 sayings of Jesus found in texts outside of the New Testament.¹⁴ Together, these show that there was a vibrant oral stage to the formation of early Christian texts, some of which became part of the New Testament.

The Greek word for "gospel," *euangelion*, originally referred to oral preaching about Jesus Christ, and occurs in that sense throughout Paul's letters, the authentic letters of Paul being the first known Christian literature. As Christian communities spread throughout the Roman Empire and began to be established and the apostles and eye-witnesses of Christ's ministry began to die, the Christian movement needed written records of this gospel. The first such written Gospel was that of Mark, possibly written between 66 and 70 cE, when the Temple was destroyed. Other written Gospels followed, Matthew and Luke around 80–85 cE and John around 90 cE.

The collection of these texts as sacred or canonical Scripture, however, varied among different groups. Marcion (early second century), the first author known to have used the term *euangelion* for a book or writing, accepted as Scripture only ten of Paul's letters and an edited Gospel of Luke. In his argument with gnostic Christians, Irenaeus of Lyon (ca. 170–180) developed a principle called the *regula fidei* ("rule of faith"), based on varying lists of affirmations

^{13.} The *Gospel of Thomas* is a gnostic work containing sayings of Jesus in gnostic clothing. Some scholars think it preceded the canonical Gospels, but the majority hold it to date from the early second century CE.

^{14.} Joachim Jeremias, *The Unknown Sayings of Jesus*, trans. R. H. Fuller (London: SPCK, 1958).

drawn from the Scriptures themselves, that were upheld as parameters for the authenticity of scriptural writings. He was also one of the first to call Christian writings Scripture.¹⁵

One factor that contributed to the development of a fixed Christian canon was the Christian preference for the codex from at least 100 cE. The codex was bound like modern books as opposed to a scroll; this format made it possible to gather a large number of writings into a single book.¹⁶ The letters of Paul were the first to be collected; 2 Peter 3:15–16 (ca. 140–150 cE) refers to them as Scripture.

Several gospels circulated in the second century in addition to the four that now stand



P⁴⁶ is a third-century codex of the writings of Paul. The page shown here is from Hebrews, which was thought at the time to have been authored by Paul. Many scholars believe that the collected Pauline writings formed the nucleus around which the New Testament grew.

in the New Testament; examples include the *Protevangelium of James*, the *Gospel of Peter*, and the *Gospel of the Hebrews*. The divergences between the various gospels raised questions. By about 200 CE, the four Gospels and thirteen letters of Paul were widely accepted.¹⁷ Eusebius (*Ecclesiastical History* 3.25.1–17), ca. 320–342, set out the first identifiable list of New Testament Scriptures, dividing them

^{15.} Harry Y. Gamble, "Canon: New Testament," in *Anchor Bible Dictionary*, edited by David Noel Freedman et al. (Doubleday: New York and London, 1992), 1:852–61, at 855.

^{16.} Unlike a scroll, one writes on both sides of a page of a codex, effectively doubling the amount of text carried by a given number of pages. Also, the codex format could contain a larger number of pages than a scroll without becoming unwieldy.

^{17.} Harry Y. Gamble, "The Formation of the New Testament Canon," in *A History of Biblical Interpretation*, ed. Alan Hauser and Duane Watson (Grand Rapids: Eerdmans, 2003), 1:409–29, at 416.

into three categories: *recognized* as Scripture were four Gospels, fourteen Letters of Paul, 1 John, 1 Peter, and possibly Revelation; *disputed* were James, Jude, 2 Peter, 2 John, and 3 John; and *spurious* were *Acts of Paul, Shepherd of Hermas, Apocalypse of Peter, Barnabas, Didache*, and possibly Revelation. Different communities, however, continued to follow their own practices for some time: the Syrian community used a text that harmonized the four Gospels well into the fifth century cE. The first list that corresponds to the current canon of the New Testament is found in a text by Athanasius dated to 367 cE. This canon was affirmed at the Council of Hippo in 393.

The formation of the canon was no designed process, but the result of the interplay of contingent factors. However, certain criteria did play a role. The first was *apostolicity*—a writing had to be seen as either deriving from the era of the apostles or agreeing with what the early community took to be apostolic teaching. Another was *catholicity*—a writing had to be relevant to the church at large and not addressed only to a specific group. *Orthodoxy* required that a writing not contradict the "rule of faith." For example, bishop Serapion of Antioch initially allowed the *Gospel of Peter* to be read in church until he found its content to be contrary to the accepted faith.¹⁸ Finally, a writing should be *traditional*, that is, in use in worship in most churches and from early times.

The formation of the various canons of the Bible reflects the values and concerns of various communities. Within both Judaism and Christianity, these canons developed over a significant period of time in both oral and written form. They came out of worshipping communities, and reflect those communities' experiences of certain texts as sacred. Although contemporary biblical scholars tend to study biblical texts as discrete literary productions, the fact that these texts are now preserved in various collections, each with its own focus and purpose, continues to affect how individual texts are interpreted.

^{18.} Ecclesiastical History 6.12.3-6.

DISCUSSION QUESTIONS

- As indicated in this chapter, many of the books of the Bible appear to have been subjected to multiple revisions and additions over an extended period of time. Should this pose a problem for believers, who regard these writings as "God's word"? Would an earlier version of a biblical text be "God's word" as well, or only the final revision?
- 2. While Christians and Jews both regard the Hebrew Bible as inspired Scripture, they often differ dramatically in their interpretations of the meaning of those Scriptures. Explain this phenomenon and offer examples. Along with the differences, are there also significant points of agreement between Jewish and Christian readings of these texts?
- 3. Discuss the criteria for acceptance of a given text as canonical. Given these criteria, would it be possible to add to the canon? Could new revelations be incorporated into the canon? If a previously unknown letter of Paul or collection of sayings of Jesus were discovered, should Christians accept it as canonical assuming it could be proved to be authentic?
- 4. Describe the Septuagint and explain its significance for the differences that currently exist between the Hebrew Bible and the various forms of the Christian Old Testament.
- 5. By accepting certain writings as canonical, the Jewish and Christian communities assert their belief that they are, in some sense, "God's word." Given that these writings are also manifestly the work of human beings, is this belief inconsistent? Why or why not?

For Further Study

- Davies, Philip R. Scribes and Schools: The Canonization of the Hebrew Scriptures. Louisville: Westminster John Knox, 1998.
- Gamble, Harry E. "The Formation of the New Testament Canon and Its Significance for the History of Biblical Interpretation." In A History of Biblical Interpretation, edited by Alan J. Hauser and Duane F. Watson, 1:409–29. Grand Rapids: Eerdmans, 2003.

- McDonald, Lee Martin. *The Biblical Canon: Its Origin, Transmission, and Authority*. Updated and rev. 3rd ed. Peabody, MA: Hendrickson, 2006.
- McDonald, Lee Martin, and James A. Sanders, eds. *The Canon Debate*. Peabody, MA: Hendrickson, 2002.
- Sanders, James A. "Canon: Hebrew Bible." In Anchor Bible Dictionary, edited by David Noel Freedman et al., 1:837–52. Doubleday: New York and London, 1992.
- Sundberg, A. C., Jr. "'The Old Testament of the Early Church' Revisited," in *Festschrift in Honor of Charles Speel*, edited by T. J. Seinkewicz and J. E. Betts, 88–110. Monmouth, IL: Monmouth College Press, 1996.

Internet Resources

www.ntgateway.com/canon

A directory of internet resources related to the New Testament canon.

archive.org/details/BartEhrman-TheHistoryOfTheBibleTheMaking OfTheNewTestamentCanon

A series of audio recordings in which Bart D. Ehrman discusses the New Testament Canon.

www.bible-researcher.com/canon1.html

Article by Michael Marlowe on the Old and New Testament canons.

www.deadseascrolls.org.il/home

A library of images of fragments of the Dead Sea Scrolls.