Digital religion out of the book

The loss of the illusion of the ‘original text’ and of the notion of a ‘religion of the book’

A specialist in the thousands of manuscripts of the New Testament, I am one of a number of scholars working on ancient Greek texts: since the classical age, a detailed knowledge of philology and critical editions of texts have been developed in this field.¹ This knowledge is at risk today because the new digital support draws new parameters for texts and textuality itself. The Italian philosopher Umberto Eco announced the end of the variant in the digital culture, noting that the notion of the ‘original’ text ‘certainly disappears’ (Eco and Origgi 2003: 227). For him, the problem is not really the loss of the ‘original’ production of an author – unless one wishes to reconstruct her/his psychology – but rather the alterations that I can make myself to the texts of other people.

Let’s assume that I download onto my computer La Critique de la raison pure, and that I start to study it, writing my comments between the lines; either I possess a very philological turn of mind and I can recognize my comments, or else, three years later, I could no longer say what is mine and what is Kant’s. We would be like the copyists in the Middle Ages who automatically made corrections to the text that they copied because it felt natural to do so – in which case, any philological concern is likely to go down the drain (Eco and Origgi 2003: 227).²

Eco underlines the gradual disappearance of the notion of the ‘original text’; the undermining of the philological approach is tinged with nostalgia for all scholars whose roots are in classical, philosophical or linguistic studies. It is

¹ This article is largely based on an article published in Scholarly Research and Communication, that accepted kindly the reuse of the text. See Clivaz 2012. Thank you to Cécile Pache for the editorial preparation of this article.
² Thank you to Jenny Read-Heimerdinger for the English translation of this quotation.
interesting to examine how this disappearance of the notion of an ‘original text’ will affect the relationships to the sacred texts of those religions which are called ‘religions of the book’, in the context of a global transformation of the notion of ‘textuality’ itself in Western culture through the development of digital culture. In fact, the modern belief in the existence of a completely stabilized text, clearly attributed to a specific author, goes back no further than the middle of the nineteenth century. It has its roots in the final steps taken in around 1850 to fix the legal status of the author and the text – a legal status chosen and promoted by booksellers for economic reasons, and not by the authors themselves, according to Roger Chartier (see Chartier 1996: 51). It is my belief that this legal development led to the Western fascination for the fixed ‘book’ and to the so-called ‘religions of the book’. At first glance, the expression ‘religions of the book’ seems to be based on the Quranic expression *ahl al-kitab*, the ‘people of the book’, as stated, for example, by Wilfred Cantwell Smith. In fact, it is only in the second part of the nineteenth century that this notion was popularized, from a variety of perspectives, in Western academic discourse. In his wide-ranging article, Smith also makes reference to a programmatic lecture given in London in 1870 by Friedrich Max Müller, ‘Sacred Books of the East’ (Smith 1989: 30, 33), but he makes no mention of what is repeatedly overlooked in research: the gap between the Quranic expression ‘the people of the book’ and the notion, widespread in Western culture, of the ‘religions of the book’. Max Müller sought to present a classification of religions, starting from the notion of the ‘book’ and applied to eight religions:

> With these eight religions the library of the Sacred Books of the whole human race is complete, and an accurate study of these eight codes, written in Sanskrit, Pâli, and Zend, in Hebrew, Greek, and Arabic, lastly in Chinese, might in itself not seem too formidable an undertaking for a single scholar (Müller 2004: 56).

His point of view is clear: thanks to the notion of the ‘book’, a universal picture of religions can be obtained; the sacred books are understood as reflecting the image ‘of the real doctrines of the founder of a new religion’ (Müller 2004: 53). Here we face the cultural effect of the legal status given to the printed

---

3 Smith 1989: 30: ‘It is illuminating, I suggest, to begin with the seventh century AD as the virtually culminating stage of the process, and to trace it then backwards in time. I am indebted to my research assistant Nicolas Merminod for providing useful bibliographical information on the topic.
text and its author. In this context, the modern concept of *illiteracy/literacy* drastically influences perceptions of extremely diverse religions, whereas the perception of the oral traditions and orality in history was one of a devaluation, notably in France since 1880, as Florence Descamps (2005) underlines. At that time, the idea of the ‘religions of the book’ met with considerable success amongst Protestant theologians such as Friedrich Heinrich Geffcken or Carl Theodor A. Liebner, who anachronistically linked Calvin’s doctrine to the idea of *Religionbuch* (Geffcken 1875: 225; Liebner et al. 1872: 93). On the basis of these observations, I adopt the hypothesis that the fixation of the legal status of the author and the text around 1850 was behind the Western fascination with a fixed ‘book’ and the so-called ‘religions of the book’. Nevertheless, neither Judaism, nor Islam nor Christianity can be reduced to such a concept. Since that time – but only since that time – we are used to a cultural discourse underlining the links between the emergence of the modern book and the Bible, such as that produced by Jean-Claude Carrière. He reminds us that the modern history of the book begins with the history of ‘the’ book, the Bible (see Carrière and Eco 2009: 294):

> With the religions of the Book, the book has served not just as a container, as a receptacle, but also as a ‘wide angle’ from which it has been possible for everything to be observed, everything related, maybe even for everything to be decided (Carrière and Eco 2009: 121).

This example of the nineteenth-century emergence of the expression ‘religions of the book’ highlights the fact that we are now only just beginning to unravel all the unconscious cultural statements that the sanctification of printed culture has imposed on us. The second part of this paper will illuminate the effect of the ‘digital out-of-the book culture’ on a small world; the edition of the more than 5,700 manuscripts of the Greek New Testament.

---

4 The term *illiteracy* appears in a dictionary of 1839, and *literacy* in a dictionary of 1913, see Barnton 2007: 19.
5 On Christianity as a religion not of the book, see Clivaz 2011: 52–5.
6 Thank you to Jenny Read-Heimerdinger for the English translation of this quotation.

Let’s start with a recent ‘bombshell’ that exploded at the end of 2010, in the scholarly world of editors of the Greek New Testament (NT). Since the nineteenth century, critical editing work of the NT has been controlled by the Institute for the New Testament Textual Research (INTF, located in Münster, Germany) for the main printed edition, NA27 (see Nestle and Aland et al. 1993), and by the International Greek New Testament Project (IGNTP), a committee in charge of a slowly emerging, comprehensive critical edition of the NT which was inaugurated in 1949. At the last general meeting in the field of biblical studies – the Society of Biblical Literature (SBL) annual meeting in November 2010 in Atlanta – a new, independent edition of the Greek New Testament was presented and offered to all the participants, published by a respected scholar in the field, Michael Holmes (2010), with the support of Logos Software and the Society of Biblical Literature: neither the INTF nor the IGNTP had been informed of the project. This edition has come as a shock for scholars working in the field. Why?

The new product is now freely available online, whereas the complete, printed NA27 edition is available only in paper form and has to be purchased. As a consequence, for practical reasons this new, digital edition of the Greek NT could well become the main one, which is problematic because of the scientific quality of the edition. Indeed, even though SBL justifies the project with arguments grounded essentially on a financial basis, this ‘new’ edition overall implies a return to the nineteenth edition of B. A. Westcott and F. J. A. Hort (1881) – all the information provided by the papyri, for example,
CLAIRE CLIVAZ

is omitted. Moreover, the apparatus is not based on the manuscripts but on previous printed editions (see Holmes 2010: XI). In other words, this edition represents a conservative shift and is now available online for free, sponsored by the American SBL. Its chief purpose is to convey the impression that scholars have finally achieved a stable, unified and simplified Greek text of the New Testament.\(^\text{11}\) There is nothing surprising in this turn of events: it is, in my opinion, a logical response at a time when digital culture has the potential to redefine entirely the way we think about the editing of ancient texts; particularly texts supported by a large number of different manuscripts, as is the case with Homer – as I will develop below – and particularly the New Testament. It will be useful to map out the general situation with regard to the editing of ancient texts. When it comes to the New Testament, it involves an attempt to get a somewhat ‘fixed, stabilized, sacred text’.

Whereas some US scholars try to go this way, other European scholars keep an open mind about the digital potential for an open-ended and interactive edition of the New Testament ‘out of the Book’. The possibility of a collaborative authorship for the edition of the NT has already been highlighted by scholars such as David Parker or Ulrich Schmid, who have recommended the creation of ‘an interactive \textit{apparatus criticus}, in which the kind of information visible will be partly controlled by the user. . . . In the digital edition, the transcription of the verse will be available, and the user will be able to scrutinize the editorial decisions’, even if it means ‘a weakening of the status of standard editions, and with that a change in the way in which users of texts perceive their tasks’ (Parker 2003–4: 404). Schmid has called for a ‘fully interactive digital edition’, with the possibility of also incorporating data available for the NT from the various relevant ancient languages and not just the Greek manuscripts (Schmid 2012: 190). The fact that scholars can now compare a baseline text with real manuscript photographs highlights what has only too often been forgotten: a critical edition is always a reconstructed text, composed according to some point of view or another. This main text always belongs to a period of history, as has long been known: the Codex Sinaiticus represents the New Testament according to the Sinaiticus community, those who also read the \textit{Shepherd} and the \textit{Epistle to Barnabas} as Scripture (Codex Sinaiticus 2012); the \textit{textus receptus} represents the New Testament according

\(^{11}\) An initiative such as this cannot but serve as a reminder of the heated debate in the summer of 2010 at the SBL forum, following the resignation of Prof. Ronald S. Hendel because of what he perceived to be an excessively conservative direction being taken by SBL (see SBL 2012). This new Greek NT edition would appear to confirm the new direction.
to Erasmus and his followers; and the NA²⁷ represents the New Testament according to Eberhard Nestle and Kurt Aland, in discussion with other scholars in a modern context. There has never existed an edition of the New Testament without an ‘according to’, or, in other words, without a cover – the symbol of institutionalization and power – to hold the folios or pages together.

Even though reflections such as these can be found in NT scholarship, no real, fresh conception of a digital edition of the NT has emerged until now. This situation can be explained on the grounds of an ideological cause and of institutional factors which are currently leading to an emerging deregulation of scholarly editing of the New Testament. The ideological reason becomes apparent when comparing the digital edition of the NT with the Homer Multitext project, which has opted to develop a digital tool based on the history of readings rather than on the edition of the Homeric ‘text’. As their website states,

The Homer Multitext views the full historical reality of the Homeric textual tradition as it evolved for well over a thousand years, from the pre-Classical era well into the medieval. It is an edition of Homer that is electronic and web-based. Unlike printed editions, which offer a reconstruction of an original text as it supposedly existed at the time and place of its origin, the Homer Multitext offers the tools for reconstructing a variety of texts as they existed in a variety of times and places (The Homer Multitext Project 2012).

Consequently, access is provided to photographs and diplomatic texts of the manuscripts, not to a classical critical edition. It goes without saying that in NT scholarship no one has yet dared present a NT ‘Multitext’ edition, since the relationship of NT scholars with their text has been so strongly determined by the culture of the ‘religion of the book’. Such a task would seem all the more complex and urgent than another current issue: the emergence of a hybrid, digital scholarship, beyond Western cultural boundaries.

**The emergence of a hybrid, digital scholarship beyond Western boundaries: the example of the Greek and Arabic NT manuscripts**

The digital revolution is also transforming the familiar Western boundaries of scholarship, as can be demonstrated by the example of the Greek and Arabic NT manuscripts. This topic presents a very interesting case in cultural studies.
by explaining why, until now, the Western academic world has not really been interested in Arabic manuscripts of the NT. Since G. Graf’s volumes (1944), the twentieth century has not produced any important work on the subject. The textbooks of New Testament textual criticism (NTTC) make very brief mention of the Arabic NT manuscripts, sometimes without presenting a bibliography (see Aland and Aland 1989: 214; Vaganay and Amphoux 1991: 42–4; Parker 2008: 124). Two factors account for this situation. The first is the complexity of the relationship between Western and Oriental cultures, as analysed by Said and developed in cultural and post-colonial studies (see the key work by Edward Said 1978). The following quotation by Kurt and Barbara Aland is symptomatic of this point: ‘. . . unfortunately the Arabists of today are hardly concerning themselves with the transmission of the New Testament, although there are many interesting problems here. . . ’ (Aland and Aland 1989: 214). There is a twofold assumption in this statement of the Alands: the interest should necessarily go from Arabic studies to Greek studies, and it should be obvious that everybody ought to be interested in working on the New Testament manuscripts. The second factor is that the main quest of NT textual criticism has been the establishment of the earliest and most accurate NT text, based on the oldest manuscripts. From that perspective, the Arabic NT manuscripts have always been disqualified because of their rather late dating, as can be seen in David Ewert's statement: ‘Since the Arabic versions are so late, they are not useful as witnesses to the original text of NT’ (Ewert 1990: 171).

On that point, the thrust of narrative textual criticism (see Parker 1994: 704; Clivaz 2010a: 195) shows the usefulness of manuscripts like these, in terms of the history of reading and the history of early Christianity. From that point of view, the Arabic NT manuscripts represent an incredibly rich field of research.

Since the beginning of the twenty-first century however, research into the Arabic NT manuscripts does seem to have been reactivated. My claim is that this renewed interest should be interpreted within the framework of what can be called an emerging digital Christianity. Classical Western scholarship on Christian Arabic in the past 30 years has advertised a new publication of Graf’s Geschichte der christlichen arabischen Literatur (see Graf 1979, Samir 2007) and regularly produces a Christian Arabic bibliography in the Journal

---

12 New publications have been arriving over recent years: Thomas 2007; a soon to be published review of the research is to be found in Kashouh 2012. My thanks are due to my research assistant Sara Schulthess for the bibliographical references and her thoughts on the topic. See Schulthess 2012a and 2012b: 333–44.
Digital religion out of the book

for Eastern Christian Studies, as well as projects such as that of Prof. J. P. Monferrer-Sala on Greek-Arabic NT manuscripts. But the more lively productions come from Beirut, in connection with the Center of Documentation and Arabic Christian Researches (CEDRAC): a critical edition of the Arabic Gospel according to Luke has been produced by Sister Josephine Nasr (unpublished), as well as an important study by Hikmat Kashouh, *The Arabic Versions of the Gospels*, published by de Gruyter in 2012. This is a PhD thesis, which was carried out under the supervision of David Parker, and it throws light on a discrete but ongoing work on these manuscripts from Graf up to today, offering an abridged list of 200 Arabic gospel manuscripts which are grouped into families (Pearse 2010).

While this PhD is a fine Birmingham product, it nevertheless shows distinct signs of adhering to the agenda of a particular identity; as for example when Kashouh concludes that ‘this thesis suggests that the Gospels were first translated into Arabic in either the sixth or early seventh century’ (Kashouh 2012: 380). A sentence like this could have huge implications in terms of cultural identities, for it suggests that Christian texts may have existed in Arabic before Muslim texts, a problematic issue and one argued over by both communities. Similar identity quests can be observed on certain Muslim websites which show the emergence of a hybrid Western scholarly discourse. This discourse appears thanks to the less institutionally regulated place of expression offered by the internet, on certain Muslim websites devoted to the study of Greek NT manuscripts. They often set out accurate information, as can be found, for example, on the website Islamic Awareness (Islamic Awareness 2012). The ideological point of view is nevertheless clearly expressed on the homepage of this website: ‘The primary purpose of Islamic-Awareness website [sic] is to educate Muslims about the questions and issues frequently raised by the Christian Missionaries and Orientalists. You will find a variety of excellent articles and responses to missionary and orientalist writings.’ An extended inquiry into some of the Muslim websites that study the Greek NT manuscripts in English and Arabic would be in order here so as to understand their interest in these manuscripts. It is at one and the same time frustrating and interesting for me, as a New Testament scholar, to see a Muslim Arabic website providing photographs of Greek NT manuscripts (see sheekh-3arb.net 2012): what view of my field of research is given by such a website? This website clearly illustrates how apparently separate scholarly worlds are meeting.

---

13 A project in Cordoba, BFF2002-02930.
on the web, but without supposing any interaction between them for the time being.\textsuperscript{14}

The emergence of a digital, hybrid Western scholarly discourse can also be discerned, for example, on a website such as the University of Leeds Arabic Language Computing Research Group, announced on AWOL (2010). Indeed, the link indicated by AWOL, rather than leading to an Arabic Studies department of the University of Leeds, leads to the Faculty of Engineering.\textsuperscript{15} All these surprising facts merit closer investigation and a three-year research project will be done on the topic at the University of Lausanne during 2013–16.\textsuperscript{16}

Digital media offer new opportunities for developing a hybrid Western scholarly discourse, as these Christian and Muslim examples show. Within this hybrid scholarly discourse, the Arabic and Greek NT manuscripts become the pretext for new identity quests and tensions between groups/communities. The phenomenon contributes to the shaping of an emerging digital Christianity, out of which will come perhaps a multitext edition of the New Testament. As the previous sections sought to demonstrate, the fields of NT manuscripts and of the editing of ancient texts are particularly sensitive to the emergence of digital humanities. Consequently, I would like to conclude this article with a call for the writing of a cultural history of digital humanities, under the banner of the programmatic essay by Roland Barthes, ‘The Death of the Author’, first published in 1967.

\textbf{Conclusion: the first edition of the Barthesian ‘Death of the Author’ (1967)}

According to Willard McCarty and Susan Hockey, the starting point for this new field of knowledge was the ‘application of computing to the humanities . . . about 50 years ago, in the late 1940s, by a Jesuit scholar, Father Roberto Busa,}

\textsuperscript{14} Most surprisingly, it should be noted that the website of the Center for the New Testament Manuscripts (Texas) has borrowed a webpage from www.sheekh-3arb.net, without noting their choice to do so (see the Vaticanus Scripture Index on that webpage: CSNTM 2012).
\textsuperscript{15} See Arabic Language Computing Research @ Leeds 2012; this website leads to Qurany 2012.
\textsuperscript{16} I have just been awarded a three-year grant from the Swiss National Fund to open a PhD research project on this topic, co-supervised by Prof. David Bouvier (Ancient Greek, University of Lausanne) and Prof. Herman Teule (Early Christian Arabic Literature, University of Nijmegen). Sara Schulthess will be in charge of it during 2013–16.
in the *Index Thomisticus* (McCarty nd: 1; see also Hockey nd). Moreover, it cannot be forgotten that scientific research in the USA during the Second World War was the milieu for the production of the first digital inputs, as attested by the important article by Vannevar Bush – ‘As we may think’ (1945) – where he asks: ‘What are the scientists to do next [after the war]?’ The sixties subsequently played a very important role, as stressed by Katie Hafner and Matthew Lyon (1998: 11–42). Computers were already at work in the literary imagination and in scholarly perceptions of culture, as the novel *Le Littératron* by Robert Escarpit (1964) shows, or this 1968 statement by the French historian Emmanuel Le Roy Ladurie: ‘Tomorrow’s historian will either be a programmer or will not be’ (1973: 14). It was also at that time that Roland Barthes wrote his famous essay ‘The Death of the Author’. If a cultural history of digital humanities were to be written, it should shed light on this ‘blind spot’ in scholarly perceptions of the thinking of Roland Barthes and Michel Foucault on the author.

Barthes and Foucault seemingly spoke about the disappearance, or the death, of the author at a time when the hypertext and the cyber-world did not exist, as Roger Chartier summarizes:

> The world of digital texts is a world where texts are displayed, modified, rewritten, where writing takes place within an already existing piece of writing, a world where the reader is involved not outside the text but within the texts themselves, a world where, as Foucault sometimes imagined, texts would not be assigned to an author’s name, where the ‘author’s function’ would lose its importance in a kind of textuality formed by layers of discourses that are continually being rewritten and in a permanent exchange between writers and readers – readers who in their turn are authors (Chartier 2001: 17–18).

---

17 ‘L’historien de demain sera programmeur ou ne sera pas.’
18 The classical references are Barthes 1984 and Foucault 1969.
19 ‘Le monde du texte numérique est un monde où les textes sont déployés, repris, réécrits, où une écriture écrit dans une écriture déjà là, un monde où le lecteur intervient non pas sur les marges du texte, mais dans les textes eux-mêmes, un monde où comme l’avait rêvé parfois Foucault, s’effacerait l’assignation au nom propre, où s’effacerait la “fonction auteur” dans une sorte de textualité formée de nappes de discours toujours repris et liés à l’échange permanent entre producteurs et lecteurs – mais des lecteurs à leur tour auteurs.’
As we have seen, however, the computer was already in operation in Western culture during the sixties. The search for the very first version of Barthes’ article ‘The Death of the Author’ never fails to occasion surprise. This first version was written in English – and not in French – and appeared without pagination in a multimedia-box in the experimental American review *Aspen.*

The first appearance of the topic of the death of the author is therefore represented by a few floating English pages, in a box containing also 4 films, 5 records, 8 boards, 10 printed data and texts. This being so, it is now time to acknowledge that the ‘death of the author’ was proposed within a framework that was itself already influenced by the emergence of the English multi-media culture, as symbolized by the first publication of Barthes’ article.

As the question of the twofold emergence of the codex and of Christianity shows (see Clivaz 2011: 25–7), ideas and new writing materials always develop in synergy. The Foucauldian ‘author’s function’ is probably too narrowly defined for it to function now in digital culture (see Neeman 2012: 3–36), where, as Chartier (2001: 17) indicates, ‘readers in their turn are also authors’.

Such an observation was already at the heart of Barthes’ 1967 article, where he states:

> The true locus of writing is reading. . . . In this way is revealed the whole being of writing: a text consists of multiple writings, issuing from several cultures and entering into dialogue with each other, into parody, into contestation; but there is one place where this multiplicity is collected, united, and this place is not the author, as we have hitherto said it was, but the reader: the reader is the very space in which are inscribed, without any being lost, all the citations a writing consists of; the unity of a text is not in its origin, it is in its destination (Barthes 1967).

Nevertheless, Barthes does not resist the temptation to render the reader absolute with respect to the author: ‘but this destination can no longer be personal: the reader is a man without history, without biography, without psychology; he is only that someone who holds gathered into a single field all the paths of which the text is constituted’ (Barthes 1967). Ultimately, this total and disembodied reader will in a sense reinforce the strength of the ideology of the author during the end of the twentieth century.

With the digital writing medium, we have a very different perception today of the phenomenon of writing, profoundly marked as it is by a plurality of

---

20 See the first publication of Barthes (1967: 5–6).
Digital religion out of the book

authorship as well as of readership. As I have suggested elsewhere (see Clivaz 2010b), the classical triad ‘author–text–reader’ could be replaced by a plural triad: ‘authors–scribes–readers’. The ‘text’ is replaced here by the scribes: they are the people who literally make the text. The scribe is the last author and a particularly influential reader. In digital terms, we could call the ancient scribe the scriptor, the one who writes and reads, reads and writes, and re-writes again. The exhausting, age-old fight between the author and the reader has probably come to an end with the digital medium of writing and with the figure of the scriptor. Within the digital context there emerges a mass of authors–readers, who seek to understand, speak and write. They are the scriptors of our move beyond Western cultural boundaries, whatever that will look like.

In order, at the end of this article, to open up further avenues I will point out that the synergy between ideas and the support of writing was the blind spot of modernity. This must now be recognized, in order to deconstruct the printed-culture notion of the ‘religions of the book’. New digital interactive and open-ended editions of the Jewish, Buddhist, Muslim, Christian, and so on sacred texts will help to go beyond the categorization proposed by Max Müller in 1870.

References

Internet sources

Arabic Language Computing Research @ Leeds

AWOL

bibelwissenschaft.de

See Barthes 1967: ‘the modern writer (scriptor) is born simultaneously with his text; he is in no way supplied with a being which precedes or transcends his writing, he is in no way the subject of which his book is the predicate; there is no other time than that of the utterance, and every text is eternally written here and now.’

37
**Codex Sinaiticus**  

**CSNTM**  

**The Homer Multitext project**  

**IGNTP**  

**Islamic Awareness**  

**Pearse, R.**  

**Qurany**  

**SBL**  

**SBL Greek New Testament**  

**sheekh-3arb.net**  

**Bibliography**

**Aland, K., and B. Aland**  

**Barnton, D.**  

**Barthes, R.**  

Bush, V.

Carrière, J.-C., and U. Eco

Chartier, R.

Clivaz, Claire

Descamps, F.

Eco, U., and G. Origgi

Escarpit, R.

Ewert, D.
Foucault, M. 

Geffcken, F. H. 

Graf, G. 

Hafner, K., and M. Lyon 

Hockey, S. 

Holmes, M. W. (ed.) 

Kashouh, H. 

LeRoy-Ladurie, E. 

Liebner, C. T. A., et al. (eds) 
1872 Jahrbücher für deutsche Theologie 17(1).

McCarty, W. 

Müller, F. M. 

Neeman, E., in collaboration with J. Meizoz and C. Clivaz 

Nestle, E., and K. Aland et al. (eds) 
Parker, D.

Said, E. W.

Samir, S. K.

Schmid, U.

Schulthess, S.

Smith, W. C.

Thomas, D. R.

Vaganay, L., and C.-B. Amphoux

Westcott, B. F., and F. J. A. Hort