

Bibleref Specification

Draft Specification, 4 July 2007

This document specifies requirements for authoring and processing web content that contains bibleref markup.

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1. Introduction

1.1. Audience

This document is intended for developers of computer systems that process content containing bibleref markup. See [the bibleref overview](#) for a introductory description of how content producers can use bibleref.

1.2. Status

This 4 July 2007 recommendation is a draft, and while implementations are encouraged to use it, some details may change in future versions. Your comments are welcomed, and should be emailed to bibleref@semanticBABBLE.com (replacing BABBLE with bible in the address).

The permanent link for this version of the specification is <http://semanticbible.com/bibleref/bibleref-specification-20070704.html>.

1.3. Terminology

Within this document, the terms 'MUST', 'SHOULD', and 'MAY' (when capitalized) are used in the following specific senses:

MUST

this item is an absolute requirement

SHOULD

there may exist valid reasons not to treat this item as a requirement, but the full implications should be understood and the case carefully weighed before discarding this item

MAY

an item deserves attention, but further study is needed to determine whether the item should be treated as a requirement.

1.4. Principles

Bibleref adheres to [the general principles of microformats](#), including:

- Solve a specific problem
- Start as simple as possible
- Design for humans first, machines second

In this spirit, bibleref attempts to add as few requirements as possible to achieve two goals:

1. unambiguously distinguishing Bible references from other text
2. ensuring the intended references are clearly specified

The first goal is accomplished by use of the `bibleref` class attribute. The second goal is accomplished by specifying the Bible reference in the title attribute when it would otherwise be unclear or incomplete.

2. Identifying Bible References: Bibleref Class Attribute

Bibleref markup **MUST** specify `bibleref` as one of the class names for elements that contain Bible references: only elements that reference the `bibleref` class constitute bibleref markup.

Since (X)HTML allows `class` attributes on virtually any element, virtually any element can be designated a Bible reference through use of the `bibleref` class attribute. However, as a best practice, users **SHOULD** limit the use of `bibleref` to textual elements. The text enclosed by an element with a `bibleref` attribute **SHOULD** be a plain Bible reference, to make it possible for parsers to determine the intended reference.

Unless other elements such as `a` or `span` are used, bibleref markup **SHOULD** use the `cite` element to indicate that a Bible reference is being cited. Regardless of which element is used, the presence of the `bibleref` class attribute (not the enclosed content) is what designates an element as a Bible reference.

Consistent with the (X)HTML specification, other `class` attributes **MAY** be included along with `bibleref` (for styling or other purposes).

2.1. Using Bibleref with Other Elements

When bibleref markup is combined with other elements (for example, a `span` element for styling), the `bibleref` element **MAY** be placed outside and enclosing the other element to allow use of the inner `title` attribute for display purposes, e.g.

```
<cite class="bibleref" title="2Tim 2.15">  
  <span title="Do your best to present yourself ...">2 Tim 2:15</span>  
</cite>
```

3. Specifying the Intended Reference: the Bibleref Title Attribute

Any content can be enclosed within the element that uses the `bibleref` class attribute. However, if the content cannot be easily and unambiguously recognized and parsed (for example, a context-dependent phrase like "verse three of this chapter"), the content provider **MUST** use the title attribute to specify at least the book name, and optionally the chapter

number, verse number, and Bible version

Example

The following are all examples of correctly formatted `title` attributes:
`title="2Tim"` (specifies the entire book)
`title="2Timothy 2"` (specifies the entire chapter)
`title="2Timothy.2.15"` (specifies a single verse)
`title="2Timothy 2:14-19"` (specifies a range of verses from a single chapter)
`title="2Timothy 2.14-3.9"` (specifies a range of verses from adjoining chapters)
`title="ESV 2Timothy.2.15"` (specifies a particular Bible version)

If the reference determined by processing the text of a `bibleref` element conflicts with the reference specified by the `title` attribute, the `title` reference is normative and **MUST** be produced.

Example

Given this (poorly organized) markup:
 In the second chapter of Timothy, `<cite class="bibleref" title="2Tim 2.15">verse 15`
 introduces the idea illustrated in `2Tim 2:20</cite>`
 "2Tim 2.15" **MUST** be designated as the reference. A better approach would be for the author to only enclose "verse 15" in the `cite` element, however.

The `title` attribute format specification also allows discontinuous spans of verses within the same book to be indicated as a single reference, where the component spans are separated by a comma or semi-colon. For example, a reference like "2Tim 2:14-19, 3:16-17" can be marked as a single reference, though the `title` attribute should be used to clarify, as follows:

```
<cite class="bibleref" title="2Tim 2:14-19; 3:16-17">2Tim 2:14-19,
3:16-17</cite>
```

Discontinuous spans that are not within the same book should each be marked as distinct references.

3.1. Title Attribute Grammar

The textual content enclosed by the element that uses the `bibleref` class attribute is not constrained by the specification, though authors are encouraged to use text that follows conventional formats for Bible references. However, the format of the `title` attribute is constrained to the following grammar, to ensure that processors can successfully determine the intended reference.

```
<sep> := ( ' ' | '.' | ':' )
```

```
<refsep> := ( ',' | ';' )
```

```
<subbookref> := Chapter[<sep>Verse]
```

`<simple> := Book[<sep><subbookref>]`

`<range> := Book<sep><subbookref>'-'<subbookref>`

`<reference> := [Version<sep>](<simple> | <range>) [(<refsep> <subbookref>['-'<subbookref>])*]`

Version

an alphabetic string designating a particular version or translation of the Bible. This element is optional. See [Book Names](#) for possible values.

Book

an alphabetic string designating one of the canonical or deutero-canonical books of the Bible. No spaces are allowed in the Book designator: "2Timothy" is valid, but "2 Tim" is not. See [Book Names](#) for possible values.

Chapter

an integer specifying a chapter reference.

Verse

an integer specifying a verse reference. Processors MAY determine whether the Verse number is valid for the given book and chapter.

Processors MUST allow any combination of spaces, periods, and colons for `<sep>`, e.g. "2Tim 2:15", "2Tim.2.15", "2Tim 2 15".

Additional whitespace is allowed between elements.

4. Bibleref Processors

A bibleref processor is any automated mechanism which processes pages with bibleref markup to:

1. identify the elements that are Bible references, and
2. specify the intended references

The specification allows flexibility in the format of processor output where it doesn't affect the semantics of the reference. A processor may therefore produce any of "2Tim 2.15", "2Tim.2.15", "2Tim 2:15", etc. In general, processors MAY produce output that differs in formatting from the original textual content or the `title` attribute, provided the references are still equivalent.

4.1. Book Designators

Bibleref processors MUST recognize the book designators specified in Appendix C of [the OSIS specification](#) (the current version is 2.1.1: note this is a large PDF file).

Bibleref processors for English or other languages MAY recognize additional book identifiers, provided there is an unambiguous mapping to canonical book names.

4.2. Version Designators

English bibleref processors MUST recognize the version designators specified in Appendix C of [the OSIS specification](#).

4.3. Internationalization

Bibleref is intended to be a language-neutral standard. Authors are free to use the names and abbreviations for books and versions that are appropriate for their language, *provided* the language content is indicated.

The minimum capabilities for recognizing book and version designators are specified above. Developers of bibleref processors are encouraged to support as many additional languages as possible. Nevertheless:

- Not all web pages fully implement existing standards for specifying language content
- Supporting numerous languages is a technical challenge

Given this, developers of bibleref processors should describe the additional languages their systems are capable of processing.

If the content of a page is *not* indicated, processors MAY use the standard set of English identifiers, and treat other identifiers according to [the guidelines for handling non-standard data](#).

See "[Internationalization Best Practices](#)" (W3C) for details on how to specify language content. [This page](#) also provides helpful guidance.

4.4. Handling Non-Standard and Invalid Data

If a processor cannot determine the intended reference from either the enclosed text or a `title` attribute if one is supplied, the processor MUST report the presence of a reference, and MAY return an empty string for the reference itself.

Processors MAY determine whether the Chapter number is valid for the given book (e.g. only the values 1-16 are valid for Mark's Gospel), and whether a given verse number is valid for the referenced chapter. The processor MAY return an empty string for references with invalid book, chapter or verse designators.

Since Bible versions are an open set (more are added over time), the processor MUST

include the version designator if it is provided in the `title` attribute, even if it is invalid or unrecognized. Processors **MAY** omit an unrecognized version identifier if it's non-standard and not included in the `title`.

5. Bibleref Examples

[This page](#) contains a variety of examples of different kinds of bibleref markup, and the intended output according to the specification. Developers of bibleref processors are encouraged to test their implementations against this and other test suites to ensure full coverage.

6. Archive

These previous versions are superceded by the current version, but retained here for reference.

- [2007 June 12 version](#)