## On beyond Paul the Simple

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#### Outline

- 1. Goals and premises
- 2. History and features of 2008 pilot edition of the "Vita of Paul the Simple"
- 3. Requirements for new edition
- 4. What can be automated and what cannot
- 5. What will change for the upcoming edition of the entire *Codex Supraslienis*, and why

#### Goals

- Support for research
  - Textological
  - Linguistic
- Accessibility
- Preservation
- · Support for teaching

#### **Premises**

- An electronic edition is not just a paper edition on screen
  - Multipurposing (views, indices, etc.)
  - Integration of resources
  - Dynamic content
- Project as workstation
  - Each response should anticipate and facilitate whatever the user is likely to do next

# Paul the Simple

- Genesis: Spring 2008, introductory graduate practicum on Old Church Slavonic, University of Pittsburgh
- Edition
  - http://clover.slavic.pitt.edu:8080/exist/paul/data /paul\_main.html
  - Will move to: http://paul.obdurodon.org
- Principal reports
  - Presentation at the fourteenth International congress of Slavists (Ohrid, 2008)
  - "Paul the not-so-simple." Scripta & e-Scripta 6 (2008): 23—45.

Linguistic

CONTINUE TRANSPORTE SECTION DESCRIPTION OF THE ACCOUNT OF THE ACCOUNT

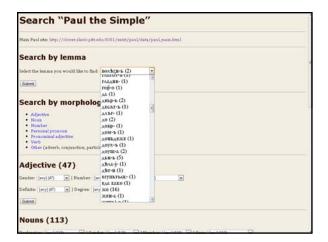
#### Browse the text: main view

- Paragraphed OCS
  - Helsinki ASCII transcription converted to Unicode and corrected manually against facsimile in Zaimov/Capaldo edition
  - Paragraphing introduced by editors
- · Linked to
  - Parallel Greek (from Zaimov/Capaldo edition)
  - Parallel English (new translation by practicum students)
  - Folio views (see below)
- · Linguistic commentary
  - Word-for-word, scrolls and highlights
  - Back-linked
- Font-switcher (freely-distributed downloadable fonts)



#### Browse the text: folio view

- Interlinear OCS and Greek on left
  - Mouse-over linguistic commentary
- · Facsimile on right
  - Magnifying glass
- · Links to other folios
- Links to main view and searches
- Same OCS and Greek text and linguistic annotation as main view
  - Single source = multipurposing

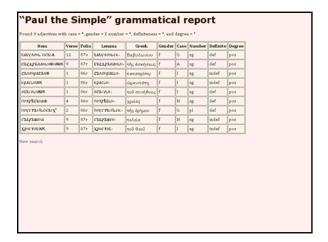


# 

#### Search the text: lexical search

- Menu populated dynamically on load
- Returns list of forms with linguistic annotations, manuscript locations, Greek parallels

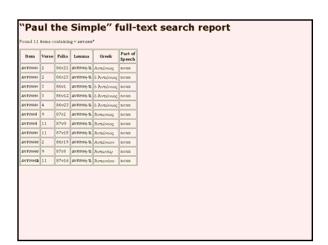




#### Search the text: grammatical search

- Menu lists populated dynamically on load
- · Faceted searching
- Returns list of forms with linguistic annotations, manuscript locations, Greek parallels





#### Search the text: full text search

- Wild cards / regular expressions
- ANTONH\* retrieves all words that begin with the string ANTONH
- Returns locations, Greek, parallels, lemmata

## Requirements for new edition

- Technical requirements
- · Access and distribution requirements

### Technical requirements

- Internet based (no CD/DVD)
- OS-independent (Windows, MacOS, iOS, Linux)
- Browser based: current versions of
  - Windows: Internet Explorer, Firefox, Chrome, Opera, Safari
  - MacOS: Safari, Firefox
  - iOS: Safari
  - Linux: Firefox
- Standards based: Unicode, HTML, CSS (Javascript)
  - No Flash, Silverlight, etc.
  - No proprietary applications

#### Access and distribution requirements

- Publication on mirrored servers
  - Long-term preservation
  - Redundant access
- · Sites accessible to all at no cost
- All source files available to all at no cost
  - Creative Commons Attribution Non-Commercial Share-Alike License
  - http://creativecommons.org/licenses/by-nc-sa/3.0/

#### What can be automated

- ("Automated" = machine-assisted)
- Transformation of Helsinki plain ASCII text to XML and Unicode
- Creation of multiple materials from a single source
- Main (paragraphed) view, folio view, linguistic and full-text databases, user interfaces for databases
- Linking of OCS and Greek at the line level
- Linking of folio view transcription and facsimile image at the *line* level
- Linguistic markup (PROIEL)
- (Reports [tabular, graphic, etc.])

#### What cannot be automated

- Proofreading and correction of errors in Helsinki corpus and Zaimov/Capaldo Greek texts
- Paleographic and other diplomatic annotations
- Linking of folio view transcription and facsimile image at the *word* level
  - Automated at the *line* level
- · Linking of OCS and Greek at the word level
  - Automated at the line level

# Changes introduced in new edition

- 1. Content: framework for linguistic annotation
- 2. Development: method of linguistic annotation
- 3. User interface: frames and panels
- 4. User interface: characters and font
- 5. User interface: image linking
- 6. User interface: mouseover

## Content: linguistic annotation

- Then
  - Idiosyncratic citation forms (based on Swan OCS Grammar)
  - къзъпн: for къзъпн, 3.p.sg.aor. of къзъпььj-, agr.w. паулъ understood
- Now
  - Standard reference system
  - To be determined
- Why
  - Different goals, different audience

## Development: linguistic annotation

- Then
  - Manually inserted lemma, grammatical annotations
- Nov
  - PROIEL machine-assisted linguistic analysis and markup
- Why
  - Paul the Simple = 3 folios
  - Codex Suprasliensis = 285 folios
- Rut
  - Linking to Greek at word level must still be done manually

# User interface: frames and panels

- Then
  - HTML frameset (frames)
- Now
  - CSS pseudo-frames (panels)
- Why
  - Better support, easier user interface, more mature CSS standard

#### User interface: fonts

- Then
  - Client-based fonts and font-switcher
  - Download and install fonts, select
- Now
  - CSS3 web fonts
- Why
  - Easier for technologically inexperienced users
  - The only way to render fonts on closed platforms (iOS)

# User interface: images

- Then
  - Image linking at page level (side by side, no internal links)
- Now
  - Image linking at line level (transcription to image and image to transcription)
- Under consideration
  - Image linking at word level
- Why
  - Easier user navigation

## User interface: touch devices

- Then
  - Hover (CSS) or mouseover (Javascript) generates a different event than click
- Now
  - Touch-sensitive alternative (under investigation)
- Why
  - Your finger is not a mouse

# Your finger



#### A mouse



## User interface: workstation

- Then
  - Limited linking across views
- Now
  - Reconceptualization of linking
- Why
  - Original goal was pedagogical, for students
  - New goals prioritize research resource, for scholars

# Design considerations

- · Limited screen real estate
  - Number and location of windows and panels
  - Pop-ups and tool tips
- Limited inventory of user-interface events
  - Click
  - Mouse movement, double click, right click, etc.

# The digital humanities perspective

- Digital humanities is humanities
  - It's not about the technology
- A digital edition should facilitate philological work that would be impossible (or so impractical as to be effectively impossible) without it
- Design principles for digital humanities have their own rationale (not the same as for e-commerce)
- The target audience is repeat visitors : mid-level to expert users
- The user interface should be intuitive and unobtrusive

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