

Fixed Layout Format in Japan

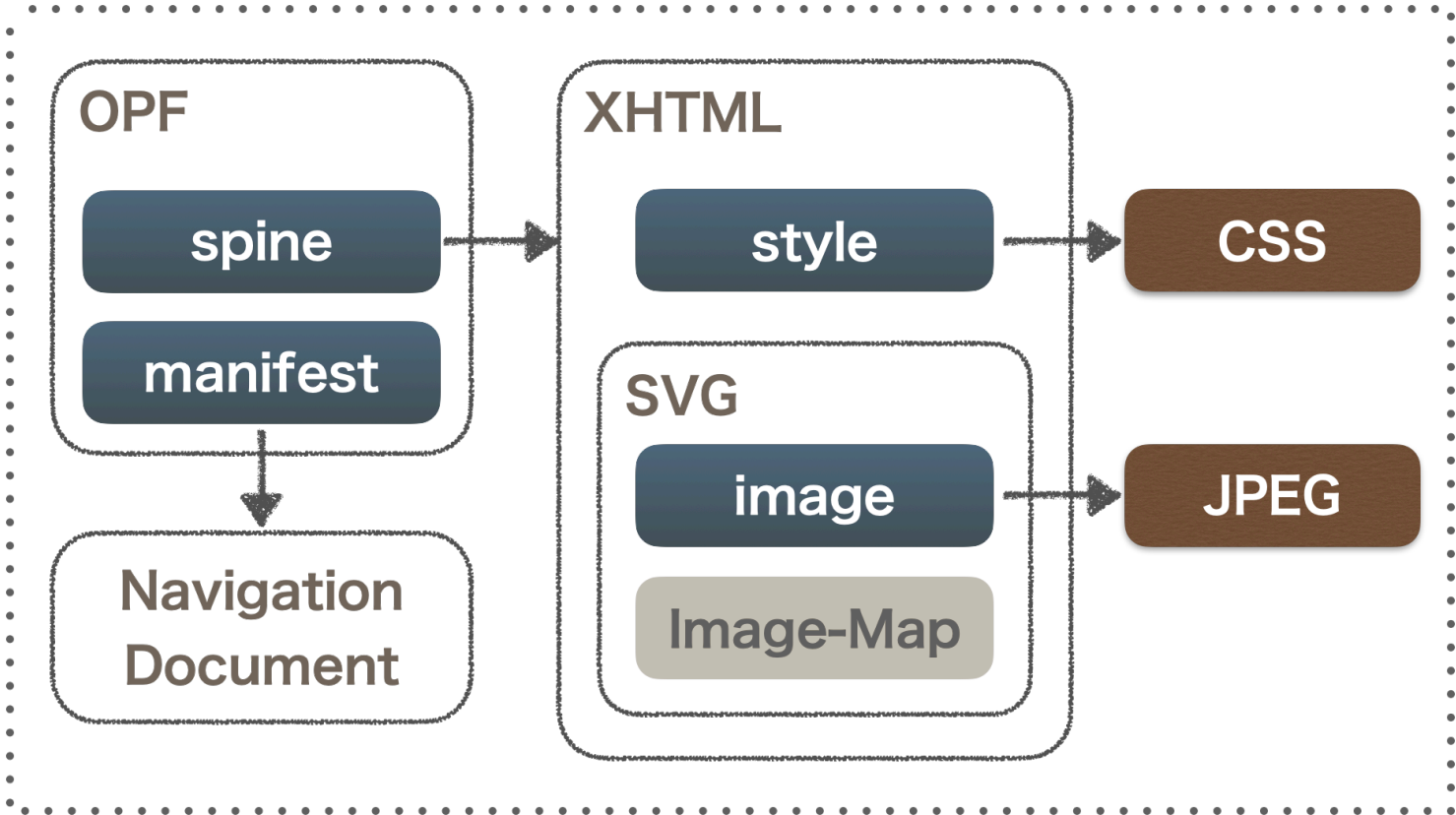
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2020/08/05

Japan FXL-EPUB Standard by EBPAJ

XHTML and Image files for each page
 ✓ Over 200 files in EPUB for 100p comic



OPF sample for EBPAJ style

```
<metadata xmlns:dc="http://purl.org/dc/elements/1.1/"> ... </metadata>
```

```
<manifest>
```

```
<!-- image -->
```

```
<item media-type="image/jpeg" id="cover" href="image/cover.jpg" properties="cover-image"/>
```

```
<item media-type="image/jpeg" id="i-001" href="image/i-001.jpg"/>
```

```
...
```

```
<!-- xhtml -->
```

```
<item media-type="application/xhtml+xml" id="p-cover" href="xhtml/p-cover.xhtml" properties="svg" fallback="cover"/>
```

```
<item media-type="application/xhtml+xml" id="p-001" href="xhtml/p-001.xhtml" properties="svg" fallback="i-001"/>
```

```
...
```

```
</manifest>
```

```
<spine page-progression-direction="rtl">
```

```
<itemref linear="yes" idref="p-cover" properties="rendition:page-spread-center"/>
```

```
<itemref linear="yes" idref="p-001" properties="page-spread-left"/>
```

```
...
```

```
</spine>
```

XHTML sample for EBPAJ style

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html>
<html ... >
...
<meta name="viewport" content="width=1448, height=2048"/>
</head>
<body epub:type="cover">
<div class="main">

<svg xmlns="http://www.w3.org/2000/svg" version="1.1"
xmlns:xlink="http://www.w3.org/1999/xlink"
width="100%" height="100%" viewBox="0 0 1448 2048">
  <image width="1448" height="2048" xlink:href="../image/cover.jpg"/>
</svg>

</div>
</body>
...
</html>

```

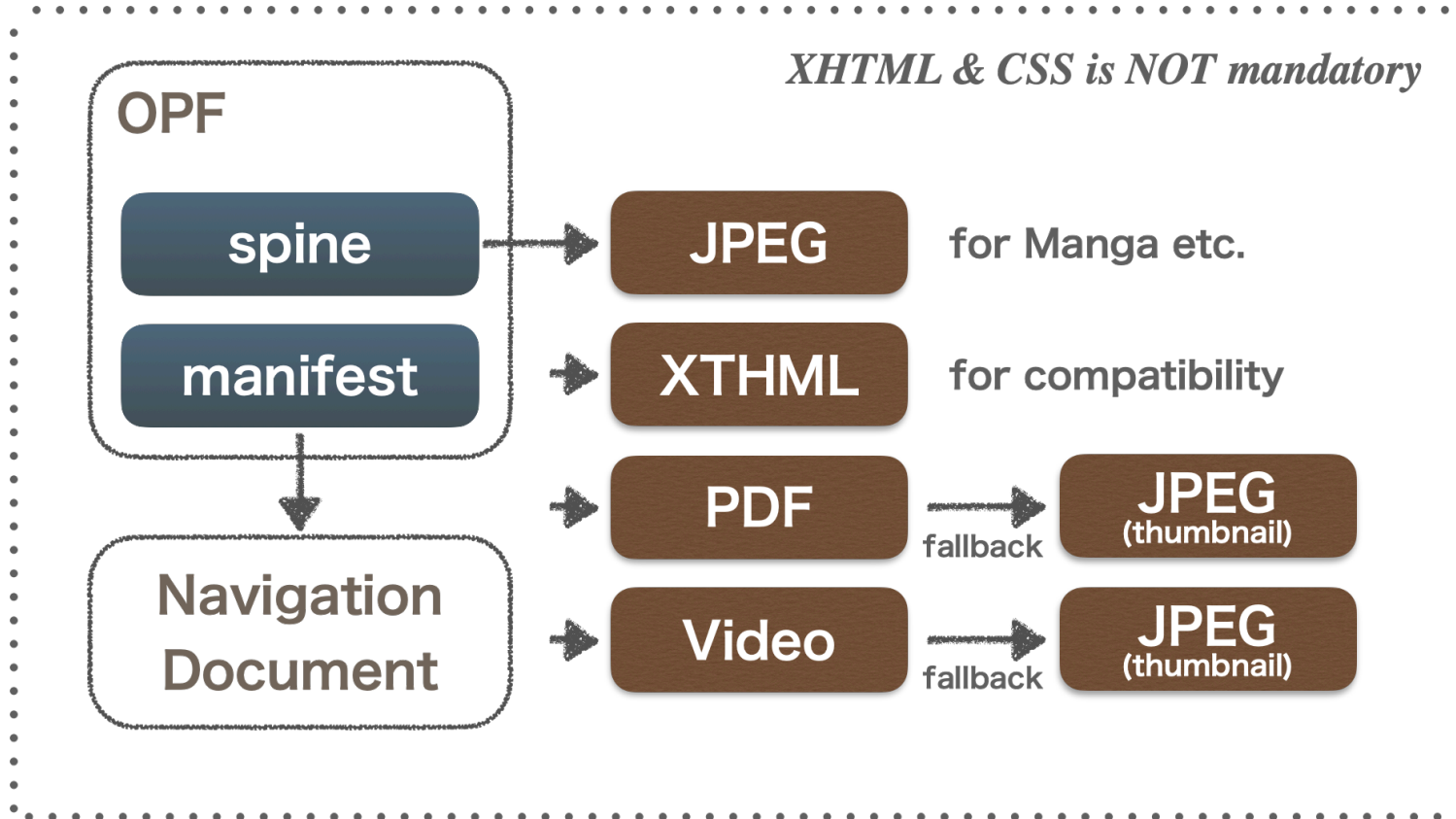
Problem in EBPAJ style EPUB

- **“SVG” in XHTML is only used to display images in full screen**
 - However, expected full screen image will not be provided by the latest browser engine

- **XHTML and CSS are not necessary to display in full screen**
 - In Japan, over 80% of the market consist of Fixed Layout EPUBs and simpler EPUB will reduce the production costs

Simple FXL-EPUB Style

XHTML and CSS are not always necessary
 ✓ About 100 files in EPUB for 100p comic



OPF sample for Simple style

```
<metadata xmlns:dc="http://purl.org/dc/elements/1.1/"> ... </metadata>
```

```
<manifest>
```

```
<!-- image -->
```

```
<item media-type="image/jpeg" id="cover" href="image/cover.jpg"
properties="cover-image"/>
```

```
<item media-type="image/jpeg" id="i-001" href="image/i-001.jpg"/>
```

```
...
```

```
</manifest>
```

```
<spine page-progression-direction="rtl">
```

```
<itemref linear="yes" idref="cover" properties="rendition:page-spread-
center"/>
```

```
<itemref linear="yes" idref="i-001" properties="page-spread-left"/>
```

```
...
```

```
</spine>
```

No XHTML for Simple style

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html>
<html ... >
...
<meta name="viewport" content="width=device-width, height=2048" />
</head>
<body epub:type="cover">
<div class="main">

<svg xmlns="http://www.w3.org/2000/svg"
xmlns:xlink="http://www.w3.org/1999/
width="100%" height="100%" viewbox="0 0 1448 2048">
  <image width="1448" height="2048" xlink:href="../image/cover/cover.jpg" />
</svg>

</div>
</body>
...
<html>

```



Problem in current EPUB spec [1/2]

[Fallback regulation of Image elements in OPF]

In the current specification, even image elements must have fallback elements.

3.4.4.3 Manifest Fallbacks in EPUB Packages 3.2

Foreign Resources MAY be referenced in contexts in which an intrinsic fallback cannot be provided (e.g., directly from spine itemref elements; from img, iframe and link elements in XHTML Content Documents; and from @import rules in CSS Style Sheets). Manifest fallbacks MUST be provided in such cases.

For reading systems, it's easy to display images rather than SVG but I don't know why SVG need no fallbacks, so I'd like to propose to deregulate this regulation.

Not a few reading systems in Japan cannot treat SVG directly and ignore fallback features.

Problem in current EPUB spec [2/2]

- **[OK] <spine> refer to XHTML including JPEG**
 - EBPAJ style
- **[OK] <spine> refer to JPEG with fallback to each XHTML**
 - d-Magazine style
- **[OK] <spine> refer to JPEG with fallback to a single XHTML**
 - <https://github.com/IDPF/epub3-samples/tree/master/30/haruko-jpeg>
- **[NG] <spine> refer to JPEG without fallback**
 - Simple style but EPUB spec must be changed