TURGAMA

Computer-Assisted Analysis of the Peshitta and the Targum: Text, Language and Interpretation

Leiden Institute for Religious Studies
Leiden University

in cooperation with

Werkgroep Informatica
Vrije Universiteit Amsterdam

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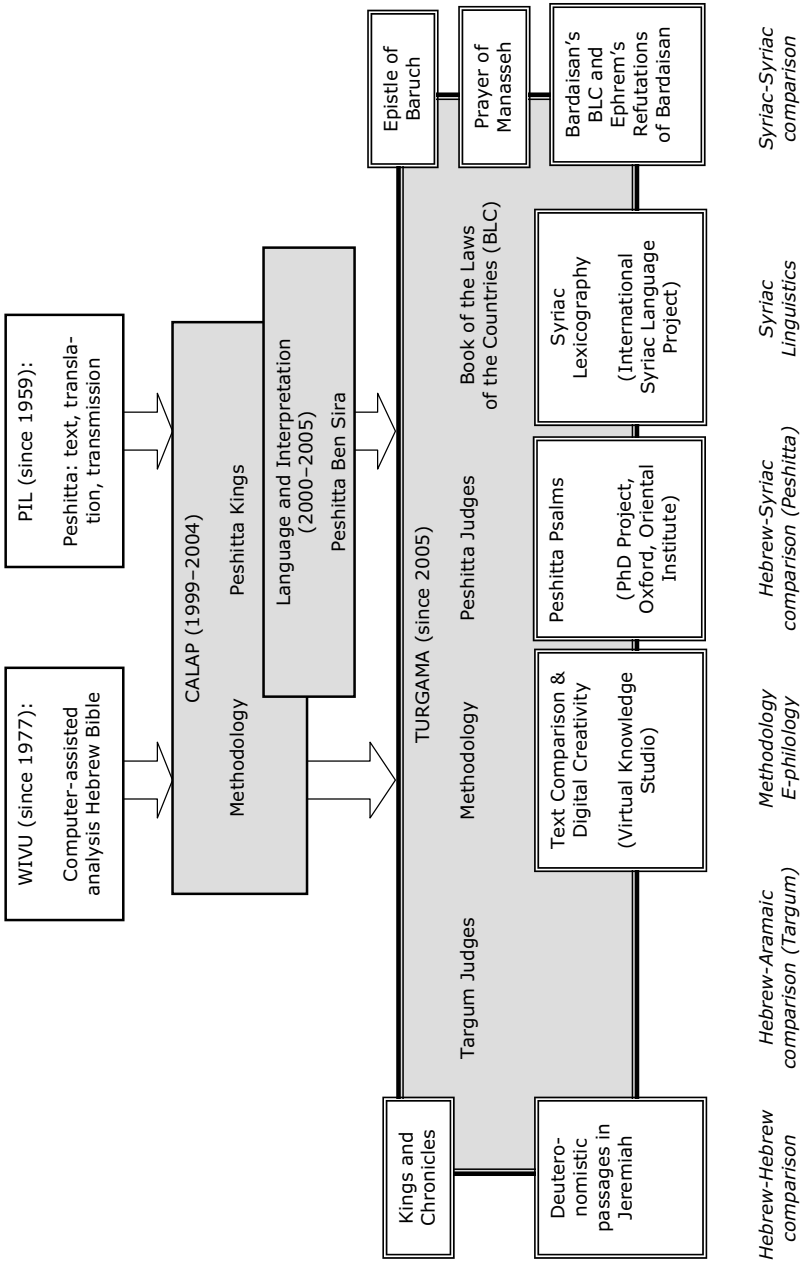
TABLE: TURGAMA, ITS PREDECESSORS, AND ITS SATELLITE PROJECTS



TURGAMA: COMPUTER-ASSISTED ANALYSIS OF THE PESHITTA AND THE TARGUM: TEXT, LANGUAGE AND INTERPRETATION

The TURGAMA project concerns a computer-assisted linguistic analysis, incorporating matters of text-historical interest and translation technique, of the Peshitta. It covers two closely related topics: the language and textual history of the Aramaic translations of the Bible (in this case Targum Jonathan) and the language of Classical Syriac documents which (unlike the Peshitta) are not themselves translations.

TURGAMA started in 2005. It is the successor of CALAP (Computer-Assisted Linguistic Analysis of the Peshitta), a joint research project of the Peshitta Institute Leiden and the Werkgroep Informatica at the Vrije Universiteit Amsterdam. CALAP concerned the computer-assisted analysis of Peshitta–Kings (Janet Dyk and Percy van Keulen) en Peshitta–Sirach (Wido van Peursen) and the development of computer programs (Constantijn Sikkel and Hendrik Jan Bosman). The CALAP project leaders were Konrad Jenner and Eep Talstra.

In TURGAMA the CALAP model of computational textual analysis and the computer programs required for it are further developed, applied to other parts of the Peshitta (Judges and Psalms), and extended towards the Targum (Judges) and a corpus of original (non-translated) Syriac, namely the *Book of the Laws of the Countries* or *Dialogue on Fate*.

Purpose

The aim of the project is to contribute to

1. The linguistic and text-historical study of the Peshitta.
2. The study of Classical Syriac.
3. The linguistic and text-historical study of the Targumim.
4. The methodological debate about the computer-assisted analysis of texts and translations.

Statement of the problem

The project will focus on the following questions.

1. What was the interaction between language system and translation technique in the translation from Hebrew (source language) into Syriac/Aramaic (target language)?
2. How does Biblical Syriac relate to early original Syriac?
3. What is the relation between the Peshitta and the Targum in terms of textual history, translation technique and interpretation?
4. How can a computer-assisted analysis contribute to the interpretation of (religious) texts?

Project constituents

The project contains six constituents:

1. Study of language and interpretation in Peshitta-Judges.
2. Linguistic study of Psalm 1–30 according to the Peshitta version.
3. Linguistic study of the *Book of the Laws of the Countries*
4. Study of language and translation technique of Targum-Judges.
5. Computer programs, methodology of linguistic and textual analysis.

Project team

The nucleus project team consists of the following members, who carry out the research pertaining to the project constituents:

Wido (W.Th.) van Peursen: Project Constituents 1 and 5.
Jeffrey A. Volkmer (Oriental Institute, Oxford): Project Constituent 2.
Dirk Bakker: Project Constituent 3.
Percy S.F. van Keulen: Project Constituent 4.
Constantijn J. Sikkel: Project Constituent 6.

Other members of the project team:

Dr. J.W. Dyk (VU Amsterdam, Werkgroep Informatica)
Dr. M.L. Folmer (Leiden University, Faculty of Arts, Hebrew and Aramaic)
Dr. E. van Staalduine-Sulman (VU Amsterdam, Faculty of Theology)
Prof. Dr. E. Talstra (VU Amsterdam, Werkgroep Informatica)
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Prof. Dr. J. Joosten (Strasbourg)
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Pilot projects

In addition, some smaller pilots are carried out pertaining to the computational comparison of parallel texts:

1. 2 Kings 18–19 and its parallels in Isaiah and Chronicles, by Wido van Peursen and Eep Talstra.
2. Deuteronomistic language in Jeremiah, by Constantijn Sikkel.

3. The two Syriac versions of the Epistle of Baruch, by Hans Rutger Bosker (Leiden University).
4. The two Syriac versions of the Prayer of Manasseh, by Ariel Gutman (École Normale Supérieure, Paris) and Wido van Peursen
5. Judges 4 and 5 in Hebrew, Syriac and Aramaic, by Dirk Bakker.

Peshitta Electronic Text Project

Another related project is the Peshitta Electronic Text Project. The aim of this project is to encourage Peshitta studies by making the electronic text of the Peshitta available. The first phase of this project concerns the preparation of (a) a lemmatized text of the Pentateuch; this text includes also a selection of variant readings; and (b) a running text of the other books of the Peshitta, including all the Apocrypha that have been or will be included in the Leiden Peshitta edition. In those cases where the Peshitta edition offers two parallel versions (e.g. in the case of parts of Tobit and 1 Maccabees), both versions are included in the electronic text.

Products of the first phase are available in the UBS Paratext Software and will become available in the future in the Logos Bible Software, the database of the Comprehensive Aramaic Lexicon (part of the Peshitta text is already available on this website) and the software packages of Accordance and BibleWorks.

Cooperation with the International Syriac Language Project

In 2007 an agreement for cooperation was established with the International Syriac Language Project (ISLP). The ISLP was founded in 2003 and since then has gathered annually. It consists of a group scholars working in the field of Syriac language studies, Syriac literature, computational linguistics, general linguistics and lexicography. Their colloquia are published in the series Perspectives on Syriac Linguistics (Gorgias Press).

Contact

The TURGAMA project leader is Dr. Wido van Peursen. He received a VIDI grant for this project from the Netherlands Organisation for Scientific Research (NWO). For more information about the background of the project or the possibilities to participate in the project you can contact him. His e-mail address is w.t.van.peursen@religion.leidenuniv.nl.

METHODS AND TOOLS

Procedure of the Computer-Assisted Linguistic and Comparative Analysis

The analysis of the Peshitta and the Targum proceeds from a multilayered linguistic analysis to a comparative textual analysis. This enables a comparison that takes into account not only surface features, but also lexemes, parts of speech, division into phrases and clause parsing.

The analysis starts with an independent bottom-up linguistic analysis of both the Hebrew and the Aramaic/Syriac texts at the following levels:

1. Word level: Segmentation of words into morphemes. The morphemes are marked with various symbols (e.g. in the encoding of Hebrew and Aramaic / marks a noun ending, [a verb ending). Two auxiliary files, a description of the morphology and a list of lexemes, are used for functional deductions from the morphological analysis and the assignment of lexically determined word functions (e.g. 'plural noun'). This procedure of encoding (not tagging!) guarantees consistency in the analysis of morphemes, because this analysis is produced automatically. Moreover, it has the advantage that not only the interpretation of a word, but also the data which led to a certain interpretation can be retrieved, whereas the motivation behind a tagging is usually not visible.
2. Phrase level: Combination of words into phrases (e.g. noun + adjective). This entails the morphosyntactic analysis and the systematic adaptations of word classes in certain environments (e.g. participle → adjective; adjective → noun), and the analysis of phrase-internal relations (e.g. attribute, modifier).
3. Clause level. Combination of phrases into clauses (e.g. conjunction + verb + determinate noun phrase). At this level syntactic functions are assigned (e.g. subject, predicate).
4. Text level. Determination of the relationships between clauses. At this level the syntactical functions of the clause within the hierarchy of clauses are assigned (e.g. object clause, attributive clause).

The linguistically analysed texts are the input for the comparative analysis, which entails the following steps:

5. Collation (in the sense of: creating a synopsis): interactive parallel alignment of segments that 'belong together', based on the calculation of their correspondences.
6. Counting: statistical analysis of correspondences between parallel segments.

7. Comparison: comparing the parallel texts with respect to all relevant categories: surface text, lexemes, parts of speech, division into phrases and clause parsing.
8. If needed: repetition of 5 to 7 in a process of refinement.
9. Retrieval and sorting: once steps 5 to 8 have been taken, lists of corresponding elements, both in the surface text and in all grammatical and lexical categories mentioned in 1 to 4, can be produced automatically (e.g. translation concordances, lists of parallel phrase patterns, frequency lists).

Computer programs used in the analysis

For the linguistic and the comparative analysis the following programs are used:

- Programs that recognize the patterns of formal elements that combine to form words, phrases, clauses and textual units.
- Language-specific auxiliary files such as a lexicon and a description of the morphology and the associated grammatical functions.
- Data sets, built up gradually, containing all patterns registered in the analysis.
- Programs that use the data sets and the auxiliary files to make proposals in the interactive procedures for the linguistic analysis and the creation of a synopsis.

The data sets are available in three platform-independent formats: as ASCII files, as an SQL dump, and as an MQL dump. The data sets are stored in an SQL database, for which the text database engine Emdros is used (see www.emdros.org). This is an SQL implementation of the Monad dot Feature database model defined by C.J. Doedens and U. Petersen. Characteristic of this model is the possibility to store overlapping hierarchies and thus to combine linguistic categories (e.g. sentences), literary divisions (e.g. strophes), traditional divisions (e.g. biblical chapters, delimitation markers in manuscripts) and material divisions (e.g. lacunae in manuscripts).

RESULTS OF THE COMPUTER-ASSISTED ANALYSIS: SOME EXAMPLES FROM THE RESEARCH INTO THE SYRIAC TRANSLATION OF THE BOOK OF BEN SIRA

Example 1: The Good Shepherd

In the Syriac text of Ben Sira 18:10 there is a remark about 'a/the good shepherd', corresponding to 'a shepherd' in the Greek text. This has been celebrated as a convincing argument that the translator of this text was a Christian rather than a Jew. (The Jewish or Christian background is one of the most debated issues in the research into the Syriac translation of the Old Testament.) However, the computational analysis of the Syriac text showed that there are tens of cases in which a noun in the Hebrew or Greek text corresponds to a noun with an adjective in the Syriac text. This observation requires a reconsideration of the traditional argumentation. Apparently the Syriac translator added an adjective on many occasions. Therefore an explanation that applies to the regular pattern of correspondence as such in terms of translation technique is preferable to an explanation in terms of 'Christian influence' that applies only to this single case.

Example 2: The maximum matrix of phrase structure

In most grammars of Classical Syriac various combinations of words are described, such as 'the genitive' (e.g. 'the horse of the king') or the apposition (e.g. 'David, the king'). They mainly deal with combinations of a head of a phrase and one extention. The types of extensions attested in Syriac are: adjectives, phrases with the particle *d-*, nouns, demonstratives, prepositional phrases and parallel elements. The basic pattern of an extended phrase is indeed that in which a head consisting of a single word takes one extension. However, in a corpus-based approach we often have to deal with more complex patterns in which various specifications are combined in one phrase. The complex structures arise from the following phenomena:

1. The extensions themselves can be extended by other specifications, as in Sir 13:26 'the marks of a good heart', where 'good' modifies the extension 'of a heart'.
2. A phrase atom can take more than one extension, as in Sir 16:3 'many wicked sons', where both 'many' and 'wicked' modify 'sons'.
4. A specification may be separated from its head. The result is a discontinuous phrase. The 'breakpoint' in a phrase is the slot between its head and the first specification. A phrase is not broken up, for example, between the first and the second specification.

A careful analysis of all attested patterns led to a 'maximum matrix of phrase pattern' that accounts for all the mutual relationships between various extensions of a phrase and the fixed order in which they occur. The matrix can be represented as follows:

[Prep–CstrNoun–CstrNoun–Noun] | [Dem.] [Adj.] [App.] [*d*-Noun] [Prep–Noun] [*d*-{Clause}] [Parallel Element]

For further details we refer to Van Peursen's *Language and Interpretation*, Chapter 15 (see bibliography). For the moment it will suffice to note that a computational corpus-based approached can improve and supplement traditional grammatical descriptions.

Example 3: the Praise of the Fathers

The final chapters of the Book of Ben Sira are called the 'Praise of the Fathers'. It has been argued that these chapters present figures of the past in the form of a *Beispielreihe*: honourable people from the past are put forward in a list of examples. Many modern Bible translations give each hero his own section. They insert, for example, a break between 47:25 and 48:1 and give the passage starting in 48:1 the heading 'Elijah' or 'Elijah and Elisha'. However, syntactically there is no start of a new paragraph in 48:1. It begins with 'until there arose a prophet', and the main clause to which this 'until' is connected occurs a few verse earlier, in 47:23 'And let there be no memory to him, to Jeroboam the son of Nebat, who sinned and caused Israel to sin…'. Elijah is mentioned by name not earlier than in 48:4. The introduction of Elijah with 'until' corresponds to another 'until', namely 48:15 'until they were exiled from their place and were scattered over all cities'. Accordingly, the depiction of Elijah and Elisha is strongly rooted in the account of the people's sin, their refusal to return from their evil deeds and the final outcome of their transgressions: the exile.

These observations apply to other heroes that are mentioned in the Praise of the Fathers as well. In other words: the syntactic and text-hierarchical analysis has shown that this section describes a chain of events rather than a series of examples. The heroes of the past are not presented as individual examples, but as part of a long chain of events. From this perspective, the interpretation of the Praise of the Fathers should be reconsidered. Ben Sira is deeply concerned with the flow of history as an ongoing chain of interrelated events rather than with the individual heroes who played a role in it.

RESULTS OF THE COMPUTER-ASSISTED ANALYSIS: SOME EXAMPLES FROM THE RESEARCH INTO THE SYRIAC TRANSLATION OF KINGS

The computational comparison between the Hebrew text and the Syriac translation of Kings has brought to light a wide array of differences between the two texts. Some of these must have to do with a systematic difference in syntax between the two languages, because they cannot be satisfactorily explained in terms of translation style or dependence on a different source text. Thus, an interesting phenomenon is that the Syriac text, in comparison with the Hebrew, tends to repeat certain clause constituents: conjunctions, prepositions and personal suffixes.

Two examples are presented here. In 2 Kgs 13:23, the Hebrew text, translated literally, reads: 'because of his covenant with Abraham, Isaac, and Jacob'. In the Syriac rendering, prepositions and conjunction are supplemented: 'because of his covenant with Abraham *and with* Isaac and *with* Jacob'.

In 2 Kgs 23:1 the Syriac repeats the particle *d* to make explicit a genitive relationship that is implicit in the Hebrew text. Whereas the latter literally reads 'all the elders of Judah and (of) Jerusalem', the Syriac repeats the particle *d* in order to indicate that 'Jerusalem' is implied in the genitive relationship with 'elders': 'all the elders of Judah and *of* Jerusalem'.

A plausible explanation for the differences noted here may be that items as prepositions and conjunctions have a more limited range of government in Syriac than in Hebrew. To be sure, there are also many instances where Hebrew syntax is slavishly reproduced in the Syriac text and the extra items are not supplied. In these cases, faithfulness to the structure of the source text may have prevailed over the tendency to state syntactic connections explicitly. Younger manuscripts can sometimes be seen to add the necessary items to articulate syntactic relationship (e.g. in 2 Kgs 25:26).

RESULTS OF THE COMPUTER-ASSISTED ANALYSIS: THE PILOT STUDY ON 2 KINGS 18–19 AND ITS PARALLELS IN ISAIAH AND CHRONICLES

2 Kings 18–19, Isaiah 37–38 and 2 Chronicles 32 each contain the story of Sennacherib's campaign against Judah. The Kings and Isaiah chapters are closely related. In the pilot project we created a synopsis of them with the help of the computer. Although the result did not differ much from traditional synopses that have been published in the course of the centuries, the very fact that it is possible to reach the same result with the computer, is noteworthy. The added value of the use of the computer lies, among others, in the need to make explicit the parameters that are taken into account. Some remarkable differences between synopses or other studies on parallel texts in the Bible go back to the points of departure and the parameters chosen. In many cases these parameters are far from obvious. But more than once they have not been made explicit.

The situation with 2 Kings 18–19 and 2 Chronicles 32 is completely different. These chapters differ so much, that it is sometimes impossible to establish which verses should be considered parallel. The computer-assisted analysis, with the help of concordances, frequency lists and lists of matches between verses, brings to light some striking correspondences, that disappear in traditional synopses, such as Bendavid's *Parallels in the Bible*. Although Bendavid does not make his criteria explicit, it seems that his decisions were motivated by literary considerations, like the desire to retain the same narrative structure in the two texts concerned, rather than by linguistic correspondences. Consequently, his synopsis does not cover correspondences between verses that do not appear in the same literary framework of, for example, the direct speech of one of the participants. This includes cases where elements of the direct speech of one participant in Kings (Isaiah) become the words of another person in Chronicles (Hezekiah) and cases where direct speech in Kings becomes narrated text in Chronicles.

These observations are relevant to the reconstruction of the Chronicler's interpretation and reworking of Kings, to developments in Classical Hebrew narrative as far as the relationship between direct speech and narrated text is concerned, and to the question of whether the Chronicler has used other sources besides Kings.

RESULTS OF THE COMPUTER-ASSISTED ANALYSIS: THE PILOT STUDY ON DEUTERONOMY AND JEREMIAH

To what extent can the similarities between Deuteronomy and Jeremiah be charted in a relatively objective manner using computational techniques? In Old Testament scholarship it is generally assumed that Jeremiah has undergone a Deuteronomistic redaction. Opinions differ, however, as to what phenomena demonstrate this redaction. For this reason, to identify which parts of Jeremiah are Deuteronomistic and which are Jeremianic, it is preferable to apply a similarity metric that is not feature-based, and hence does not require that Deuteronomistic words or phrases are defined beforehand. In his MA paper entitled 'Discovering Similarities between Deuteronomy and Jeremiah' Constantijn Sikkel used a measure that is based on the notion of Kolmogorov complexity. He divided Deuteronomy and Jeremiah into text blocks (about the size of a chapter) and calculated for each text block in Jeremiah the Normal Compression Distance (i.e. the shortest self-contained binary representation of a piece of information) to every text block in Deuteronomy.

The most proximate text blocks included Jer 10:5–11:10 and Deut 30:20–31:22; Jer 42:8–43:9 and Deut 29:22–30:20; and Jer 32:1–25 and Deut 25:9 and 26:18. Jeremiah 7 is remarkably similar to the book of Deuteronomy in general, whereas chapter 36 is more distant. These results are in line with traditional research. Although it seems at first sight not very exciting that the results agree with insights from traditional scholarship, the effectiveness of 'blind' machine learning is impressive and will be the basis for further application of this method.

BIBLIOGRAPHY OF THE CALAP AND TURGAMA PROJECTS

BOOKS

Keulen, P.S.F. van and Peursen, W.Th. van (eds.), *Corpus Linguistics and Textual History. A Computer-Assisted Interdisciplinary Approach to the Peshitta* (Studia Semitica Neerlandica 48; Assen: Van Gorcum, 2006).

Over the last few decades the use of the computer has become increasingly important in biblical studies. However, a combination of computer linguistics with diachronic text-critical and text-historical approaches has hardly ever taken place. Quite often, there is mutual misunderstanding between computer-linguistics and more traditional approaches in the field of linguistics and textual analysis. For example, in computer-assisted research of modern text corpora it is common to treat the text as an unequivocal and unidimensional sequence of characters. In biblical studies, however, 'the' text is considered an abstraction, the result of a scholarly reconstruction based on the extant textual witnesses. Here a fundamental difference in approach reveals itself.

This volume tries to overcome the misunderstanding between the various disciplines and to establish how a fruitful interaction of information technology, linguistics and textual criticism, can contribute to the analysis of ancient texts. It addresses questions concerning the confrontation between synchronic and diachronic approaches, the role of linguistic analysis in the interpretation of texts, and the interaction of linguistic theory and the analysis of linguistic data.

The first section of this volume contains the papers presented at the CALAP seminar 2003. In the second section different aspects of the interdisciplinary analysis are applied to a selected passage from the Peshitta of Kings.

Reviews:

Becking, B., *Nederlands Theologisch Tijdschrift* 63/3 (2009) 263.Cook, J., *Review of Biblical Literature* [http://www.bookreviews.org] (2007).
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Rösel, M., *Zeitschrift für die alttestamentliche Wissenschaft* 120 (2008) 136–137.
Salvesen, A, *TC: A Journal of Biblical Textual Criticism* [http://purl.org/TC] 13 (2008).

Peursen, W.Th. van, *Language and Interpretation in the Syriac Text of Ben Sira. A Comparative Linguistic and Literary Study* (Monographs of the Peshitta Institute Leiden 16; Leiden: Brill, 2007).

This book is the result of an innovative linguistic study of the Syriac translation of Ben Sira. It contains both a traditional philological analysis, incorporating matters of text-historical interest and translation technique, and the results of a computational linguistic analysis of phrases, clauses and texts. It arrives at new linguistic insights, including a proposal for a corpus-based description of phrase structure based on a so-called maximum matrix. The book also addresses the fundamental different way in which a text is approached in a computer-assisted analysis compared with the way in which this is done in traditional philological approaches. It demonstrates how the computer-assisted analysis can fruitfully shed light on or supplement traditional philological research.

Dyk, J.W. and Peursen, W.Th. van (eds.), *Foundations for Syriac Lexicography III. Colloquia of the International Syriac Language Project* (Perspectives on Syriac Linguistics 4; Piscataway, NJ: Gorgias, 2008).

This volume is the third in a series that addresses issues related to a contemporary approach to Classical Syriac lexicography. The international team of authors invited to participate in this volume represents a wide range of disciplines in Syriac, Greek and Hebrew linguistics, and opens new horizons in lexical thinking. The papers are presented in four thematically related parts.

Part 1: Lexicography and Morphology. This part contains four papers that discuss insights gained from the morphological encoding in the Turgama project. Dirk Bakker discusses third-weak verbs; he argues for providing full information as to the identity of a lexeme; Percy van Keulen discusses derivation and inflection with regard to feminine nominal endings; Wido van Peursen deals with verbs beginning with *ša*; and Constantijn Sikkel argues for the lexeme status of the so-called pronominal suffix.

Part 2: Lexicography and Syntax: Part of Speech Attribution. Terry Falla and Dean Forbes address grammatical classification in Syriac and Hebrew. The enter the debate whether part of speech should be established on the basis of word features such as the morphological structure or only by the syntactic context.

Part 3: Words, Texts, and Contexts. Janet Dyk examines translation choices made in Peshitta Kings with the help of a synopsis-based translation concordance; James Aitken looks at socio-historical background in Greek lexicographical work; and Reinier de Blois presents new tools and methodologies for the development of an electronic Hebrew lexicon.

Part 4: Interdisciplinary Perspectives: Hebrew and Greek Lexicography. Regine Hunziker-Rodewald details the Gesenius–BDB family of lexica and the KAHAL–HALAT project; Jo-Ann Hackett and John Huehnergard report on revising and updating BDB; John Kaltner examines the Koehler–Baumgartner family; James Aitken examines the lexica of Zorell and Alonso Schoekel; and finally Reinier de Blois evaluates Louw and Nida's approach to semantic domains from a cognitive linguistic perspective.

Peursen, W.Th., E. Thoutenhoofd and A.H. van der Weel (eds.), *Text Comparison and Digital Creativity. The Production of Presence and Meaning in Digital Text Scholarship* (Leiden: Brill, scheduled to appear in March 2010).

The contributions to this volume were triggered by an international colloquium, held in Amsterdam, 30–31 October 2008. They critically explore recent developments in comparative text scholarship brought about by the use of ICT. On the one hand, the spread of digital technology across philology, linguistics and literary studies suggests that text scholarship itself is taking on a more laboratory-like image. The ability to sort, quantify, reproduce and report text through computation would seem to facilitate the exploration of text as quantitative data. On the other hand, however, developing this potential also highlights text analysis and text interpretation as two increasingly separated subtasks in the study of texts.

The contributions represent various expert areas in philology (from Old Testament linguistics to New Testament manuscript studies, or from a hyperlinked edition of the sixteenth-century *Ogdoas Scholastica* of Jacob Lorhard to a stemmatological analysis of fourteen versions of the medieval Dutch drama play *Lanseloet van Denemerken*), as well as the technical analysis of the material carriers of text (such as the digital reproduction of North-West Semitic inscriptions or the analysis of watermarks in eighteenth- and nineteenth-century Arabic manuscripts), and from disciplines such as electronic editing, information sciences, book and digital media studies, and digital humanities. The confrontation of these disciplines proved to be a fertile ground for an interdisciplinary debate on the production of presence and meaning in contemporary text scholarship.

Gutman, A. and W.Th. van Peursen, *The Two Syriac Versions of the Prayer of* Manassah (Gorgias Eastern Christian Studies; Piscataway, NJ: Gorgias, scheduled to appear in 2010).

'The Prayer of Manasseh', a beautiful penitential prayer attributed to king Manasseh of Judea, has had a rich and complex textual transmission. Amongst its Syriac textual-witnesses, two main versions emerge: one appearing in the Peshitta and the Didascalia, and another in the Melkite Horologion. In this study, the authors present a detailed philological and linguistic comparison of these two versions. Combing state-of-the-art computational tools together with traditional philology the texts are compared at all linguistic levels, from their vocabulary up to their discursive structure, with a special emphasis on their morphology and syntax. The results are revealing not only as for the question of the relationship between the two versions, but also illuminate various debates pertaining to Syriac syntax. Questions of methodological nature regarding textual comparison using qualitative and quantitative techniques are addressed as well. Together

with the thorough text-historical introduction, the book is a natural companion for anyone interested in this remarkable prayer, as well for anyone interested in Syriac studies, textual-criticism or Eastern Christian Liturgy.

In progress:

Dyk, J.W. and Keulen, P.S.F. van, *Language System, Translation Technique and Textual Tradition in the Peshitta of Kings* (forthcoming in the series Monographs of the Peshitta Institute Leiden).

Walter, D.M. and Keulen, P.S.F. van, *Kings* (Annotated translation of the Peshitta to Kings, to appear in the Bible of Edessa series).

ARTICLES

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