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Digital Greek Patristic Catena (DGPC). A brief presentation

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Abstract

The project is to develop a database, which is planned to include all available information on the use of the Bible in the patristic works of Migne's *Patrologia Graeca*. Utilization of the data will be available through a web page equipped with necessary tools for developing data mining techniques and other methods of analysis. The main aim of the project is to revive the *catenae*, the ancient exegetical tool for biblical interpretation.

keywords

catena, bible references, patristic authors, biblical exegesis, database, Patrologia Graeca

INTRODUCTION

The project aims to revive with the aid of information technology the ancient hermeneutical tool of the Bible, the *Catena*, by producing an online research tool for scholars from the international community on the field of humanities and especially for disciplines on Christian literature. Similarly to the already running project *Bibindex* by Sources Chretiennes, our project is planned to provide:

- a full list of the biblical quotations in the works of the Christian authors of the first 15 centuries of Christianity
- the Bible text in the original languages and translations
- a full corpus of all the relevant Christian texts commenting on those quotations (*catena*)
- a full index of information and bibliographic data on each author and work of the first 15 centuries (*clavis*)

1. THE BACKGROUND

This project is based on the work of two professors of the New Testament from the Aristotle University of Thessaloniki, Stergios Sakkos and Pausanias Koutlemanis, who forty years ago commenced to collect, verify and multiply the references to the Bible from the patristic texts edited by J. P. Migne in *Patrologia Graeca*. They conducted lists of all the biblical references for each volume of the primary edition and edited them in the re-edition of *Patrologia Graeca* by the Centre of Patristic Editions at Athens, Greece (1985-2010). This collection —as it is known— comprises 6.131 works of 685 ecclesiastical authors in 225.138 columns of 170 volumes. The total sum of the collected biblical references is 360.143, including both quotations and allusions that extend from one word to a whole chapter. These references have been identified either by the introductory formulae (e.g. “the Scripture says”), or by the content of the biblical text that has been integrated into the patristic text. In this case, which is very common, the decisive factor has been the highly experienced research team.

2. THE PROJECT DEVELOPMENT

This work has been kindly offered by the two professors to our research team that includes theologians, linguists and computer scientists, and provided the core data of the present project. The original set of data has been processed in four steps:

i) The first step was to process the digitized tables. The following tasks were undertaken: (a) the data of the tables were verified by comparison to the original handwritten records as they were finalized by the producing research team. The tables contained seven columns of the following fields in codes: from the Bible, book, chapter and verse, and from PG, volume, column, paragraph and language of the text. (b) Each record referred either to single verse or to a set of verses. By the analysis to single verses, the total number of records increased to 873.228. (c) New records were added, 7.300 from the works of Neophyte the Recluse (12th. cen.) and 5.576 from Gregory Palamas (15th cen.).

ii) The second step was to build the dynamic database for processing the extant data, keeping an open eye to future additions and developments, on the one hand, and to co-operation with similar projects (like *Bibindex*, *Perseus* etc.), on the other. The database tables utilized three sets of data: the Bible text, the patristic *clavis* and texts and several indexes to PG (contents, subjects, names etc.) The database generates two single code fields that correspond to the unique correlation of each Bible verse to a particular patristic text.

iii) The third step was to input data to the database after resolving —as it is expected— numerous compatibility problems concerning the form of the data, the polytonic fonts, adaptation of extant data, digitization of printed material etc. The Bible texts selected were the —so called— Byzantine texts of the Old and New Testaments, as well as the scientific texts of Rahlfs and Nestle-Aland. Useful pieces of information like chapter/unit titles, cross references etc. were also included. Three sets of patristic material were also input in a primary form, since they are still under process: the Cavallera tables of contents, links to the pdf files of the PG Athens re-edition and the digitized passages of nearly 30.000 references from the books of Genesis, Exodus and Leviticus. These last texts underwent an analysis as it is shown below:

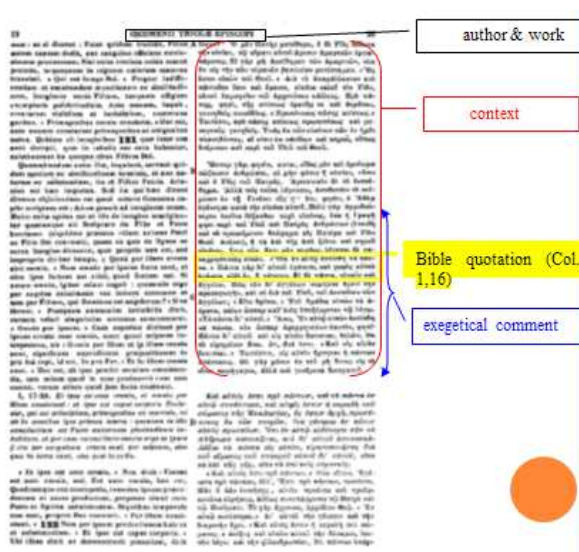


Figure 1. Catena text-passage analysis.

iv) The fourth step was to develop the web page in order to provide access to the material. The whole database was transferred to MySQL after resolving, of course, numerous compa-

tibility problems. The initial web page design is the following:

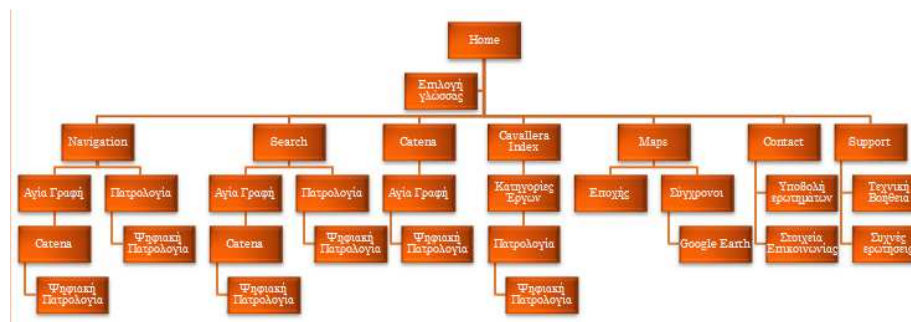


Figure 2. Web page design

The pilot web page has been uploaded to the address <http://dgpc.web.auth.gr>.

3. FUTURE PLANS

The main goal of the immediate future is to complete all the absolutely necessary data input, after they will have been verified and tested for functionality in the web page. The database is to be developed in order to hold all the available information about the patristic authors and their works from all major scholarly reference works, like PLP (Prosopographisches Lexikon der Palaiologenzeit), PmBZ (Prosopographie der mittelbyzantinischen Zeit), PLRE (Prosopography of the Later Roman Empire), CPG (Clavis patrum graecorum), BHG (Bibliotheca Hagiographica Graeca), CANT (M. Geerard, Clavis Apocryphorum Novi Testamenti, Turnhout 1992), AHG (Analecta Hymnica Graeca), IHEG (E. Follieri, *Initia Hymnorum Ecclesiae Graecae*, τ. I-V2, Città del Vaticano 1960–1966), IPG (Chr. Baur, *Initia Patrum Graecorum*). The final goal is to develop and integrate to the web page intelligent research tools for data mining, that are flexible enough to meet the needs of scholars who work in the field, in order to analyze all this information in as many different ways as possible.