

REWRITING AND TEXTUAL FLUIDITY IN
ANTIQUITY: EXPLORING THE SOCIO-CULTURAL
AND PSYCHOLOGICAL CONTEXT
OF EARLIEST CHRISTIAN LITERACY

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Whereas most scholars agree that Christianity was born before the middle of the first century AD, the earliest surviving manuscripts of early Christian literature date from almost a century later.¹ Although these artefacts are well studied, they do not directly provide us with information about the circumstances under which the earliest, now lost, Christian documents were written. While the study of the surviving manuscripts has substantially enhanced our understanding of early Christian literacy in the period when they were written,² we have to rely on our general knowledge of ancient Graeco-Roman and Jewish literacy for making inferences about the ways in which the original Christian documents of the first and early second century came into being.

In this contribution I will examine aspects of rewriting and textual fluidity in Antiquity, with the purpose of understanding the socio-cultural and psychological context of earliest Christian literacy. The terms 'rewriting' and 'textual fluidity' refer to two aspects of the same process. Rewriting means the modification of a literary text, the creation of a new version or edition of it, as well as the incorporation of (parts of) a work in a new text. It is important to note that the boundaries between these categories are not always clear-cut in actual practice, and were even less so in Antiquity. Fluidity, in turn, refers to the transformation of texts in the process of rewriting. Whereas the term 'rewriting' suggests a connection with the scribal medium, I will argue that the oral / aural medium played a significant role in all aspects of ancient literacy. First, I will review socio-cultural aspects of ancient literacy in an attempt to understand the origins of the phenomena of rewriting and textual fluidity. Second, I will offer some

¹ L.W. Hurtado, *The Earliest Christian Artifacts: Manuscripts and Christian Origins* (Grand Rapids: Eerdmans, 2006), 209–229.

² H.Y. Gamble, *Books and Readers in the Early Church: A History of Early Christian Texts* (New Haven: Yale University Press, 1995).

insights from memory studies to explain how rewriting and textual fluidity shape texts. Finally, I will conclude with some remarks about the particular factors that influenced textual fluidity in early Christianity.

Rewriting and Textual Fluidity in Ancient Literature

In order to gain some basic insights about the *Sitz im Leben* of rewriting in Antiquity, we first have to take a look at how books were written and read in the Ancient world. In most of Jewish and Graeco-Roman Antiquity, books circulated on a random and occasional basis.³ As Raymond Starr has demonstrated, reviewing a wealth of evidence especially from the Roman world, networks of friends and acquaintances constituted by far the most important channel for releasing, acquiring or borrowing books.⁴ Authors could deposit their books in libraries or bookstores, and bookstores made exemplars mainly on demand. In general, however, authors had no control over their work, which might have slipped out of their hands in a draft version or could be modified without their knowledge, while new works easily appeared under their names and without their knowledge or consent.⁵ Appeals or warnings not to change the text are found in various sources,⁶ a well-known example being Revelation 22:18–19:

I warn everyone who hears the words of the prophecy of this book: if anyone adds to them, God will add to that person the plagues described in this book; if anyone takes away from the words of the book of this prophecy, God will take away that person's share in the tree of life and in the holy city, which are described in this book.⁷

³ F.G. Kenyon, *Books and Readers in Ancient Greece and Rome* (Chicago: Aris, 1980); P.E. Easterling and B.M.W. Knox, "Books and Readers in the Greek World", in *The Cambridge History of Classical Literature. Vol. 1: Greek Literature, Part 4: The Hellenistic Period and the Empire* (eds. B.M.W. Knox and P.E. Easterling; Cambridge: Cambridge University Press, 1989), 1–41; E.J. Kenney, "Books and Readers in the Roman World", in *The Cambridge History of Classical Literature, vol. 2: Latin Literature, part 1: The Early Republic* (eds. W.V. Clausen and E.J. Kenney; Cambridge: Cambridge University Press, 1983), 3–31; R.J. Starr, "The Circulation of Literary Texts in the Roman World", *Classical Quarterly* 37 (1987): 213–223; C. Hezser, *Jewish Literacy in Roman Palestine* (Tübingen: Mohr Siebeck, 2001), 145–146.

⁴ Starr, "Circulation of Literary Texts".

⁵ Starr, "Circulation of Literary Texts", 218–219.

⁶ Gamble, *Books and Readers*, 122–125.

⁷ Translation after NRSV. The passage has been interpreted as a 'canonization formula' (W. Bousset and H. Gressmann, *Die Religion des Judentums im späthellenistischen*

How the dynamics worked in everyday life is illustrated by the occasion when a speech of Cicero leaked into circulation against his wishes and he attempted to deny his authorship by suggesting that it was a forgery.⁸ In the introduction of his *Institutio oratoria*, Quintilian mentions that his students put into circulation under his name notes taken during his lectures as an important reason for writing his manual.⁹ Different versions of a work sometimes came from the author himself, who revised a work without being able to withdraw the first version: Tertullian speaks of two substantial revisions of his treatise *Adversus Marcionem*.¹⁰ As is superfluous to say, the names and works of dead authors were even more exposed to arbitrary use or misuse—a situation that has not changed much up to modern times. In the Renaissance, for example, lute music was often reused and modified, as well as circulating in different versions; sometimes works were ‘stolen’ from their original authors and attributed to someone else, at other times pieces were ascribed to famous masters secondarily. The word ‘fluidity’ that has recently been applied to some ancient literature¹¹ is actually suitable to describe the fate of texts in most historical periods. Notably the phenomenon of fluid texts has returned in the last decade, largely due to the increasing importance of the Internet as a source of information.

Bookstores and libraries (often attached to temples, schools, baths, or gymnasia) started to gain importance in Rome beginning in the first century AD.¹² Libraries also employed scribes who made emendations, and, following Alexandrian examples, some systematic maintenance of the manuscripts started—which fell, however, far short of the level or scale of modern library standards.¹³

Zeitalter [fourth edition; Tübingen: Mohr, 1966]) or ‘protection formula’ (H. Kraft, *Die Offenbarung des Johannes* [Tübingen: Mohr, 1974]). D.E. Aune, *Revelation 17–22* (Dallas: Word Books, 1998) compares the passage to ancient ‘integrity formulae’ safeguarding tombs, treaties, and oracular revelations.

⁸ Cicero, *Att.* 13.21a.

⁹ Quintilian, *Inst.* 1, Pref. 7.

¹⁰ Tertullian, *Marc.* 1.1. The Western text of *Acts* probably also belongs to the same category. Cf. Gamble, *Books and Readers*; B.M. Metzger, *A Textual Commentary on the Greek New Testament* (Stuttgart: Deutsche Bibelgesellschaft and London: United Bible Society, 1994), 260–264.

¹¹ E.g. C.M. Thomas, *The Acts of Peter, Gospel Literature, and the Ancient Novel* (Oxford: Oxford University Press, 2001).

¹² Kenney, “Books and Readers”, 23–27. The Baths of Caracalla in Rome is a surviving example from the early third century AD.

¹³ Kenney, “Books and Readers”, 27–30.

In sharp contrast to the unrestrained and ad hoc distribution and circulation of books stands the closed circle of ancient literate society. The circle of readers and writers was restricted for two reasons: first, because books were expensive, and second, because only the elite had access to higher education. We cannot discuss the ancient system of education at this point, but it is sufficient to say that sub-elite literacy was mainly restricted to the ability to deal with documents related to everyday business;¹⁴ it was only elite education, accessible exclusively to the children of the wealthy, that equipped students with suitable knowledge to engage in intellectual life. The main form of digesting literature was reading in a circle of friends, which most often took the form of listening to a slave reading out a book, or sometimes the host reading his own writing aloud.¹⁵ The readings were discussed and the whole event often took place in the framework of a dinner party. Books had an important role as the markers of high social status and intellectual ability. For a wider circle of readers, access to books was rather restricted, yet possible under specific circumstances. For example, authors sometimes recited their own works in the marketplace.¹⁶ Bookstores, which often hosted intellectual gatherings, offered an opportunity for newcomers to enter elite society.¹⁷ All in all, whereas texts circulated rather spontaneously and fluidly in Graeco-Roman Antiquity, their circulation was restricted to a well-defined and small social circle, which is an important factor that we have to keep in mind when thinking about the *Sitz im Leben* of earliest Christian literacy.

Was the circulation of books in Jewish society different from this general picture? There are some widespread assumptions about Jewish society being more widely literate than the surrounding Gentile world. An important argument for the higher level of literacy among Jews is the existence of the study house, the so-called *bêth-midrash*.¹⁸ These houses,

¹⁴ R. Criboire, *Gymnastics of the Mind: Greek Education in Hellenistic and Roman Egypt* (Princeton: Princeton University Press, 2001), 171–172; T. Morgan, *Literate Education in the Hellenistic and Roman Worlds* (Cambridge: Cambridge University Press, 1998), 117–118.

¹⁵ W.A. Johnson, “Toward a Sociology of Reading in Classical Antiquity”, *American Journal of Philology* 121 (2000): 593–627; Starr, “Circulation of Literary Texts”.

¹⁶ E. Rawson, *Intellectual Life in the Late Roman Republic* (London: Duckworth, 1985), 52.

¹⁷ Starr, “Circulation of Literary Texts”, 223.

¹⁸ As C. Hezser, *The Social Structure of the Rabbinic Movement in Roman Palestine* (Tübingen: Mohr Siebeck, 1997), 204–205 and idem, *Jewish Literacy*, 101–103, demon-

or rooms in the houses of rabbis, likely functioned in a similar way as the homes of wealthy individuals in the Greek and Roman world, or the libraries and bookstores, offering access to books and opportunities for intellectual exchange, and do not as such bear witness to a higher rate of literacy in Jewish society. Nor is there strong evidence to support the hypothesis that synagogues functioned as libraries.¹⁹ It is safer to say that the material of Jewish education included Jewish religious literature rather than Homer, and Jewish intellectual debates were centred on religious literature rather than on Greek philosophy.²⁰ Becoming the student of a rabbi might have offered an opportunity to rise on the social ladder, yet Graeco-Roman higher education, for which no Jewish equivalent existed, was the main option for many Jews from elite families.²¹

Judaism being a 'religion of the book', one would expect the existence of an institutional framework for the production of religious writings or at least the manufacturing of Torah scrolls. As far as we know, however, no such institution existed in Antiquity. Even the numerous biblical texts found among the Dead Sea Scrolls seem to be written by many independent scribes, rather than originating from a single scriptorium.²²

The design of the scroll, or *volumen*, served first of all its function as an aesthetic, decorative, and desirable object, which demonstrated the wealth and intellectual stature of its owner.²³ The extent to which the representative aspect of the book determined its design is shown by the omission of the formerly customary word spacing from Latin manuscripts in the first century AD, in an attempt to imitate the Greek manuscript tradition.²⁴ The arrangement of the text in solid oblongs, two to three inches wide and six to ten inches high, was also suitable for reading, although it required an experienced eye to run ahead and recognize the sentences and other units of the text, without spaces or interpunction. What this system was absolutely unsuitable for was any sort of critical literary or philological activity, such as emending, editing,

strates, the institution dates back to the Tannaitic period (first-second century AD) and was not a place of higher education.

¹⁹ Hezser, *Jewish Literacy*, 163–168.

²⁰ Hezser, *Jewish Literacy*, 68–90.

²¹ Hezser, *Jewish Literacy*, 94–109.

²² M. Martin, *The Scribal Character of the Dead Sea Scrolls*, vol. 1 (Louvain: Publications universitaires, 1958), 81; Hezser, *Jewish Literacy*, 146.

²³ Johnson, "Toward a Sociology of Reading", 608–609.

²⁴ Johnson, "Toward a Sociology of Reading", 608–609.

expanding, or excerpting texts. Writing onto the scroll itself was still the easiest way of making notations²⁵—and one can surmise that the edited text then might have been written onto a new scroll. However, this would be a very expensive way of working. A more frequently used technique was to have helpers (usually slaves), who either read sources aloud, or wrote down the resulting text from dictation.²⁶ Working from multiple originals, for example to use them as sources of a new work, was very difficult, since there were no desks on which the three scrolls could be laid side by side, and also because the scrolls easily rolled up if one did not hold them with both hands.²⁷ Again, having a helper read one of the texts or relying on memory was the most likely solution.

What appears from this brief overview is that first, reading and writing in Antiquity were seldom solitary activities—although this could certainly occur as well. Second, under most circumstances, literature was delivered to the reader as oral / aural rather than visual information, and many times authorship also meant dictating rather than writing. Third, memory was an important factor in most reading and writing activities. Listening to a recitation requires that one keep words in ‘short-term’ or ‘working memory’ until whole phrases or sentences are read out. There is an important bottleneck involved here: one can simultaneously hold no more than about seven items in short-term memory,²⁸ some recent studies arguing even for a maximum of three or four items.²⁹ The limited capacity of short-term memory constrains, for example, the number of words that can be considered as parts of a single clause. In addition, one had to remember the text that was read aloud in order to take part in the discussion—using what memory studies label ‘long-term memory’. For writing or editing, memory was intensely used, due to the various technical difficulties that I have outlined above. As a general rule, one can say that the ancients tended to rely on their memory rather than opening and

²⁵ J.P. Small, *Wax Tablets of the Mind: Cognitive Studies of Memory and Literacy in Classical Antiquity* (London and New York: Routledge, 1997), 169.

²⁶ Johnson, “Toward a Sociology of Reading”, 605–606; Small, *Wax Tablets of the Mind*, 169–176.

²⁷ F.G. Downing, “A Paradigm Perplex: Luke, Matthew and Mark”, *New Testament Studies* 38 (1992): 15–36; Small, *Wax Tablets of the Mind*, 167–169.

²⁸ G.A. Miller, “The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information”, *Psychological Review* 63 (1956): 81–97.

²⁹ N. Cowan et al., “The Legend of the Magical Number Seven”, in *Tall Tales about the Mind & Brain: Separating Fact from Fiction* (ed. Sergio della Sala; Oxford: Oxford University Press, 2007), 45–59.

searching through scrolls,³⁰ which were often not accessible and the use of which was both demanding and time consuming.

With no institution existing to safeguard the faithful reproduction of religious literature, the fate of books in the ‘religions of the book’ was not very different from the fate of ancient books in general. Not all texts were, however, equally fluid. A book with very large circulation and high authority was arguably more resistant to modifications. If a text was relatively accessible and well known among the educated, like Homer in Graeco-Roman culture, alterations to it were more easily spotted and less likely to be accepted as original than changes made to less well-known texts. In this case, a rewritten text could be identified as a new literary work, dependent on a well-known, authoritative text as its source. In contrast, the random distribution and small circulation of less well-known works, or of new works after their release, made them especially vulnerable to changes. In such cases, it was often impossible to know that the text at hand existed in multiple versions or to identify the authoritative version.

The immediate socio-cultural *Sitz im Leben* of rewriting and textual fluidity in early Christian literature is the intellectual life of ancient literate society. These works were born through reading out and discussing literature at symposia and other intellectual gatherings. In the Jewish world, an alternative setting might have been the home of the rabbi or the *bêth-midrash*, but Hellenized Jews probably organized similar forms of social gatherings as the Gentile elite did. Dining rooms and study rooms attached to the synagogues (like the ones identified in Gamla and Ostia) might also have been appropriate locations for such intellectual exchanges.³¹ At these gatherings, stories, philosophical arguments, and other forms of oral literature were shared and writers had an opportunity to introduce new works before a sympathetic audience. In Judaism, an important difference from the Graeco-Roman framework was the emphasis on charity and the entertainment of guests, which evolved into a mingling of diverse social and ethnic groups in the early Church.³²

³⁰ Hezser, *Jewish Literacy*, 451.

³¹ A.T. Kraabel, “The Diaspora Synagogue: Archaeological and Epigraphic Evidence since Sukenik”, in *Ancient Synagogues. Historical Analysis and Archaeological Discovery*, vol. 1 (eds. D. Urman, P.V.M. Flesher; Leiden: Brill, 1995), 95–126; A. Runesson, “A Monumental Synagogue from the First Century: The Case of Ostia”, *Journal for the Study of Judaism* 33 (2002): 171–220 (55, 142); L.I. Levine, *The Ancient Synagogue: The First Thousand Years* (New Haven: Yale University Press, 2005).

³² I. Czachesz, “Women, Charity, and Mobility in Early Christianity: Weak Links and

While this did not happen without tensions, it channelled a variety of voices into the generation of biblical literature, exemplified by the representation of agrarian society, anti-Roman and anti-pharisaic sentiments, as well as Gentile and female viewpoints in the gospels. One can surmise that the influence of such social gatherings is reflected in the eminent position given to meals in the gospels,³³ the canonical and apocryphal acts of the apostles,³⁴ and ultimately in the emergence of the Eucharist as the main ritual of the early Church.

Fluidity and Memory

As we have seen, the circumstances of literacy in Antiquity were such that oral / aural information and memory played a much more important role in it than in modern literacy. Recently, some interesting work has been done on the role of memory in ancient reading and writing, mainly emphasizing the limited span of short-term memory (see above) and known ways to enhance memorization in Antiquity.³⁵ There are some arguments, however, against overemphasizing the issue of the accuracy of memory and the ways to enhance it. Rhetoricians indeed used to memorize speeches³⁶ and rabbis developed methods to store Talmudic material in the mind accurately.³⁷ It is well known from orality studies, however, that the allegedly 'exact' memorization of oral literature by informants does not equate to verbatim memorization in the modern sense.³⁸ Moreover, the texts we are dealing with are much longer than rhetorical speeches, and only some people from the literate elites under consideration were rhetoricians or rabbis—not to mention the danger

the Historical Transformation of Religions", in *Changing Minds: Religion and Cognition through the Ages* (eds. I. Czachesz and T. Bíró; Leuven: Peeters, forthcoming).

³³ J. Bolyki, *Jesu Tischgemeinschaften* (Tübingen: Mohr Siebeck, 1998).

³⁴ Acts 1:4, 2:46, 10:41; *Acts John* 4–85, 89, 109–110; *Acts Thom.* 29, 49–50, 121, 133, 158.

³⁵ Especially Small, *Wax Tablets of the Mind*.

³⁶ Small, *Wax Tablets of the Mind*, 81–137.

³⁷ J. Bowker, *The Targums and Rabbinic Literature: An Introduction to Jewish Interpretations of Scripture* (Cambridge: Cambridge University Press, 1969), 40–90.

³⁸ A.B. Lord, *The Singer of Tales* (Cambridge, MA: Harvard University Press, 1960), 69. Josephus promises to retell the biblical story without changes, but actually fails to do so; cf. E. Koskenniemi and P. Lindqvist, "Rewritten Bible, Rewritten Stories: Methodological Aspects", in *Rewritten Bible Reconsidered* (eds. A. Laato and J. van Ruiten; Turku: Åbo Akademi University and Winona Lake, IN: Eisenbrauns, 2008), 11–39 (29).

of anachronism when using extant rabbinical literature to judge Jewish literacy in earlier centuries. Instead of asking how accurate the memory of the ancients was and how they could have improved it, I am using insights from memory studies to reconstruct how memory works for different types of information and what this implies for the phenomenon of textual fluidity.

Since Frederick Bartlett's famous 'War of the Ghosts' experiment we have known that our mind makes use of schemata for storing new information.³⁹ Bartlett's students had to memorize and later recall a Native American folk tale, titled *The War of the Ghosts*. From the omissions and distortions of the text in subsequent recalls, Bartlett concluded that students used cultural schemata to remember the story:

'Schema' refers to an active organisation of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response.⁴⁰

Together with the immediately preceding incoming impulse, it [= the schema] renders a specific adaptive reaction possible.⁴¹

That is, we compare new information with the schemata we already have in an effort to find something that is meaningful and familiar. Any information that does not fit in with the existing schemata will either have to be distorted until it does fit, or else it will not be retained at all.⁴² A more specific model for how narratives are stored in memory has been developed by Roger C. Schank and Robert P. Abelson.⁴³ According to Schank and Abelson's model, the repeated experience of sequences of episodes leads to the formation of narrative scripts in the mind. Their famous example is the restaurant script:

1. *actor goes to restaurant*
2. *actor is seated*
3. *actor orders meal from waiter*
4. *waiter brings meal to actor*

³⁹ F. Bartlett, *Remembering: A Study in Experimental & Social Psychology* (Cambridge: Cambridge University Press, 1932).

⁴⁰ Bartlett, *Remembering*, 201.

⁴¹ Bartlett, *Remembering*, 207.

⁴² D. Groome, *An Introduction to Cognitive Psychology: Processes and Disorders* (London: Routledge, 1999), 108–111.

⁴³ R.C. Schank and R.P. Abelson, *Scripts, Plans, Goals, and Understanding: An Inquiry into Human Knowledge Structures* (Hillsdale, NJ: Erlbaum, 1977); R.S. Wyer et al., *Knowledge and Memory: The Real Story* (Hillsdale, NJ: Erlbaum, 1995).

5. *actor eats meal*
6. *actor gives money to waiter*
7. *actor leaves restaurant*

A script is activated whenever relevant information becomes available, such as 'John ordered a steak'.⁴⁴ We make sense of events around us using a relevant script stored in our memory, and at the same time new inputs modify the script. Scripts do interpretative work because once a script is evoked it supplies information that is not available in the actual situation.⁴⁵ In order to apply script theory to biblical narratives, I assume that events of which we have no first hand experience but which we learn about from other people, are also organized into narrative scripts.⁴⁶ In earlier work, I have identified a number of frequently used scripts in the New Testament and apocryphal texts: the martyrdom script, the gospel script, the healing script, and the divine call.⁴⁷ As we have seen, the importance of thinking in scripts is that the occurrence of a typical motif enables us to make inferences about other details: once the martyrdom script is evoked, the listener will expect the occurrence of a particular set of episodes and exclude others. For example, once the martyrdom script is activated in the mind, one will not think that the hero was assassinated, or was acquitted during the trial.

Scripts and other schemata played a prominent role in the memory processes underlying ancient literacy. Whereas the use of schemata and scripts explains how the basic framework of a text can be retained, other processes have to be taken into consideration to understand how the schemata are completed with all the details that give individual character to any literary composition. An especially important contribution to understanding this process is David C. Rubin's theory of 'serial recall'.⁴⁸ According to Rubin, when people recall texts, they depart from genre-specific constraints (which is a narrative script in our theory) and the initial phrase that gives cues to produce the next word or phrase. For

⁴⁴ For precise rules regarding the application of scripts, see Schank and Abelson, *Scripts*, 46–50.

⁴⁵ Schank and Abelson, *Scripts*, 41.

⁴⁶ I. Czachesz, "The Gospels and Cognitive Science", in *Learned Antiquity: Scholarship and Society in the Near East, the Greco-Roman World, and the Early Medieval West* (eds. A.A. MacDonald et al.; Leuven: Peeters, 2003), 32.

⁴⁷ Czachesz, "Gospels", 29–32; I. Czachesz, *Commission Narratives: A Comparative Study of the Canonical and Apocryphal Acts* (Leuven: Peeters, 2007), 224–254.

⁴⁸ D.C. Rubin, *Memory in Oral Traditions: The Cognitive Psychology of Epic, Ballads, and Counting-Out Rhymes* (Oxford: Oxford University Press, 1995), 175–176.

example, narratives about Jesus and the martyrs are based on the same script yet have many different versions.⁴⁹ Biblical scholars have routinely explained such phenomena by referring to the editorial work of the authors, who, it is assumed, rephrased their sources according to their own theological views. I suggest that in many cases the relation between texts is better explained if we think about it in terms of oral transmission and memory, relying on script theory in combination with Rubin's model of serial recall.

Let us take an example, the death of the martyr. The choice of words and phrases that can be used in telling a Christian martyrdom narrative is limited. When reporting the death of the martyr, the gospels, the apocryphal acts of the apostles, and the acts of the martyrs use expressions meaning 'give up his spirit' (ἐξέπνευσεν, ἀπέπνευσεν, ἀφῆκεν/παρέδωκεν/ἀπέδωκεν τὸ πνεῦμα).⁵⁰ As the performer arrives at this detail, he knows that a phrase with 'spirit' is needed, but the actual formulation is a matter of momentary inspiration. Sometimes other words are used, such as 'taken up' in *Gospel of Peter* 19. When reciting the narrative in oral performance, the actual story emerges from a delicate interplay of scripts, traditional vocabulary, and innovation.

The use of narrative scripts and serial recall is not restricted to 'oral literature' in a narrow sense. Rather, it influences the way we remember any text or part of a text, for example when remembering it in copying, editing, citing, or discussing. When reading a passage or listening to it as it is being read aloud, our minds search for known schemata, such as narrative scripts. The story that we are hearing will be stored as an instance of a script, for example, as a martyrdom narrative. When we are retelling the narrative, recall it in the context of a discussion, or use it as a source of a new written work, the script will be filled up with details in ways that I have illustrated above. As Rubin has demonstrated, serial recall also determines the retrieval of all sorts of memorized texts in modern literate societies.⁵¹

⁴⁹ I. Czachesz, "The Gospel of Peter and the Apocryphal Acts of the Apostles: Using Cognitive Science to Reconstruct Gospel Traditions", in *Das Evangelium nach Petrus. Text, Kontexte, Intertexte* (eds. T.J. Kraus and T. Nicklas; Berlin: De Gruyter, 2007), 245–261.

⁵⁰ E.g. *Martyrdom of St Carpus* 47; *Martyrdom of Pionius* 21.9; *Martyrdom of St Conon* 6.5. For comparisons of the Apocryphal Acts with the Acts of the Martyrs, see A. Hilhorst, "The Apocryphal Acts as Martyrdom Texts: The Case of the Acts of Andrew", in *The Apocryphal Acts of John* (ed. J.N. Bremmer; Kampen: Kok Pharos, 1995), 1–14.

⁵¹ Rubin, *Memory*, 177.

In Bartlett's experiment described above, information that did not fit into students' mental schemata was forgotten or distorted. Sometimes, however, information that does not fit into our mental schemata has a greater chance of being remembered. In a series of experiments conducted in the 1970s, Frank C. Keil demonstrated that humans share a number of ontological categories to make sense of their environment.⁵² Keil argued that ontological categories represent

The most fundamental conceptual cuts one can make in the world, such as those between animals and plants, artefacts and animals, and the like.⁵³

His experiments have also shown that

At the ontological level there are clusters of properties that unambiguously and uniquely belong to all members of a given category at that level. All animals are alive, have offspring, and grow in ways that only animals do.⁵⁴

In other words, people have particular expectations of things belonging to a particular category. Psychologists have not yet reached a final agreement regarding the set of basic ontological categories, but the following list is widely supported: 'human', 'animal', 'plant', 'artefact', and '(natural) object'.⁵⁵

According to Pascal Boyer's theory of 'minimal counterintuitiveness', religious ideas violate intuitive expectations about ordinary events and states, inasmuch as they

combine certain schematic assumptions provided by intuitive ontologies, with nonschematic ones provided by explicit cultural transmission.⁵⁶

Or, as he more recently summarized his model,

⁵² F.C. Keil, *Semantic and Conceptual Development: An Ontological Perspective* (Cambridge, MA: Harvard University Press, 1979), 46–62.

⁵³ F.C. Keil, *Concepts, Kinds, and Cognitive Development* (Cambridge, MA: MIT Press, 1989), 196.

⁵⁴ Keil, *Concepts*, 214.

⁵⁵ Keil, *Semantic and Conceptual Development*, 48; S. Atran, "Basic Conceptual Domains", *Mind & Language* 4 (1989): 7–16; idem, *In Gods we Trust: The Evolutionary Landscape of Religion* (Oxford: Oxford University Press, 2002), 98; P. Boyer, "Cognitive Constraints on Cultural Representations: Natural Ontologies and Religious Ideas", in *Mapping the Mind: Domain Specificity in Cognition and Culture* (eds. L.A. Hirschfeld and S.A. Gelman; Cambridge: Cambridge University Press, 1994), 391–411 (400–401); P. Boyer, *Religion Explained: The Evolutionary Origins of Religious Thought* (New York: Basic Books, 2001), 90.

⁵⁶ P. Boyer, *The Naturalness of Religious Ideas: A Cognitive Theory of Religion* (Berkeley: University of California Press, 1994), 48, 121, and *passim*.

religious concepts generally include explicit violations of expectations associated with domain concepts

—that is, they violate the attributes that children already intuitively associate with ontological categories.⁵⁷ The idea of a ghost that can go through walls, for example, is based on the ontological category of human beings, but violates our expectations about intuitive physics that should otherwise apply to humans. Concepts that contain such violations, Boyer suggests,

are more salient than other types of cultural information, thereby leading to enhanced acquisition, representation, and communication.

The original purpose of developing the notion of minimally counterintuitive ideas has been to explain widespread beliefs in ancestors, spirits, and gods.⁵⁸ But the theory (as understood in the light of the growing body of experimental data) has a broader implication: once a minimally counterintuitive detail appears in a textual tradition, such a detail has a better chance, all being equal, to be transmitted than other details; moreover, its presence enhances the chance of the whole text to be transmitted. Along these lines one can explain, for example, the dominance of particular types of narratives about the death and resurrection of Jesus.⁵⁹ Now let us take another example from the book of Acts, that is, the well-known episode of the apostle Paul raising Eutychus (Acts 20:7–12).⁶⁰ We can imagine the following hypothetical, alternative versions of the story. 1) ‘The boy fell out of the window and broke his leg. Paul hurried downstairs, lifted him up, and laid him on a bed. He took a piece of wood and cloths and secured the broken leg by splints.’ 2) ‘The boy fell out of the window and died. Paul did not go down but prayed to God. The boy came back to life, turned into an owl and flew back to the third floor. From that day he could remember everything he heard.’ In terms of what we know about memory and counterintuitiveness, my prediction is that the first narrative would fare quite well in short-term recall, but would decay

⁵⁷ P. Boyer and C. Ramble, “Cognitive Templates for Religious Concepts: Cross-Cultural Evidence for Recall of Counter-Intuitive Representations”, *Cognitive Science* 25 (2001): 535–564 (538).

⁵⁸ Boyer, *Religion Explained*, 58–106; I. Pyysiäinen, *How Religion Works: Towards a New Cognitive Science of Religion* (Leiden: Brill, 2001), 9–23.

⁵⁹ I. Czachesz, “Early Christian Views on Jesus’ Resurrection: Toward a Cognitive Psychological Interpretation”, *Nederlands Theologisch Tijdschrift* 61 (2007): 47–59.

⁶⁰ I. Czachesz, “Magic and Mind: Toward a Cognitive Theory of Magic, with Special Attention to the Canonical and Apocryphal Acts of the Apostles”, *Annali di Storia dell’Esegesi* 24 (2007): 295–321 (306–307).

quickly thereafter. The second version, in contrast, contains too many counterintuitive details (rising from the dead, turning into an animal, remembering everything), and would not be faithfully encoded in memory. A single counterintuitive detail, Paul raising the dead boy (violating the ontological expectation that dead bodies do not revive), is necessary but also enough so that the episode would be advantaged in long-term (and due to contextual effects, perhaps even in short-term) recall and therefore survive better than the other two.

Involuntary emotional response is another factor that contributes to the selective nature of textual memory.⁶¹ Children imitate facial expressions and other bodily movements at a very early age, indeed, right after birth.⁶² A significant contribution to understanding imitation was the discovery of so-called ‘mirror neurons’ in the brains of monkeys in the late 1990s.⁶³ These neurons are activated when monkeys observe an action in another monkey as well as when they act in a similar way themselves. Mirror neurons are also activated when actions are observed but not actually carried out by the observer. Also in humans the observation of actions performed by others activates brain areas that are responsible for the movement of different parts of the body.⁶⁴ There are similar findings about emotion: the same brain parts that are involved in the feel of disgust and pain are also activated when we empathize with such emotions.⁶⁵ Not only do we not actually have to carry out actions or be exposed to pain in order to empathize with them, but also a limited

⁶¹ I. Czachesz, *The Grotesque Body in Early Christian Literature: Hell, Scatology, and Metamorphosis* (Habilitationsschrift Heidelberg, 2007), 202–207, and “Explaining Magic: Earliest Christianity as a Test Case”, in *Past Minds: Studies in Cognitive Historiography* (eds. L.H. Martin and J. Sørensen; London: Equinox, in press).

⁶² A.N. Meltzoff, “Elements of a Developmental Theory of Imitation”, in *The Imitative Mind: Development, Evolution, and Brain Bases* (eds. A.N. Meltzoff and W. Prinz; Cambridge: Cambridge University Press, 2002), 19–41; S. Hurley and N. Chater, “Introduction: The Importance of Imitation”, in *Perspectives on Imitation: From Neuroscience to Social Science. Imitation, Human Development, and Culture*, vol. 2 (eds. S. Hurley and N. Chater; Cambridge, MA: MIT Press, 2005), 1–52.

⁶³ G. Rizzolatti and L. Craighero, “The Mirror-Neuron System”, *Annual Review of Neuroscience* 27 (2004): 169–192.

⁶⁴ G. Rizzolatti et al., “The Mirror System in Humans”, in *Mirror Neurons and the Evolution of Brain and Language* (eds. M.I. Stamenov et al.; Amsterdam: Benjamins, 2002), 37–59.

⁶⁵ C. Keysers and D.I. Perrett, “Demystifying Social Cognition: A Hebbian Perspective”, *Trends in Cognitive Sciences* 8 (2004): 501–507; T. Singer et al., “Empathy for Pain Involves the Affective but Not Sensory Components of Pain”, *Science* 303 (2004): 1157–1162.

amount of information is sufficient to activate the relevant brain areas and elicit empathy.⁶⁶ In the gospels, we often read about people who are seriously ill and desperately seeking healing (for example, Gospel of Mark 2:1–12). Parents seek help for their sick or already dead children (e.g. Gospel of Mark 1:21–43). These effects are further amplified by the presentation of extreme (e.g. lameness, blindness), repulsive (e.g. ‘leprosy’), or spectacular (e.g. ‘demoniacs’) symptoms and diseases. Further, it is logical to assume that after such startling conditions, healing stories evoke more intense, positive feelings when problems are miraculously solved in the end. Recent experimental findings support the hypothesis that details that arouse emotions in stories enhance the memorability of the gist and details (both central and peripheral) of the narrative.⁶⁷ I suggest that healing miracles generate a set of emotional memories that increases their memorability.⁶⁸ As I have argued elsewhere, the representation of the human body in apocalyptic literature elicits a variety of cognitive and emotional responses that explain their memorability and popularity in early Christian literature.⁶⁹

Let us now summarize the significance of the findings on the effects of memory for our understanding of textual fluidity. First, memory adapts information to well-known schemata. This is an important reason behind why literature applies genres, forms, and narrative templates. Without intentionally ‘imitating’ sources, new works will naturally adjust themselves to generic constraints. Second, details will be easily changed and varied, since the mind fills them in by using serial recall. Third, some sort of (non-schematic) information enjoys an advantage in memorization, due to various archaic structures of the human mind. It is to be expected that the deep involvement of memory in rewriting and retelling will favour, in the long run, ideas that minimally violate innate ontological expectations, or ones that mobilize emotional reactions. Spirits, angels, miracles, and various features related to hell and the afterlife enjoy such benefits and are therefore frequent in fluid biblical texts. How such

⁶⁶ V. Gallese et al., “A Unifying View of the Basis of Social Cognition”, *Trends in Cognitive Sciences* 8 (2004): 396–403.

⁶⁷ C. Laney et al., “Memory for Thematically Arousing Events”, *Memory & Cognition* 32 (2004): 1149–1159.

⁶⁸ H. Eichenbaum, *The Cognitive Neuroscience of Memory: An Introduction* (Oxford: Oxford University Press, 2002), 261–281.

⁶⁹ Czachesz, *Grotesque Body*, 202–207; I. Czachesz, “Metamorphosis and Mind: Cognitive Explorations of the Grotesque in Early Christian Literature”, in *Metamorphoses: Resurrection, Body and Transformative Practices in Early Christianity* (eds. T. Karlsen Seim and J. Økland; Berlin: De Gruyter, 2009), 219–243 (237–241).

details are spread over time is exemplified by the acts of the martyrs, among which the earliest are more or less free from such details, whereas the later ones employ them frequently.⁷⁰

Concluding Remarks

In this article I have only been able to outline a tentative framework for the study of rewriting and textual fluidity from a socio-cultural and cognitive perspective. Historical nuances need to be added along diachronic, geographical, and sociological dimensions. Let me make a few additional remarks about these details.

The situation that I have outlined in this article seems to have been more or less unchanged in the first and early second centuries AD. There are, however, several factors that nuance this general picture. With regard to temporal variation, the assumed preference for the codex in early Christianity might have implications for the transmission of texts in the second century.⁷¹ Due to the spatial limitations of this article, however, we have to postpone the consideration of this factor to a later occasion. Another source of variation in the general pattern concerns differences between the Graeco-Roman and Jewish settings of literacy. As we have seen, there is no evidence that elite education would have been available to Jews apart from Greek and Roman rhetorical schools.

In terms of socio-economic variation, there are obvious differences between the intellectual life of major imperial cities, such as Rome or Alexandria, centres with local importance, such as Jerusalem and Damascus, numerous smaller cities, and finally, rural centres with some degree of literacy. We can assume that provincial literates imitated the models set by elite intellectuals, and therefore the general appearance of their literacy was not substantially different from the elite patterns.⁷² Yet it is obvious that only a few instances of biblical literature complied with the literary standards of the Graeco-Roman elites. The works by elite Jews that one can categorize as 'rewritten Bible', such as Philo's *Life of Moses* and Josephus' *Jewish Antiquities*, were certainly among them. These authors not only wrote in good Greek, but also cited Graeco-Roman literary

⁷⁰ Hilhorst, "Apocryphal Acts".

⁷¹ Hurtado, *Earliest Christian Artifacts*, 43–93.

⁷² Johnson, "Toward a Sociology of Reading", 612–615.

sources.⁷³ How difficult it was to write at a level that was accepted by the elite literati is shown by the fact that even Josephus sent his works to friends to improve his Greek (*Against Apion* 1.50).⁷⁴ Most biblical literature, however, fell below the elite standards, as Augustine himself acknowledged when he argued that the Bible hides divine revelation behind a modest stylistic appearance.⁷⁵ The difference between the highest elites and non-elite education is not only a matter of style but it also determines their respective ways of using textual traditions, for example, how they deal with the natural appeal of miraculous and magical themes. When Josephus and Philo report or discuss miracles in their works, they evidently feel the need to take a sceptical, or at least reflective, stance.⁷⁶ After all, they do not want to sound like the historians whom Lucian ridicules in his *True History*, that is, the ones who seek the favour of the reader by filling their texts with miraculous and fantastic details. The danger of such amateurism, by ancient standards, did not bother writers who did not aspire to acceptance into the highest elite. It is not accidental, therefore, that the lack of elevated literary style is often accompanied by an unceasing flow of miraculous events, as well as a rather naïve attitude toward them. Finally, earliest Christianity itself had a varied socio-economic composition. Supported by its flexible social network structure,⁷⁷ it embraced an unprecedented social diversity and geographical mobility, which certainly contributed to the integration of different textual traditions into its texts, including magic, miracle, and folklore.⁷⁸

⁷³ E.g. Josephus cites Herodotus in *A.J.* 10.18–20; Philo cites Euripides in *Alleg. Interp.* 3.202. See Koskeniemi and Lindqvist, “Rewritten Bible”, 32–33.

⁷⁴ G. Hata, “Is the Greek Version of Josephus’ ‘Jewish War’ a Translation or a Rewriting of the First Version?”, *Jewish Quarterly Review* 66 (1975): 95; G.H.R. Horsley, “The Fiction of Jewish Greek”, in *NewDocs* 5 (1994), 5–40 (34).

⁷⁵ Augustine, *Conf.* 3.5.9.

⁷⁶ E. Eve, *The Jewish Context of Jesus’ Miracles* (Sheffield: Sheffield Academic Press, 2002).

⁷⁷ Czachesz, “Women, Charity, and Mobility”.

⁷⁸ For a student of Jan Bremmer it is impossible not to become enthusiastic about Graeco-Roman religion and culture. During the fifteen years of my collaboration with Professor Bremmer he never ceased to point out historical, philological, archaeological, and literary details of ancient religions that needed to be (re)considered in my work. This paper, beside many others, grew out of that fascinating, ongoing discussion. Dear Jan, you have given me lots of comments and ideas to think about for long hours, and I very much hope you will keep doing so for many years to come!