Is the Bible losing its covers? Conceptualization and use of the Bible on the threshold of the Digital Order

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Abstract: Does the Digital Revolution change our use of the Bible? Can our conceptualization of the Bible as a book that can be read 'from cover to cover' stand the transition from the printed to the digital medium? When the Bible is read online, does the lack of a physical object affect the appropriation of the Bible? These questions are addressed from a broad historical perspective. It is argued, among other things, that our conceptualization of text is still strongly rooted in 'the Order of the Book' in spite of rapid changes that are taking place. Even if we do eventually arrive at the Digital Order, we still have a long way to go. We are only on the threshold. The question of whether the Bible is losing its covers can be countered with the observation that it did not have covers when it originated. It acquired them only later on, after the invention of the codex (when the production of complete bibles became technically possible) and the printing press (when it became more usual to produce complete bibles). Even after the invention of the printing press it took quite a while before the covers were "discovered" and made effective in reflections about the Bible and in reading practices.

1. An exciting age

We live in an exciting age. PC's, Smartphones, iMacs, iPods and iPads, Facebook, Amazon, Google, LinkedIn, eBay and Twitter are radically changing our access to sources of information, to books and journals, to music and literature, to information on what is happening in other parts the world, and to the people in our social networks.[1] They change the ways in which we present ourselves, make (or lose!) 'friends', buy books or music, book our holidays and communicate with other people, both near and at the other end of the world. We can hardly imagine that only two or three decades ago it was common to use paper, rather than a screen, to check the time schedule for train departures or to make a bank payment, or that the best way to have access to knowledge was an encyclopedia series on one's book shelves rather than Wikipedia.

We are in the middle of fast and drastic developments that affect all parts of life. These developments are part of the 'Digital Revolution'. On Wikipedia we find the following description of this revolution:[2]

> The Digital Revolution is the change from analog mechanical and electronic technology
> to digital technology which began anywhere from the late 1950s to the late 1970s with the

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[1] It is a privilege to dedicate this contribution to my colleague and friend Professor Nicolai Winther-Nielsen on the occasion of his 60th birthday. I presented part of this contribution in one of our classes in an MA course on Religion and Media, coordinated by my colleague Dr Johan Roeland. I am grateful for the feedback I received from the participants of this course and also for their participation in a small experiment about two ways of reading (see below, note 28). I am also indebted to Professor Peter Ben Smit, Professor Lourens de Vries, Professor Adriaan van der Weel and Dr Maarten Wisse for their comments on an earlier version of this contribution.

[2] http://en.wikipedia.org/wiki/Digital_Revolution (consulted 1 November 2013).

adoption and proliferation of digital computers and digital record keeping that continues to the present day. Implicitly, the term also refers to the sweeping changes brought about by digital computing and communication technology during the latter half of the 20th century. Analogous to the Agricultural Revolution and Industrial Revolution, the Digital Revolution marked the beginning of the Information Age.

A transition is taking place. But what is its point of departure, and what will be its destination? The quotation above from Wikipedia suggests that the point of departure is the world of the analogue and mechanical and that the destination is the Information Age. In this contribution, however, I want to zoom in on this transition, elaborate on its starting-point and challenge too hasty conclusions about its goal. I will further address its implications for the conceptualization and use of the Bible. I will build upon the thoughts that Adriaan van der Weel developed in various publications about the transition that is taking place. This is a good place to begin before we focus on the Bible, because Van der Weel, who has the perspective of a book historian, pays due attention to the way in which notions and usages of text are changing.

2. The order of the Book

Text pervades every aspect of human life. Our culture and society was, and still is, dominated by text, and more particularly by the book. Text is used in manuals and menus, advertisements and billboards, newspapers and TV guides, passports, licences and contracts. The social and practical problems that illiterate people have in modern Western societies show how much these societies demand the ability to write and to read, to deal with texts, in short, to be fully adapted to our textual world.

In his book *Changing our Textual Minds*,[3] Adriaan van der Weel characterizes the époque where we come from as 'the Order of the Book': a culture deeply defined by the codes of print, whose entire social fabric is defined by the textual codes of manuscript and print. One of his main arguments is that we are still in the Order of the Book, despite the rapid technological changes that are taking place. This relates not only to the role of text and book in society, the dominance of which is clearly felt by those who cannot read or write, but also to the way in which the book has shaped our minds, our conceptualizations and our world view. Idioms such as 'to be an open/closed book', 'not to judge a book by its cover', 'from cover to cover' and 'turn the page' all show the impact of 'the book' on the way we think, observe and conceptualize.

3. On the threshold

If we describe the present period in terms of 'transition' or 'revolution' and see the Order of the Book at the beginning of this transition, the question arises as to whether the introduction of the computer marks the end of the Order of the Book.

There are arguments that support an affirmative answer to this question. We are witnessing the tremendous impact of the computer on all aspects of human life and trends that seem not to have reached their endpoint. If these trends continue, more and more paper will lose ground to screen,

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[3] Adriaan van der Weel, *Changing our Textual Minds. Towards a Digital Order of Knowledge (*Manchester: Manchester University Press, 2011).

and analogue text to the digital, the number of people in the world that have access to the Internet will continue to increase rapidly, and so on.

However, making prognoses just by expanding existing trends is simplistic and thinking that the Order of the Book is over now disregards the impact the Order of the Book still has not only on our culture and society in general, but also on computer applications and the way texts are dealt with using the computer. This impact can be seen, for example, from the way in which the Graphic User Interfaces that were created in the 1980s followed the typographical conventions of the printed book[4] or from the way in which people resort to e-readers to have access to books in a form that to some extent imitates the format of the printed book.

Everything we try to say about the endpoint of the present transition depends on our assessment of these two conflicting factors: the amazing strength of the Order of the Book in the decades that have passed since the introduction of the computer on the one hand, and the enormous impact of the computer, replacing other mediums in ways that were unthinkable some decades ago, on the other.

One of the claims that I want to make in this contribution is that even if we do eventually arrive at the Information Age or Digital Order, we still have a long way to go. It would be presumptuous to claim that we have left the Order of the Book behind. We are only on the threshold.

4. Changes of text mediums

Within the history of humankind the transition from the book to the digital medium can be seen in the light of earlier major changes of text mediums[5] that have taken place in the past, such as that from oral to written, from scroll to codex, and from manuscript to printed book. Each of these transformations had an enormous impact on human life and culture.

Each transformation also provoked resistance: Plato's complaints about the transition from oral communication to writing in his *Phaedrus*;[6] Rabbinic resistance to the use of codices instead of scrolls, at least as far as liturgical usage was concerned;[7] Johannes Trithemius's praise of manuscript production as against printing;[8] or the critical responses to the digital medium in Andrew

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[4] Cf. Van der Weel, 'Feeding our Reading Machines: From the Typographic Page to the Docuverse' (forthcoming). Van der Weel observes in the last few decades 'a noticeable reluctance to abandon the typographic form of print' and calls the Graphic User Interface (GUI) and WYSIWYG (What You See Is What You Get) 'a major capitulation to *Homo typographicus*'. On the *Homo typographicus* see also Van der Weel, *Changing our Textual Minds*, p. 69.

[5] I follow Adrian Weel, *Changing our Textual Minds*, p. 63, who uses the plural 'mediums' rather than 'media' to avoid confusion with mass media (newspaper press, readio, television).He defines medium as 'A construct consisting of a tool or technology with its (explicit) technical protocols and any implict social protocols with the purpose of communicating information, expressed in one or more of the modalities of still text, images, sound, and moving imagese over time and/or space' (Van der Weel, ibid.).

[6] Plato, *Phaedrus*, 274e-275a; cf. Van der Weel, *Changing our Textual Minds*, p. 72; idem, 'Pandora's Box of Text Technology', *Jaarboek voor de Nederlandse boekgeschiedenis* (2013), pp. 201–204 (http://www.let.leidenuniv.nl/wgbw/research/Weel_Articles/VanderWeel_PandorasBoxOfTextTechnology_2013.pdf).

[7] See Saul Lieberman, *Hellenism in Jewish Palestine: Studies in the Literary Transmission, Beliefs, and Manners of Palestine in the I Century B.C.E. – IV Century C.E.* (Texts and Studies of the Jewish Theological Seminary of America 18; New York: Jewish Theological Seminary of America, 1950), pp. 203–208.

[8] Cf. Van der Weel, *Changing our Textual Minds*, p. 88.

Keen's *The Cult of the Amateur: How Today's Internet Is Killing Our Culture*[9] and *Digital Vertigo: How Today's Online Social Revolution Is Dividing, Diminishing, and Disorienting Us*.[10]

Nevertheless, the transformations took place, and changed human life and culture. The transition from the oral to the written diminished the role of human memory (foreseen by Plato, who called writing an aid to reminiscence rather than to memory!),[11] but supported 'increasingly sophisticated intellectual skills promoted by reading and writing'.[12] According to the controversial theory of Julian Jaynes it even lies at the origin of human consciousness in the sense of the ability of individuals to look at themselves from the outside.[13] Further effects of the transition from the oral to the written medium, described by Van der Weel in more detail, were the separation of speaker and addressee, the objectification of the materiality of the written word, the possibility of comparing various accounts and the quantifiability of knowledge.[14]

The other transitions mentioned above, from scroll to codex and from codex to print, had also enormous consequences for various parts of human life and the conceptualization, transmission and dissemination of texts. We will discuss some of these consequences in Section 5 (on the unintended effects of printing) and Section 9 (on the interaction between the use of the codex and the development of the concept of a Christian canon).

Seeing the transition from the printed book to digital text against this background may help us put the transition to the digital medium in perspective. It makes us realize that developments are taking place that cannot be stopped, notwithstanding the criticism uttered and the potential negative effects. It makes us also realize that indeed things do change, whether we like it or not. Plato was right that writing diminished the role, and eventually also the capability, of human memory. Likewise now that the need for knowledge at hand is fading away due to the easy access to knowledge on the Internet, the role of memory may be further reduced and new intellectual skills may be developed.

The larger background also makes us aware that it is hard to predict what the effects of the digital revolution in the long term will be. This brings us to the topic of invention and discovery.

5. Invention and Discovery

The major reason for the uncertainty about the future of text now that the digital medium has entered the scene is that every technological innovation has two types of properties: those intended and those unintended. The first have to be invented, the second to be discovered. Unlike the invention, the discovery occurs gradually and may take decades or even centuries.[15]

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[9] London and Boston, Mass.: Doubleday/Currency, 2007.

[10] London: Constable, 2012. I thank Fabian Eikelboom (cf. footnote 1) for this reference.

[11] Van der Weel, *Changing our Textual Minds*, pp. 71–72; see also the reference to Plato, *Phaedrus*, above (footnote 6).

[12] Van der Weel p. 77.

[13] Julian Jayens, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Boston: Houghton Mifflin, 1976); see also Van der Weel, *Changing our Textual Minds*, p. 76.

[14] Cf. Van der Weel, *Changing our Textual Minds*, pp. 70–79.

[15] Cf. Van der Weel, 'Feeding our Reading Machines' on 'new forms of text production (…) followed at some distance by a more gradual discovery'.

An interesting example of the difference between invention and discovery is that of page numbers. The invention of the printing press in the West[16] made the production and multiplication of texts much more efficient, but it took about 35 years before page numbers were introduced and about a century before the addition of page numbers became common practice.[17] The fact that printing enabled the production of identical copies, which made it possible to employ page numbers as a useful means of text reference, was something that had to be discovered, it was an unintended property of the printing press.[18]

Likewise, the cultural and societal consequences of book printing only became visible in the course of time. Looking back, we can agree with Elizabeth Eisenstein that the invention of print had an enormous impact on the Renaissance, the Reformation and the scientific revolution,[19] but this impact was unforeseen. If Gutenberg had had an idea of the impact that the printing press would have, perhaps he wouldn't have gone through with it, because in the end it undermined the authority of the Church in a way of which he would not have approved.[20]

These examples from the past should be kept in mind if we start evaluating the transition to the digital medium. In the history of the human race, changes of text medium, from oral to written, from scroll to codex, and from manuscript to print, had enormous consequences on all aspects of human life. However, just as all the previous transitions enhanced so many consequences that had never been thought of, we should be modest in attempting to predict how the digital medium will shape our life in the future. The role that books still play in our culture, and the way in which our minds are shaped by the book (see above, Section 1), show that we are still basically in the Order of the Book.

6. Canonical texts and the digital medium

From the rapid changes that are taking place as part of the Digital Revolution (Section 1) we turned to the pervasive role of text in all aspects of life. We argued that our culture and social fabric are still defined by the Order of the Book (Section 2) and that we are only on the threshold of a largely unknown new Era (Section 3). We put the transition from printed text to digital text into perspective by looking at other transitions of textual mediums in history (Section 4) and learnt from these paral-

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[16] We will not comment here on the invention of the printing press in China some centuries earlier.

[17] Adriaan van der Weel, 'New Mediums: New Perspectives on Knowledge Production', in W.Th. van Peursen, E.D. Thoutenhoofd and A.H. van der Weel, *Text Comparison and Digital Creativity. The Production of Presence and Meaning in Digital Text Scholarship* (Scholarly Communication 1; Leiden: Brill, 2010), pp. 253–268, esp. 255.

[18] Van der Weel, *Changing our Textual Minds*, p. 83.

[19] Elizabeth Eisenstein, *The Printing Press as an Agent of Change: Communications and Cultural Transformations in Early-Modern Europe* (Cambridge: Cambridge University Press, 1979); cf. Van der Weel, *Changing our Textual Minds*, pp. 80-81. Note, however, that we can notice the emergence of a reading culture in the late Middle Ages even before the invention of the printing press and the Reformation; see Sabrina Corbellini, 'Beyond Orthodoxy and Heterodoxy: A New Approach to Late Medieval Religious Reading', in idem (ed.), *Cultures of Religious Reading in the Late Middle Ages: Instructing the Soul, Feeding the Spirit, and Awakening the Passion* (Utrecht Studies in Medieval Literacy 25; Turnhout: Brepols, 2013), pp. 33–53. In her contribution 'to the reconstruction of the possibilities for lay readers to access religious texts and to the analysis of the impact of the presence and circulation of religious texts on their daily life' (p. 35) Corbellini concludes that 'the religious literacy and readership of late medieval laity could reach a very high level. (…) Non-professional users of religious texts (…) could access religious knowledge and take it into their own private, domestic space.' (pp. 52–53).

[20] I thank Professor Adriaan van der Weel for this suggestion.

lels, among other things, that we should be modest in predicting what the effects of the new medium will be, because each technological innovation has not only intended properties (to be invented), but also unintended features (to be discovered) (Section 5).

When we turn now to the use of the Bible, the question arises as to what it means that sacred texts are transmitted through the digital medium. In another publication dealing with sacred texts in oriental manuscript studies, I used the following working definition of 'sacred texts': 'texts that are accepted as authoritative by a religious community and are regarded as formative for its identity'.[21] I will not repeat here the complications involved in defining 'sacred texts' and the relationship with 'canonical texts', which I use, but I want to point out that the notion of 'sacred texts' or 'canonical texts' is related to religious communities that regard those texts as their holy scriptures. That means that one cannot speak of 'sacred texts' without taking into account the conceptualization of 'sacred' in religious communities. One point on which religious traditions differ and which is relevant to the topic under discussion, is the question as to whether the sacred character of a text is thought of as being conferred to the material carriers of the text as well.

In the Jewish tradition the idea that the sacredness of a text relates also to its material carrier gave rise to instructions for the proper production of biblical manuscripts with regard to writing materials, the sewing and repairing of parchment, and the preservation of scrolls that had become unfit for use. It also led to debates as to whether or not a menstruating woman is allowed to touch a Torah scroll. Similar concerns about the material aspects of sacred texts and purity play a role in Islam.[22]

In the Christian theological tradition such notions were not developed, although in all currents and periods of Christianity examples can be found in which the bible as a physical object is thought to be under divine protection, the subject of miracle stories,[23] venerated in liturgical contexts, used in ceremonies (e.g. taking an oath with one's right hand over the Bible),[24] and subjected to all kinds of ritual, magical and amulet-like usages, from its being placed in cradles to protect babies in Protestant popular religion[25] to the practice of putting bibles in the four corners of the foundation of a new house in Papua New Guinea.[26]

As far as the Christian tradition is concerned, the lack of a theological elaboration of the notion of the sacredness of the material carriers of the biblical text raises the expectation that the medium through which the text is transmitted is taken as arbitrary, although the role of the physical object of the bible in some liturgical practices and in forms of popular religion shows that this cannot be taken for granted. And indeed, we see that in general the transition from the printed to the digital medium for reading the Bible does not meet strong widespread opposition, but that there is at least one

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[21] W.T. van Peursen, 'Sacred Texts', forthcoming in the *Handbook of Comparative Oriental Manuscript Studies*, which will be delivered by the COMSt Project.
[22] For further details and other examples see Van Peursen, 'Sacred Texts'.
[23] Cf. Fred van Lieburg, 'De vuurvaste bijbel. Orale cultuur, materiële religie en de Heilige Schrift,' *Radix: gereformeerd wetenschappelijk tijdschrift* 28 (2002) 317-328.
[24] Cf. Van Lieburg, 'Direkte Gotteserfahrung. Pietismus und Bibliomantie', forthcoming in *Pietismus und Neuzeit* 39 (2013).
[25] Van Lieburg, 'Direkte Gotteserfahrung. Pietismus und Bibliomantie'.
[26] Professor Lourens de Vries, personal communication.

context in which the use of the digital medium is disputed: the liturgical one.[27] Some advocate the use of a printed bible in church, others encourage the use of smartphones, not only for reading the Bible, but also for twittering during the service.[28] The interplay of factors in this debate is more complicated than the pros and cons that are put forward in the discussion suggest, because behind the arguments are hidden presuppositions about sacred text, textual medium and liturgy.

In non-liturgical contexts there seems to be hardly any opposition to reading the Bible through the electronic medium, and yet the textual medium seems to be less arbitrary than one would expect. In several contexts (church, student's MA course, a scholarly conference) I asked people about their reading experience[29] and was surprised to see that many of them, including 'digital natives', described reading a printed bible as something more devotional, concentrated and focused, whereas online bibles were more associated with copy-and-paste activities for writing student's papers. Thin pages, characteristic of printed bibles, or even the smell, evoked experiences that were missing with online Bible reading.

7. The physical object and the virtual text

In the preceding section we saw that even though there is no strong Christian tradition of considering the material carriers of the biblical text sacred, there is still some sense that 'the Bible' is not only an abstract sequence of words, independent of the textual medium, but that the physical object of the material carrier of the text plays a role in the experience of reading the Bible.

There are no intrinsic characteristics of the physical objects containing the text of the Bible vis-à-vis the digital medium that sufficiently account for this sense.[30] The ingredients of a manuscript or printed bible are in the end natural products, which can be subjected to physical and chemical analysis. We can study the chemical components of carbon ink and iron gall ink, or we can investigate the various procedures for the preparation of parchment or paper. Books and manuscripts are earthy products that in the end go back to plants, trees, minerals etc. Nevertheless, they are sometimes felt to be more appropriate carriers of divine texts than the 'magical' text displayed on a computer screen, which lacks the materiality of the former.[31]

If one includes smell and thin pages in describing one's experience of reading the Bible (cf. above, Section 6), this implies a strong association of 'Bible' and 'book', of the abstract text and its material carrier. We have seen that, at least in Christianity, this association cannot be explained from a

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[27] Compare the Rabbinic resistance to the use of the codex in the synagogue, where, too, a new textual medium that was accepted for other purposes was controversial in a liturgical context.

[28] See e.g. Should you tweet during the sermon? or 5 Reasons to use your bound Bible & not your smartphone in church; 5 Reasons you should twitter in church. Compare also these websites of a church that invites people to twitter and collects the tweets (reference from Freek Houweling, see footnote 1).

[29] In total I asked about fifty people about their reading experiences. The students of the MA course (cf. footnote 1) and the youth club of my own local church were asked to spend some time reading the Bible online and some time reading from a printed copy of the Bible and describe the differences.

[30] I use here some comments by Gemmer Burger (cf. footnote 1).

[31] Cf. Van der Weel, *Changing our Textual Minds*, p. 145: 'While the substrate on which the digital text is stored (working memory and storage medium) consists, like the rest of the hardware, of tangible and visible matter, the text itself is virtual in nature. Virtual here means 'existing conditionally'. In more precise, albeit negative, terms, a virtual text is an intangible, invisible, and unreadable representation of that text. It is stored in such a way that it may, under certain conditions, be made visible, legible, and tangible.'

theological tradition that confers sanctity from a text to its carrier, nor from the intrinsic properties of the materials used in manuscript production or book printing.[32] It should rather be explained from 'our engagement with the codex as a physical object as much as one housing intellectual content',[33] which is typical of the Order of the Book. One could even argue that for most human beings the first engagement comes prior to the latter.[34]

8. Conceptualization of the Bible

The association of the Bible with the physical object that contains the text of the Bible is also reflected in the language itself. In many languages the word 'bible' is ambiguous. It can refer both to a collection of writings ('I study the Bible'), and to a physical object, containing the text of these writings ('I forgot my bible'). In writing a distinction can be made by the use of a capital letter in the first case, although there are different rules in various languages. Nevertheless, the fact that the word 'bible' is used in both senses illustrates how much we conceptualize the Bible as a book.[35]

An idiom that is based on the conceptualization of the Bible as a book is that of reading it 'from cover to cover', an idiom that we mentioned above as typical of the Order of the Book (Section 2). This idiom used in relation to the Bible only makes sense if we conceptualize the Bible as a book; a book, not only as a text or collection of texts, but also in its physical shape, an object with pages and covers.

When we apply the question as to whether we are moving towards the end of the Order of the Book (cf. Section 3) to the Bible, the question is: How persistent will this conceptualization of the Bible as 'book' and as being bound between two covers prove to be when we read the same collection of writings more and more through other, digital media? Or, as we put it in the title of this contribution: Is the Bible losing its covers? Here, again, (as in Section 4) a larger historical perspective is needed before we can tentatively answer this question.

9. Scroll, codex and canon

Looking back into history, we can say that the conceptualization of the Bible as a book with covers is based on a technological innovation that took place after the composition of the writings that the Bible contains. Before the invention of the codex in the beginning of the Common Era, the most usual material carriers of the biblical text were scrolls. But a scroll cannot contain the whole canon. Most often a scroll contained one biblical writing, such as the Book of Isaiah. This is the case among the Dead Sea Scrolls, where we find scrolls such as 1QIsa[a] or 1QIsa[b], referring to scrolls

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[32] Unless virtual text (see above) is considered less stable or less trustworthy.

[33] Quotation from Ray Siemens, 'Foreword: Imagining the Manuscript and Printed Book in a Digital Age', in W.Th. Peursen, E.D. Thoutenhoofd, and A.H. van der Weel (eds.), *Text Comparison and Digital Creativity. The Production of Presence and Meaning in Digital Text Scholarship* (Scholarly Communication 1; Leiden: Brill, 2010), pp. ix-xvii, esp. x.

[34] Cf. Siemens, 'Foreword', p. x, on 'the young child's first encounter with the book, which most likely involves the sense of taste at least as much as sight'.

[35] A cross-linguistic and cross-cultural study would reveal various strategies to distinguish between the Bible as a collection of writings and a bible as a physical object, e.g. by using words such as 'Scripture' for the former. Thus in Indonesian *alkitab* is used when the focus is on the object, *Firman Allah* as the focus is on the Holy Scriptures. In other cases the distinction is reflected by grammatical restrictions, e.g. whether or not 'the Bible' can be the subject of *verba dicendi* (I am indebted to Professor Lourens de Vries for these references).

from Qumran Cave 1, containing the Book of Isaiah. Only in the case of small books that were closely related, such as the Twelve Prophets, were various books put together. Scrolls containing this collection of books have been found among the Dead Sea Scrolls (4QTwelveProphets[a-g]) and in other places in the Desert of Judah: another Hebrew scroll in Murabba`at and a Greek one in Nahal Hever. (Compare also the reference to 'the Twelve Prophets' in Ben Sira 49:10.) The technological innovation of the codex made it possible to collect multiple writings, or even the complete biblical canon, in one physical object. Only from then on did the Bible have its 'covers'.

It is likely that the technology that gave the Bible its 'covers' somehow influenced the conceptualization of the canon among Christians, who readily accepted the codex (cf. above, Section 4, on resistance to the codex, at least for liturgical purposes, in Rabbinic Judaism), although the exact relationship between codex and canon in terms of influence is hard to establish, and should not be defined in terms of dependency (the canon being dependent on the codex or the other way round). The establishment of the canon was not a decision taken at once and if the codex technology played a role in it, it was only one among various factors. Yet various scholars have made a strong argument that the single codex Bible somehow contributed to the Christian conceptualization of the canon as a closed exclusive selection of sacred writings.[36]

10. Selection of books in biblical manuscripts and printed bibles

When technology was so far developed that one could produce large-size codices, it became possible to include the complete Bible (in a Christian context: the complete Old and New Testaments) in one single codex, between two covers. And indeed, in the fourth and fifth centuries a few famous pandects, that is: manuscripts containing the complete Bible, were produced, such as the fourth-century Codex Sinaiticus, which is now also available online.[37]

It should be recalled, however, that even when it had become technically possible to have the complete Old and New Testaments combined in one codex, this was exceptional rather than the rule. Pandects are relatively rare. Given the immense costs of having a complete Bible manuscript produced, the scarcity of pandects does not come as a surprise. Not every usage of the Bible required a pandect. Thus in liturgical contexts lectionaries, containing the weekly readings from the Bible, or manuscripts containing only the Psalms and Odes, which played a major role in liturgy, were sufficient. The enormous costs involved in manuscript production may also explain why there is some variation in the books that were included. If one had produced a codex, one wanted to make optimal use of it. In the light of this, the very fact that the Codex Sinaiticus, the oldest Greek pandect (4th cent.), contains the Epistle of Barnabas and the Shepherd of Hermas, or that the oldest complete Syriac manuscript of the Bible, the Codex Ambrosianus (6th or 7th cent.) includes parts of Josephus' *Jewish War* does not necessarily mean that the scribes of these manuscripts considered these

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[36] Cf. Robert A. Kraft, 'The Codex and Canon Consciousness', in L.M. McDonald and M.A. Sanders (eds.), *The Canon Debate* (Peabody, Mass., 2002), pp. 229–234 ; Cf. W.Th. van Peursen, 'La diffusion des manuscrits bibliques conservés: typologie, organisation, nombre et époques de copie', in F. Briquel-Chatonnet and Ph. Le Moigne (eds.), *L'Ancient Testament en syriaque* (Études Syriaques 5; Paris : Geuthner, 2008), pp. 193–214.
[37] See www.codexsinaiticus.org.

books canonical.[38] It may be that the scribe just wanted to make optimal use of the pages that were prepared.

With many codices containing only selected readings or selected biblical books and a relatively small number of pandects, the invention of the codex made the notion of the Bible 'from cover to cover' theoretically possible, but not that obvious. This notion was able to take root more deeply when new technological developments had taken place. It was only after the invention of the printing press that the production of complete bibles became common practice.

We can go one step further and claim that even after the invention of the printing press and the Reformation, it took some time for the concept of 'the Bible from cover to cover' to be developed. It seems that it was basically the emphasis on the Bible as the Word of God by people such as Charles Hodge (1797–1878) in response to the Enlightenment that nutured this conceptualization, although it may be traced back to earlier arguments for the divine inspiration of the Scriptures (including the Hebrew vowel signs) by Gisbertus Voetius (1589–1676) and John Owen (1616–1683).[39] The ideal of reading the complete Bible from Genesis to Revelation as something of worth for one's personal religious life was not a product of the Reformation either, but rather of 17th-century Pietism.[40] Analogous to the examples discussed in Section 5, we could perhaps say that the potential to be the feeding ground for the conceptualization of the Bible 'from cover to cover' was also an unintended property of the printed book.

It was a long way that led to the present production and distribution of the Bible and the accompanying conceptualization of the Bible as a book, completely enclosed within two covers. If one now goes to buy a bible, one can find a complete bible for an affordable price. All the books of the Bible are there, most often in the same traditional order. There are only a small number of options, such as whether or not the Deuterocanonical or Apocryphal books are included and which translation is used. Apart from these points of variation, the text of the Bible and the order of its books is standardized. This standardization as well as the widespread distribution of 'complete' bibles is not the result of the invention of the codex, but rather of other developments, that have their starting-point in the printing press.

11. Approaching the Bible without touching its covers

We are so familiar with the standardization of the text and contents of the Bible that it is hard to realize that our conceptualization of the Bible as a fixed collection of books, with a beginning and an end, to some extent depends on a technological innovation of about five centuries ago. Likewise, it is hard to imagine that this conceptualization with which we are so familiar will change due to the digital medium.

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[38] Cf. Van Peursen, 'La diffusion des manuscrits bibliques conservés'.

[39] Dr Maarten Wisse, personal communication.

[40] Cf. Fred van Lieburg, 'Bible Reading and Pietism in the Dutch Reformed Tradition.' In: *Lay Bibles in Europe 1450-1800*. Ed. by M. Lamberigts and A.A. den Hollander. Leuven 2006, 223-244: 'Whereas the Reformation stood for *sola scriptura*, God's Word as the final religious rule, Pietism stood for *tota scriptura*'; see also idem, 'Het Piëtisme en de Bijbel: vroeger en nu,' *Theologia Reformata* 45 (2002) 145-158.

However, the digital medium provides us with the opportunity of access to the Bible without first touching its covers. When I want to read a biblical passage online, I can go to www.biblegateway.com and search for biblical passages or for occurrences of words. From there I can jump in, so to speak, at the place to which the query results lead me. This facilitates, if not promotes, a use of the Bible that disregards the canonical context or the larger literary contexts. One can, either by text search or by word search, arrive at a beautiful verse such as 'Therefore God give thee of the dew of heaven, and the fatness of the earth, and plenty of corn and wine' (Genesis 27:28), without any awareness of the literary context (this is part of the blessing that Jacob acquired by deceit) or the place of this book in the Bible, being the first book of the Old Testament.

We should not overestimate, however, the awareness of context when people read printed Bibles. This depends on the training the reader received and/or the religious community in which the reading takes place. One could argue that disregard of the context is also visible in the traditional search for *dicta probantia* in systematic theology or in the religious practice of 'Bibliomancy', which is a form of divination that seeks to understand God's message by randomly selecting a passage from the Bible.[41] In other contexts the use of isolated Bible verses in all types of religious or devotional use (memorization of Bible verses, home decoration containing verses from the Bible, biblical one-liners used in certain types of preaching) also reflects disregard of the context. Compare, for example the description that Maarten Wisse gives of Bible use in the pre-modern and pre-Reformation period:

> In terms of a metaphor taken from the present, one could say that using the Bible in the pre-modern and pre-Reformation period was like walking in a cloud, a word cloud in which all kinds of Bible verses floated around and passed by. The believer moves around in this cloud and picks a verse that suits his or her theological claim.[42]

Will the digital medium affect the conceptualization of the Bible as a closed exclusive selection of sacred writings? Here, again, it is hard to predict anything because of the various factors involved. Thus the way in which interfaces of online bibles lead the user through the Bible and how they show the larger canonical and literary context may influence the user's 'canonical awareness'. Another factor that renders the answer to this question uncertain is the effect of reading practices. On the one hand one could expect that, for example, a project to read the Bible 'from cover to cover' is more successful if one uses a printed book than with digital text, which requires a different navigation through the text than just moving from the start till the end. On the other hand, it appears that screen reading evokes more a scanning attitude than paper reading.[43] If the digital medium indeed

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[41] Cf. Van Lieburg, 'Bible Reading and Pietism in the Dutch Reformed Tradition' and 'Het Piëtisme en de Bijbel: vroeger en nu' on the wide distribution of this practice in Pietism as well as attestations to this practice from earlier periods.

[42] Maarten Wisse, 'Doing Theology through Reception Studies: Towards a Post-Postmodern Theological Hermeneutics', *Nederduitse Gereformeerde Teologiese Tydskrif* 53 (2012), 239–249; available at http://ngtt.journals.ac.za/pub/article/view/237 (accessed 5 November 2013).

[43] Cf. A. van der Weel, 'Memory and the Reading Substrate' (forthcoming); idem, 'Digitaal lezen en de toekomst van onze geletterde mentaliteit' (forthcoming in *Speling*).

causes a change from close reading to distant reading,[44] this may also enhance a way of Bible reading which involves reading larger passages with a more scanning attitude.

12. Back to the pre-printing era?

To what extent the 'fluidity of virtual data',[45] the 'textual liquidity'[46] and the textual instability of digital text[47] will change the conceptualization of the Bible as a closed exclusive selection of sacred writings with a fixed text, constituting 'God's holy, unchanging Word'[48] is hard to predict. We have seen two conflicting tendencies throughout this contribution. The first is the continuing strength of the Order of the Book, which makes us think in categories based on notions of book and print. The second is the impact of technological innovations on the way in which we consume and conceptualize text. The first tendency supports the prediction that the conceptualization of the Bible as a book will continue, even if the use of the digital medium to access the biblical text increases, the second suggests that finally new conceptualizations of texts will arise, rooted in the new mediums.

In a larger historical perspective we can say that the Bible underwent a change of medium before, namely from scroll to codex, and that the close association that we nowadays make of 'book' and 'Bible' is secondary.[49] Perhaps we can go one step further and conclude that the reading of the Bible through the digital medium means to a certain extent a return to the period before codex and printed book, in which the transmission was also fragmented and fluid.

The conceptualization of the Bible that is allegedly under threat due to the digital medium is not the shape that the Bible had when it was composed or in the earliest period of its transmission. Thus the question in the title of this paper should be countered with the question: Did the Bible have covers at all when it originated?

In the more specific field of biblical scholarship this 'return to the preprinting era' is one of the promising aspects of the introduction of the computer into the field of textual analysis. In the academic study of the Bible a major object of research is the multiplicity of manuscripts and versions that were produced before the invention of the printing press. The computer provides new ways for storing, displaying and comparing these parallel texts.

The potential of the digital medium as a treasure of both intended and unintended properties (Section 5), too, has an impact on biblical scholarship. If we realize that there is so much to discover, we should not be content with imitations of analogue research practices with digital tools, but continue

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[44] For a recent contribution to the discussion see Paul Gooding, Melissa Terras and Claire Warwick, 'The Myth of the New: Mass Digitization, Distant Reading, and the Future of the Book', *Literary and Linguistic Computing* 28/4 (2013), pp. 629–639.

[45] Van der Weel, *Changing our Textual Minds*, p. 146.

[46] Cf. Van der Weel, 'Feeding our Reading Machines'.

[47] Van der Weel, *Changing our Textual Minds*, p. 149.

[48] See e.g. http://www.crossroad.to/HisWord/verses/topics/Word.htm.

[49] Another line of development is that from oral to written transmission. In Antiquity long-duration texts were primarily transmitted *from mind to mind*. The transition to printed Bible slowly enhanced a reconceptualization of the Bible as letters printed on paper. See Lourens de Vries, 'Local Oral-Written Interfaces and the Nature, Transmission, Performance and Translation of Biblical Texts', in James A. Maxe and Ernst R. Wendland (eds.), *Translating Scripture for Sound and Performance. New Directions in Biblical Studies* (Eugene, Oreg.: Cascade, 2012).

searching for those unforeseen characteristics of the digital text.[50] The mathematical characteristics of the digital representation of text opens the doors for completely new ways of analysing, comparing and clustering texts.

13. Recapitulation

After reflections on the Digital Revolution, the Order of the Book and the impact of technological innovations (Sections 1–5; see the summary at the beginning of Section 6) we focused on the conceptualization and use of the Bible. We discussed the way in which the relation between sacred texts and their material carriers is perceived in religious traditions, especially Judaism and Christianity. In (Section 6), we noted that in the Christian tradition various responses to the digital medium show the strong association of 'Bible' and 'book'. Since this cannot be accounted for by elaborated theological reflections on the status of these material carriers in the Christian tradition, nor by intrinsic characteristics of the physical objects that contain the text, we suggested that it is our culturally determined engagement with the codex as a physical object that accounts for this association (Section 7). We saw that the conceptualization of the Bible as a book is reflected in various usages of the word 'bible' and in the idiom 'from cover to cover' (Section 8). An historical overview of the transition from scroll to codex and the relation to the Christian understanding of the canon (Section 9) led to the conclusion that the notion 'from cover to cover' could only take root when it was common practice to produce complete bibles after the invention of the printing press (Section 10). The question as to whether the Bible is losing its covers now that it is possible to approach the Bible without touching its covers remained unanswered because of the unpredictable factors involved (Section 11). Finally, this unanswered question itself was challenged by the observation that the covers as they figure in the conceptualization of the Bible as a (printed) book are the result of two technological innovations that took place later on: one a few centuries later(large-size codices, the other 14 centuries later (printing press).

14. Final considerations

Does the transition to the digital medium change our reading of the Bible and should we worry about that?[51] At first sight the answer to both questions is a reassuring 'No!' for at least three reasons.

1. The transition from printed text to digital text can be seen as analogous to earlier changes of textual medium. Such changes do take place, they cannot be stopped, and objections raised, such as Trithemius's objections against book printing, are overruled by history. The Bible survived the previous changes of textual medium, so with this transition there is nothing to worry about.[52]

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[50] See e.g. Eep Talstra and Janet W. Dyk, 'The Computer and Biblical Research: Are there Perspectives beyond the Imitation of Classical Instruments?', in W.Th. van Peursen and R.B. ter Haar Romeny, *Text, Translation, and Tradition. Studies on the Peshitta and its Use in the Syriac Tradition Presented to Konrad D. Jenner on the Occasion of his Sixty-Fifth Birthday* (Monographs of the Peshitta Institute Leiden 14; Leiden: Brill, 2006), pp. 189–203.

[51] Ignoring the fact that the question of whether or not we should 'worry' about something is a hardly an academic question at all.

[52] Here, again, the perspective becomes even wider if we include the interaction of oral and written transmission. Cf. De

2. The printed book, containing the Bible from cover to cover, which some people prefer to digital text, was just a phase in the history of the Bible. The strong association of 'Bible' and 'book' is a historical phenomenon, not something that was there when the Bible was written. For this reason the question as to whether the Bible is losing its covers, which is hard to answer because of some unpredictable factors that are involved, can be countered by challenging the question itself: The Bible started without covers, so why should we worry when it loses them again?

3. Some of the alleged changes in reading practices are not as great as they seem. Indeed, online Bibles may support a fragmented approach to the Bible and a loss of context, but such an approach is also attested in centuries before, even in the classical theological approach to the Bible as a source of *dicta probantia* or in the widespread use of isolated verses from the Bible in bibliomantic practices.

However, it would be naive to assume that everything remains the same. Some characteristics of the digital medium have the potential of changing our reading, consumption and appropriation of religious texts. Here we can put forward the following observations.

1. The changes of textual medium in the past had an enormous impact, partly unforeseen, not only on culture and society, but even on human capacities and brain power. It is to be expected that such effects will also occur with the transition to the digital medium. 'All in all, digital reading is a greater departure from our age-old habits than we realise'.[53]

2. Even though one could argue that 'the message' is independent of the medium or that the transmission of a text through multiple mediums (i.e. printed and digital) leads to a better reception of the text,[54] the usages and conceptualizations discussed in this contribution as well as more theoretical reflection on 'form' and 'contents' or 'presence' and 'meaning'[55] show that one cannot make a sharp distinction between the text and its formal presentation.

3. Reading practices are changing. It has been noted that screen reading evokes a scanning attitude and that the digital medium causes a shift from close reading to distant reading (cf. above, Section 11). This may also affect the way the Bible is read. It may lead to a type of scanning larger bulks of texts, rather than close reading of small passages.

4. This more superficial, scanning attitude may be strengthened by distraction. With regard to the tablet Van der Weel writes: 'It is certainly true that a tablet *can* be used for immersive reading no less than a printed book; it is just a great deal less likely that it will be. Distrac-

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Vries 'Local Oral-Written Interfaces', p. 95 'The Bible emerged as a canonized and at the same time highly heterogeneous body of long-duration texts from antiquity These were long-duration texts shaped by the specific local, oral-written interfaces of antiquity (…) But once canonized, the Bible started its long journey via societies shaped by rich print and mass reading cultures towards primary oral cultures in remote corners of the world. In doing so, the Bible travelled through a range of different oral-written interfaces'.

[53] Van der Weel, 'Memory and the Reading Substrate'.

[54] Such claims were made in the students' responses (cf. footnote 1).

[55] Hans Ulrich Gumbrecht, *The Production of Presence. What Meaning Cannot Convey* (Stanford, CA: Stanford University Press, 2004); Wido van Peursen, 'Text Comparison and Digital Creativity. An Introduction', in W.Th. Peursen, E.D. Thoutenhoofd, and A.H. van der Weel (eds.), *Text Comparison and Digital Creativity. The Production of Presence and Meaning in Digital Text Scholarship* (Scholarly Communication 1; Leiden: Brill, 2010). pp. 1–27.

tion is built into the device – and may well be built increasingly into the very text'. [56] This applies to other representatives of the digital medium as well.[57]

The distraction may be further evoked by the interface of online Bibles. The interfaces are an important aspect of the human-computer interaction. A user may experience some elements of the interface as hindering the reading process (e.g. distracting advertisements) and others as helpful (e.g. access to cross-references or different translations).

5. The readers' appropriation of the text may be affected. We cannot possess digital text in the same way as we can possess a printed Bible. The consumption of digital text is defined in terms of access rather than ownership of the physical carrier.[58] This may also affect the appropriation of the biblical text.[59]

Finally, the digital medium may not only have an impact on the way the Bible is read, but also on its readership. The Internet may influence the dissemination of the text of the Bible because it provides access to the biblical text to people who do not have access to printed bibles. It would be interesting to investigate whether the experiences of those people differ from those who use online and printed bibles side by side, but the circumstances of the former group will in many cases not allow such research.

In this contribution I focused on Bible use in a broad sense. The digital medium also provides challenges and opportunities for the more specific field of biblical scholarship. The 'return to the pre-printing era' (Section 11) brings in a parallel between the character of textual sources from before the invention of the printing press and the digital tools that are now available to store, display and compare these texts. The unintended properties of the digital medium that are gradually discovered (Sections 5, 11), encourage us not be content with imitations of analogue research practices with digital tools, but to continue searching for those unforeseen characteristics of the digital text.

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[56] Van der Weel, 'Pandora's Box of Text Technology', 198.
[57] Cf. Van der Weel, 'Feeding our Reading Machines'.
[58] Cf. Van der Weel, 'Memory and the Reading Substrate'; idem, 'Feeding our Reading Machines'.
[59] Cf. Van der Weel, 'Memory and the Reading Substrate': 'If the importance of *material* ownership of information is indeed dwindling, would *mental* "ownership" be far behind?'