Diogenes at 10 years: milestones and morals

Peter Heslin

Digital Classicist Seminar, London

22 August 2008
1998/9 – Pandora

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- Moral: Classicists are conservative!
- Moral: Visual markup is evil!
First steps

- A script: grep and a bit of scripting: a few lines of context and author.
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- Perl for poetry: crude work-title and book and line numbers.
- Rudimentary browser.
- Added beginnings Greek output: Ibycus encoding for Latex.
- Started to get curious about the citation info embedded in the text.
Reverse engineering

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- Originally was decoded in hardware!
- Eureka – every 8KB chunk resets the state.
- Much richer information and suggested the possibility of robust decoding.
Reverse engineering

<table>
<thead>
<tr>
<th>Sep 21, 00 0:27</th>
<th>lat0474.txt</th>
<th>Page 1/1</th>
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<tbody>
<tr>
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<td>..........</td>
<td>@88lP R. QVIN</td>
</tr>
<tr>
<td>00000100: f5e9 eee3 f4ff ef83 c3e9 e3ff 9ff4 ff40</td>
<td>..........</td>
<td>CTIO ORATIO</td>
</tr>
<tr>
<td>00000200: 4040 407b 3150 524f 2050 2e20 5156 494e</td>
<td>@Quae res in civ</td>
<td></td>
</tr>
<tr>
<td>00000300: 4354 494f 204f 5241 5449 4f7d 3120 9140</td>
<td>itate duc pluri</td>
<td></td>
</tr>
<tr>
<td>00000400: 4051 7561 6520 7265 7320 696e 2063 6976</td>
<td>mum possunt, esse</td>
<td></td>
</tr>
<tr>
<td>00000500: 6974 6174 6520 6475 6165 2070 6c75 7269</td>
<td>contra nos amb</td>
<td></td>
</tr>
<tr>
<td>00000600: 6d75 6d20 706f 7373 756e 742c 2065 6165</td>
<td>ae facit in hoc tempore, summa</td>
<td></td>
</tr>
<tr>
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<td>gratia et eloc</td>
<td></td>
</tr>
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<td>quanta; quartum</td>
<td></td>
</tr>
<tr>
<td>00000900: 6b32 7465 6d70 6f72 652c 2073 756d 6d61</td>
<td>alteram, C. Aqui li, vereor, altem metuo. Eloq</td>
<td></td>
</tr>
<tr>
<td>00000a00: 2067 7261 7469 6120 6574 2065 6c6f 2d80</td>
<td>ventia Q. Horten</td>
<td></td>
</tr>
<tr>
<td>00000b00: 7175 656e 7469 613b 2071 7561 7275 6d20</td>
<td>si ne me in dice</td>
<td></td>
</tr>
<tr>
<td>00000c00: 616c 7465 7261 6d2c 2043 2e20 4171 7569</td>
<td>ndo impediat, non</td>
<td></td>
</tr>
<tr>
<td>00000d00: 6e69 2e20 7665 7265 6f72 2e20 616c 7465</td>
<td>nihil commove</td>
<td></td>
</tr>
<tr>
<td>00000e00: 7261 6d20 6d65 7475 6f2e 2080 456c 6f71</td>
<td>or, gratia Sex.</td>
<td></td>
</tr>
<tr>
<td>00000f00: 7565 6e74 6961 2051 2e20 486f 7274 656e</td>
<td>Naevi ne P. Quin</td>
<td></td>
</tr>
<tr>
<td>00001000: 7369 206e 6520 6d65 2069 6e20 6469 6365</td>
<td>ctio noceat, id</td>
<td></td>
</tr>
<tr>
<td>00001100: 6e64 6f20 696d 7065 6469 6174 2c20 6e6f</td>
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<td></td>
</tr>
<tr>
<td>00001200: 6e20 806e 6968 696c 2063 6f6d 6d6f 7665</td>
<td>riter pertimesco</td>
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“Read in all bytes with the sign bit set. This is the ID for the first record. Call a subroutine to decode the ID data. Now read in all bytes with the sign bit unset. This is the text of the first record. Call a subroutine to process the text. Repeat this process for all records in the block, that is, until the ID data contains the end of block marker.”
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This code was slow .....
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- I think other software may still do it the wrong way.
- **Moral:** when the corpus is closed, you do better to ignore the spec.
I found some orphan code (C for MSDOS) on the Internet. I was able to figure out odd TLG features from it (which I probably wouldn’t have bothered about myself).
TLG features

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- Word list Should have ignored it or built my own. I assumed that conforming with the TLG would make my code more robust, but I just demonstrated how badly the TLG dealt with odd cases, then I had to try for bug-for-bug compatibility. This code is a nightmare and I don’t understand it anymore.
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- Moral: don’t assume that you need to support all features in the spec – some are obsolete (or nearly so) and speed-up hacks.
The Web! (Sort-of)

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  - Moral: Web was a good choice of interface.
The Web! (Sort-of)
2000 – The Web! (Really)

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- **Moral**: an application should do one thing well.
New functionality

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- Moral: adding core functionality is good, and so is documentation.
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- **Moral:** it’s better to be fast and 98% correct than slow and 99% correct.
New features

- Links to Perseus morphological tools.
New features

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- Coptic support.
New features

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- Coptic support.
- Added a dedicated HTTP server. Initially to allow running on Windows, but was a faster and cleaner solution all around.
2002 – Version 1.0

- Basic features complete, but ...
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Hard to install.
2005 – OS X

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2005 – OS X

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- Added CPAN directory. Ease of installation and protecting against 3rd-party changes.
- First step in that direction. Moving away from a Unix mentality.
- Still, many users could not fathom starting the server then the client.
- **Moral:** for non-technical users a big, simple bundle is better than having to install many tools.
2006 – Version 2.0

- Big attempt to make things simpler.
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Idea was right: to have client and server in the same package.
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- **Moral:** lots of platform-specific code is not the same as cross-platform code.
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New features: marginal line numbering, user-defined corpora.

Never released: release process too complex.

**Moral:** Unless you have slaves, make sure you can cut a release on one machine.
2007 – Version 3.0

- New platform: Mozilla.
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1998/9
2000
2001/2
2002
2005
2006
2007
Present
Future

2007 – Version 3.0

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- Moral: let someone else do the porting work!
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Version 3.1

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Web 2.0 features.

Unicode input.
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Web 2.0 features.
Unicode input.
Moral: it’s easier to distribute data than binaries.
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- New features were not allowed to be submitted for the RAE.
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- Collecting feature requests.
- New features were not allowed to be submitted for the RAE.
- **Moral:** do fig-leaf publications and get grants.
Future – Problems

- General public does not have the CD-ROMS.
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- Perhaps they will disappear.
Future – Problems

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- Can’t expand the corpus.
Future – Solutions

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- Licensing issues?