

Relevant topics:

- standardization issues, including relationship to current and future W3C standards like HTML, SVG, MathML, Web API-s, metadata, etc.
- layout definition and control (fixed and adaptive layout, high quality typesetting, font definition and management, etc.)
- ergonomoy

Soleb is a publishing company specialised in history, with two main collections: egyptology and contemporary history.

Publishing scientific texts dealing with Egyptology forces us to mix many languages like Egyptian hieroglyphics, Arabic, ancient Greek, Tifinagh... Whereas most are simply a matter of embedding the proper fonts, hieroglyphics are not typeset linearly and have either to be included as embedded images, or would require an extension similar to MathML.

Soleb pays also a lot of attention to the typesetting quality of its books, and their ergonomoy and readability.

As we move towards having electronic books as our primary publishing medium, we find the current standards unsatisfactory. Fixed layout books are too tied to a platform. In our view they are a solution not very different from homothetic PDF books, and do not use all the possibilities of ebooks. Reflowable books have a better match with the diversity of readers but unfortunately rely on imperfect layout algorithms resulting usually in poor readability.

Orphans and widows, page turns, line breaks, global paragraph balance, justified text as well as line breaks in left-aligned text are poorly handled. The relation between text and images is also badly managed. Smart use of portrait/landscape switching is not enabled in reflowable ePub 3 since single-spread cannot be enforced.

We have been developing solutions mixing HTML5, CSS and JavaScript to try to reach with reflowable ePub 3 the reading comfort level we expect in our publications. We also try to be innovative in handling the relation between text and images : some of our publications include a large number of figures or photographs, and we would like to offer a seamless and convenient navigation between the pictures and the related text.

We would be glad to demonstrate some of our solutions and discuss possible standard extensions like typesetting hints, image-text synchronization hints, and MathML-like extensions to typeset hieroglyphics.

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