

Namespaces again

Namespace Recap

- Namespaces provide a way of slicing up an XML document into pieces from different domains.
- Which in turn means you can create documents out of multiple XML vocabularies.
- Namespaces are URIs mapped to prefixes.
- The URIs are often URLs, but they aren't generally usable URLs. URLs are just convenient.

Recap continued

- There can be a default namespace (a URN not mapped to a prefix), as well as other namespaces.
- Prefixes (and the default) can be remapped within the document.
- XML schema uses namespaces to map sections of XML documents to schemas in the `xsi:schemaLocation` attribute.

More on namespaces

- The prefix 'xml' is reserved. It is never mapped to a URN.
- You may see xml:lang, xml:space, and xml:id from time to time.
 - xml:lang is a generalized way of indicating language use.
 - xml:space indicates how whitespace should be handled by a processing application (values are 'default' or 'preserve')
 - xml:id is a generalized way of handling identifiers

More on schema

- We've looked at the built in datatypes
- You can also construct your own
 - by restriction
 - by list
 - by union

Let's play...

- We're going to take our biblioML language and make it work for TEI...

More XML Technologies

XLink, XPointer, XInclude, XQuery, XPath 2.0

Linking and Pointing

- We've seen various methods for linking already:
 - internal: ID / IDREF
 - external: attributes + URLs
- We've also dealt a lot with ways of pointing at bits of a document
 - XPath

Linking and Pointing

- There are XML technologies intended to handle these issues in greater depth.
- Perhaps unsurprisingly, they haven't done well...

XLink

- XLink has been a W₃C recommendation since 2001, but it hasn't seen wide adoption.
 - Meant to be a generalized linking vocabulary that could be pulled into other XML languages as needed
 - XHTML snubbed it
 - It is used in some applications (SVG for example) but nothing uses its full power.

XPointer

- XPointer seems stalled. Bits of its syntax are W₃C recommendations, but the bulk has been in draft since 2002.
 - Meant to extend XPath and allow pointing at fragments of an XML document that can't be described in an XPath expression.
 - makes points and ranges in a document addressable.

XInclude

- Schemas are lacking something that DTDs have built in. What is it?
- Entities. Especially external entities.
- Can use XPointer (in theory)