Mopping up with eMOP: the Early Modern OCR Project at Texas A&M

http://emop.tamu.edu/

Introduction

The field of Digital Humanities offers interesting new scholarly and pedagogical possibilities for literary studies as a whole and early modern and eighteenth-century studies in particular. The Early Modern OCR Project (eMOP) at the Initiative for Digital Humanities, Media, and Culture at Texas A&M seeks to improve the usability of texts available through the EEBO and ECCO databases. As part of this project, four undergraduate students with little to no advanced technical knowledge are taught to train OCR engines to read and recognize fonts in text images from the EEBO and ECCO collection. This hands-on project has served as a means of introducing students to texts, fonts, and unique print characters of the period.

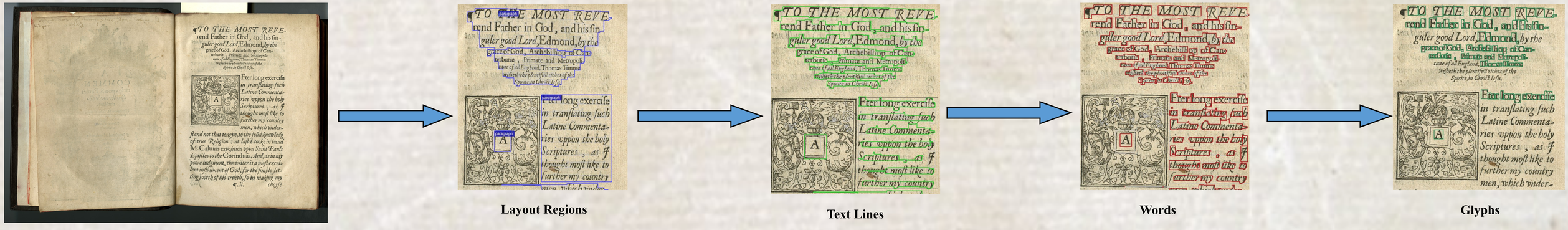
Step One: Naming Font Sets

Page images are named according to publisher, publication year, and the 20-line height. For example, a text image from the 1702 *Anno Regni* text would be named cbil1702_116.

Printer	Primary Type Style	20-LN HT (mm)	Body Size	Year	Place	Author	Title
Andrew Crook	Roman	143	Double Pica	1651	London	Hobbes	Leviathan
	Roman	92	English	1651	London	Hobbes	Leviathan
	Italic	92	English	1651	London	Hobbes	Leviathan
Charles Bill	Black Letter	116	Great Primer	1702	London	England and Wales	Anno Regni
	Roman	116	Great Primer	1702	London	England and Wales	Anno Regni
	Black Letter	116	Great Primer	1693	London	England and Wales	Gulielmi et Mariae
	Roman	116	Great Primer	1693	London	England and Wales	Gulielmi et Mariae
	Roman	94	English	1693	London	England and Wales	Gulielmi et Mariae
	Black Letter	116	Great Primer	1693	London	England and Wales	Gulielmi et Mariae

Step Two: Page Segmentation and Analysis

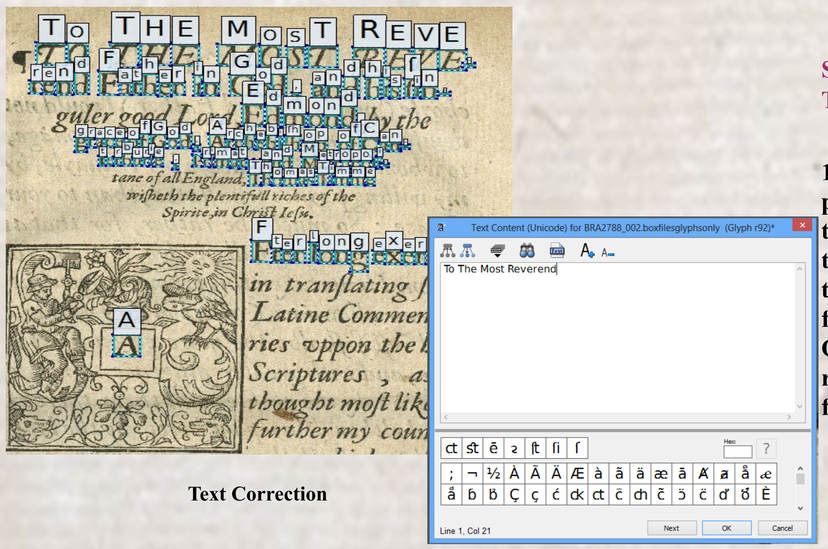
Layout regions, lines, words, and individual glyphs in a text are identified and defined using Aletheia Desktop, a tool developed by PRImA Lab at the University of Salford that performs page segmentation and text recognition, among other tasks.



Document Image **Layout Regions** **Text Lines** **Words** **Glyphs**

Step Three: Text Correction

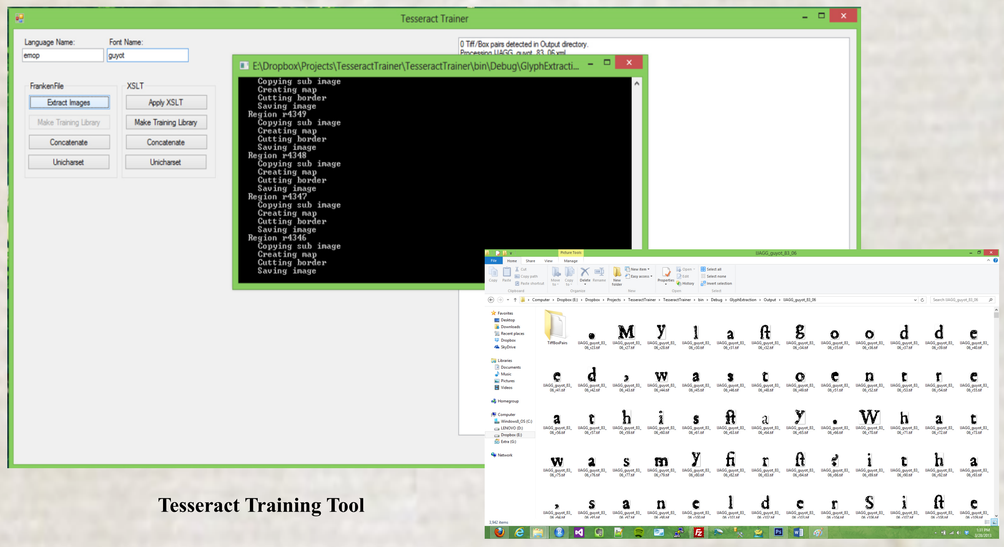
Aletheia analyzes the page image and generates text for each character. Students are then responsible for fixing any "misreads" by typing in the correct text in the Text Content Box for each corresponding character--paying special attention to unique characters such as long S's, ligatures, italics, rotunda R's, suspension marks, and printer's marks.



Text Correction

Step Four: OCR Training

10-15 page images are processed for each font type and comprise a training set. A Tesseract training tool uses the font set to train the OCR engine to read and recognize that particular font.



Tesseract Training Tool