UPFRONT XHTML: For Workflow, Not Just the Web

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If HTML is so ubiquitous and essential . . .
How come it don’t get no respect?
The Fundamental Reasons:

The tangled, troubled history of XHTML.

The big sea change on presentation.
THE EVOLUTION OF HTML

HTML1:
“Look, Ma,
I made a web page!”
THE EVOLUTION OF HTML

HTML2:
“Somebody actually PAID me to make a web page!”
THE EVOLUTION OF HTML

HTML3:
Early signs of primitive tool use.
THE EVOLUTION OF HTML

HTML4:
Don’t use presentational markup. Unless you want to. [It’s “deprecated.”]
THE EVOLUTION OF HTML

HTML5:
No presentational markup. Use CSS. Period.
And it's XML . . . except when it isn't.
No biggie, man, I get what you mean.
We have rules for a reason . . .
THE HOLY TRINITY

DocBook
NLM
TEI

Originally created for specific communities. Extended to be “general purpose” [generic]. Almost always customized unless they’re a direct fit.
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Almost always customized unless they’re a direct fit.
(If they are a direct fit, use them!)
But you still always need HTML. 

Always.
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Online? HTML.
EPUB? HTML.
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Online? HTML.
EPUB? HTML.
Apps? HTML.
XHTML IS XML.
XHTML is HTML that follows XML rules.

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**XHTML IS XML.**

It can be simple or complex.
It can be *rigorously structured*.
It can be *richly semantic*.
It can contain tons of *metadata*.
The Upfront XHTML Strategy

Start with the *vocabulary*.
- What are the *components* of your content?
- What do you *call* them?
- What do you need to *do* with them?
- What do you need to *distinguish for rendering*?

Everybody understands the vocabulary. Only the geeks understand the XML.
The Upfront XHTML Strategy

Use these terms consistently for:

• MS Word style names for copyediting.
• InDesign style names for typesetting.
• Values of @class or @role attributes for CSS.
• Values of @epub:type attribute for EPUB 3; can align with Structural Semantics Vocabulary
• Values of @class attribute for CSS for PDF. . . .
XHTML 1.1 or HTML5?

- **Known, formal schema, used by systems & tools**
- **No schema, evolving, more semantic**
XHTML is the FRAMEWORK.

Within that framework, incorporate best-of-breed markup that does what you need to do.
Building blocks are `<section>/<div>`, `<p>`, `<span>`, `<h*n>`, etc.

Use your vocabulary in attributes.

Use Schematron to QC it.

Big benefit: proof and edit via browser-based tools.
Need math?

Incorporate MathML.
Need CALS tables?

Incorporate the CALS/OASIS table model.
Need granular citation markup?
Incorporate the NLM/JATS citation markup.
(CrossRef!)
Need rich metadata?
Leave `<meta>` for what it’s meant for. Devote the first `<div>` to metadata that can = JATS header. (Or whatever metadata is most useful to you.)
Need to use HTML1.1-based tools but want HTML5 semantics?

Capture the HTML5 semantics in attributes.

E.g., `<div class="aside">` as a “container” element to wrap sidebars, pull quotes, etc.
Need JATS?

Align your XHTML-based markup with JATS.

UPFRONT.

Get the benefit of XHTML for online/web-based technologies and JATS for hosting/interchange.
The Upfront XHTML Strategy

Example 1: SAGE Publications

- SAGE titles all use TEI
- CQPress titles all use DocBook
- Needed common master XML model for
  —Delivery by composition vendors
  —Repository
  —Transform to existing TEI & DocBook models

**Solution:** Base model on XHTML, incorporate vocabularies needed for TEI & DocBook uses
Example 2: University of Toronto Press

- Publish monographs, textbooks, and journals
- Want to provide full services to distribution clients
- Needed well integrated workflow
  — Editing in Word, using eXtyles
  — Comp by various vendors using InDesign
  — XML to generate EPUB, NLM, DocBook, TEI

**Solution:** Base model on XHTML, develop UTP vocabulary that spans Word, InDesign, CSS
Example 3: The World Bank

- Big range of publications, some highly designed
- 50% of books planned to be only digital, no print
- Outsource all production to various vendors
- Had NLM model, not widely used
- Committed to open access, online, accessibility

**Solution:** Base model on XHTML, develop rich vocabulary, schema, plain-English specifications; works with InDesign or CSS-driven PDF+EPUB
Example 4: Harvard Business Publishing

- Publish thousands of cases authored by faculty
- Word template for authoring, creating final PDFs
- Need XML repository to generate online, EPUB, and accessible versions, + future repurposing
- Need highly automated workflow

**Solution:** Base model on XHTML, use upCast to generate XHTML1.1, modified by XSLT to HBP Case XML + EPUB, QC with Schematron
Thanks!

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