# One Tiny LEAP: A Case Study for Using TEI P5 ODD for Project-Specific Encoding Documentation

A Poster for TEI 2014

#### Introduction

This poster documents the creation of a TEI P5 ODD file for the <u>Livingstone-online Enrichment and Access Project</u>. This serves as a useful case study for reminding TEI conference attendees about the flexibility in using TEI P5 ODD for the generation of project-specific documentation or introducing this concept to those who are unfamiliar with it. It documents a number of aspects of TEI P5 ODD writing which may not be familiar to those who have only used off the shelf TEI schemas or only used Roma for customising to the TEI Guidelines.

## **ODD**

The TEI P5 ODD language, created by the 'documentation elements' module of the TEI P5 Guidelines, enables users to create a single document to act both as meta-schema and project-specific encoding. This module is "a module which may be used for the documentation of the XML elements and element classes which make up any markup scheme, in particular that described by the TEI Guidelines, and also for the automatic generation of schemas or DTDs conforming to that documentation". While many TEI schema developers use the TEI P5 ODD format to create their meta-schema and generate Relax NG (or other formats) from it, they often do not use the same file to store project-specific documentation. This means that they do not receive the full benefit of TEI P5 ODD as this stands for 'One Document Does-it-all'.

## **LEAP**

LEAP is an NEH Humanities Collections and Reference Resources Grant funded project to support ongoing enrichment of and access to Livingstone Online. The Livingstone Online site — a well established, transatlantic, digital archive initiative — seeks to provide worldwide access to the writings of Dr. David Livingstone (1813-73), the Scottish abolitionist, missionary, and explorer of Africa. The Livingstone Online site is directed jointly by Adrian S. Wisnicki (University of Nebraska - Lincoln) and Christopher Lawrence (University College London). The archive is published by University College London and is associated with the NEH-funded Livingstone Spectral Imaging Project published by the UCLA Digital Library. The Livingstone-online Enrichment and Access Project (LEAP) will support updating, integrating, and providing access to these two sites and their the digital image and transcription collections in order to secure their long-term sustainability as a unified, open-access resource for scholars and the general public. Dr James Cummings of the Research Support Team, Academic IT Services, University of Oxford is providing TEI-related consultation and legacy data migration assistance to the project.

Responding to the NEH's Bridging Cultures initiative, LEAP will enhance our understanding of the history of the slave trade; nineteenth-century Africa; Victorian politics, religion, and science; imperialist culture in Europe; and the practicalities of colonization around the world. Livingstone's manuscripts -- one of the largest such surviving collections from any Victorian explorer or traveler -- are a treasure trove of understudied primary textual material for all of the above topics as well as Livingstone himself. A Victorian moral and religious hero, Livingstone propounded a dramatically different relationship between the West and Africa than existed in his own time. He held that African intellectual capabilities were equal to those of Europeans. He envisioned an economic order with Africans as fully empowered trading partners of the West. He also served as an untiring advocate for African rights and the abolishment of the East African slave trade. His descriptions of numerous African cultures in the years 1841 to 1873 -- a momentous thirty-year period in the history of the

European colonization -- are crucial to understanding the background of current African and worldwide geopolitics on a range of issues, from the spread of diseases to the fall of apartheid, the rise of Christianity in the Third World, and climate change from the nineteenth century to the present.

LEAP centers on two areas of endeavor. First, it is integrating the sites of Livingstone Online and the Livingstone Spectral Imaging Project under one enhanced website. As part of this process, the new Livingstone Online will digitally archive, catalogue, and encode significant Livingstone manuscript collections from the David Livingstone Centre, Scotland, and the National Library of Scotland. The rich and extensive Livingstone collections from these two archives -- which will add over 3,500 pages of diaries, notebooks, letters, maps, illustrations, and publishing records to our site -- will be digitally hosted in conformance with established standards for global access and preservation. Second, it is promoting access to and use of the new site and newly integrated core data collection. Because Livingstone's works are scattered across institutions in the UK and around the world, digital access to his manuscripts is especially valuable -- making online research capabilities and access important to both academic and public users. LEAP will implement an interoperable, web-based environment that will allow users to take advantage of our full data collection: encoded text and images, metadata, and supporting information. Through this process of expansion and development, Livingstone Online will enable greater analytical capabilities and will remain a reliable digital reference resource in the long term.

#### LEAP ODD

As part of the creation of an archive of TEI P5 encoded texts the LEAP project needs a customisation of the TEI to reduce human error and enforce project-specific uses of the TEI Guidelines. To do this the TEI P5 customisation mechanism, the TEI P5 ODD language is used. This provides many benefits for those writing encoding manuals and the use of these in the LEAP ODD will be highlighted in the poster. This poster will demonstrates not only meta-schema customisation of modules, elements, attributes, and classes, but also documentation elements. This will include those at the phrase level for indicating elements, attributes, and their values in running prose, as well as elements such as <specList> and <egXML>. In addition to showing how these are used in the TEI, the standard output from TEI-XSL transformation (to html in this case) will be described. The LEAP project's encoding manual is intended for (often inexperienced) coders working as part of the project to follow the encoding decisions of the LEAP project. As such, a lot of effort was put into the formatting and layout of examples, handling of whitespace, CSS, and nature of the documentation provided to the coders. Additionally template files for LEAP encoding of letters and diaries were provided. All of these are freely available at <a href="https://github.com/jamescummings/LEAP-ODD">https://github.com/jamescummings/LEAP-ODD</a>.

## Conclusion

The LEAP ODD is a good case study in writing a project-specific TEI P5 ODD with both meta-schema and local encoding guidelines in a single document. This poster documents some aspects of TEI P5 ODD writing which may be unfamiliar to those who have only used the off the shelf TEI schemas such as tei\_all or TEI Lite, or indeed have restricted their customisation use to Roma. While this case study does not justify a full academic paper it may be useful as a poster introducing these concepts to attendees who are not familiar with them.

# **Bibliography**

Cummings, James. 'The Text Encoding Initiative and the Study of Literature', in *A Companion to Digital Literary Studies*, Ed. by Susan Schreibman and Ray Siemens, (Oxford: Blackwell, 2008),

pp. 451-476. http://www.digitalhumanities.org/companionDLS/

LEAP-ODD Github Repository: <a href="https://github.com/jamescummings/LEAP-ODD">https://github.com/jamescummings/LEAP-ODD</a>

Livingstone Online: <a href="http://www.livingstoneonline.ucl.ac.uk">http://www.livingstoneonline.ucl.ac.uk</a>

Livingstone Spectral Imaging Project: <a href="http://livngstone.library.ucla.edu/">http://livngstone.library.ucla.edu/</a>

TEI Consortium, eds. "Documentation Elements" Guidelines for Electronic Text Encoding and Interchange. TEI P5 Version 2.6.0, 20 January 2014. http://www.tei-c.org/release/doc/tei-p5-doc/en/html/TD.html (30 April 2014).

Wisnicki, Adrian S. What is LEAP? http://livingstoneonline.wordpress.com/2014/04/18/what-is-leap/

Wisnicki, Adrian S. "Interstitial Cartographer: David Livingstone and the Invention of South Central Africa." *Victorian Literature and Culture* 37:1 (Mar. 2009): 255-71.