



# XPath Guide

## Introduction to Digital Scholarly Editing

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# Commands

/ Selects the first child

// Selects all descendants

[] Restricts the search

( ) Makes a group

@ Selects an attribute

not() Negates the content inside brackets

text() Selects the text-node, ie. the text content inside the element.

* Selects all elements

ancestor:: Selects ancestors

# Examples

//x/y : Selects the first child *y* element for all *x* elements in the document

//x//y : Selects all *y* elements descendants of *x* elements in the document

//x/@123 : Selects the attribute *123* in all *x* elements (this does not select the element, only the attribute!)

//x [@123= ”abc”] : Selects only the *x* elements whose attribute *123* is equal to *”abc”*

//x [y] : Selects only the *x* elements that have at least a *y* element as child.

//x [ not(y) ] : Selects only the *x* elements that do not have a *y* element as child

//x [ not( @123= ”abc” )] : Selects only the *x* elements that do not have an attribute *123* with value *”abc”*

# More Examples

//x [@123= ”abc”][@456= ”def”] : Selects only the *x* elements that have attribute *123* with value *”abc”* **and** attribute *456* with value *”def”*

(//x)[last()] : Selects the last *x* element in the document

(//x)[1] : Selects the first *x* element in the document

(//x)[2] : Selects the second *x* element in the document

//x//y[2] : Selects all the *y* elements that are the second child of an *x* element.

//x//* : Selects all descendants for every *x* element

//y/ancestor::x : Selects all *x* elements that are ancestors of a *y* element

# Advice

Usually you will want to start with // , so that you get the elements anywhere in the document.

If you use *last()* or a number in square brackets, you probably want to use brackets for the selector: for example (//x)[last()] or (//x//y)[3]

# XPath Exercise

Write the XPath to perform the following searches in the TEI-Bible:

**1- All quotes (direct discourse)** | quotes = <q>
**2- All quotes from Jesus** | Jesus is identified in the attribute @who with the value ”per1”.
**3- The last quote from Jesus in the whole text.**
**4- All quotes from God to Moses** | God = ”per14”, Moses = ”per26”. Inside <q>, @who (speaker) @toWhom (listener)
**5- All mentions of the person Jesus.** | To tag mentions the element <rs> is used. The attribute @key identifies the person/place/entity. Jesus is ”per1”
**6- All mentions of the person Jesus in the Gospel of Matthew** | The Gospel of Matthew is a  with the attribute @xml:id=”b.MAT”
**7- The last of those mentions.**
**8- The second chapter of the Gospel of Matthew** | Chapters in a book are  (children of the  for the whole book) with @type=”chapter” and @n with the chapter number.